THE STANDARD DICTIONARY OF FACTS

Grace A. Gordon
1922
Lionville, Pa.

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The Standard Dictionary of Facts

HISTORY, LANGUAGE, LITERATURE, BIOGRAPHY, GEOGRAPHY, TRAVEL, ART, GOVERNMENT, POLITICS, INDUSTRY, INVENTION, COMMERCE, SCIENCE, EDUCATION, NATURAL HISTORY, STATISTICS AND MISCELLANY

A PRACTICAL
HANDBOOK OF READY REFERENCE
BASED UPON EVERYDAY NEEDS

ORIGINALLY PREPARED AND SUBSEQUENTLY REËDITED,
EXTENSIVELY REVISED, ENLARGED AND IMPROVED
BY COMPETENT SPECIALISTS
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PUBLISHERS' PREFACE

AFTER a wide experience in selling single-volume reference works, the publishers planned the production of The Standard Dictionary of Facts by an entirely new method, the success of which is now a notable achievement in twentieth century book making. Instead of assuming to know exactly what the public desired in a quick reference manual, or of taking for granted that any editor we might employ would possess such knowledge, we went to the only infallible source of information,—the people themselves.

Through our large force of expert salesmen, men and women of education, culture and experience, who had been in personal contact with tens of thousands of reference book users throughout the country, we secured first hand knowledge of what the average person desired above all else to find in a handy single volume. By carefully classifying the results of this extensive inquiry—representing hundreds of thousands of visits to parents, pupils, teachers, professional and business men, artisans and farmers—a definite working plan for the contents was evolved and placed in the hands of the editorial staff with explicit instructions to build the work strictly in accordance with this unique method.

In other words, The Standard Dictionary of Facts is not the product of an editor, or of a corps of editors, in the customary sense. The sole function of its editors has been to embody as completely as possible from available material the subject matter which had been specifically indicated by a vast number of reference book users.

But in the mind of the publishers this working plan embraced another fundamental constructive idea,—that of generous revision and improvement, to be made in quick response to discovered needs. In consequence the text of the work from the first has been subjected to repeated improvements some of which have involved much greater labor and expense than the original edition. A single revision has included changes on upwards of 500 pages; and the index, now the most comprehensive ever placed in a work of like magnitude, has been repeatedly made anew. Since the publication of the original edition in 1908, no less than twelve separately copyrighted revised editions have been made, so that it is now substantially a new work.

At this point it is fitting to state that the appreciation of the public has been most generous. We are gratified to be able to say that our expensive policy of improvement has been rewarded by the largest patronage ever extended to a single-volume reference work. We, therefore, feel peculiarly indebted to hundreds of thousands of subscribers for their constructively helpful support, without which the phenomenal development and popularity of this manual would have been impossible.

Hundreds of special reference works together with the resources of large libraries have been drawn upon to secure the vast range of information now contained in this volume. In addition, much special aid has been furnished by many persons throughout the United States and Canada. The valuable departments of Literature and Language are almost entirely due to the efforts of Miss Susan F. Chase, M. A., Pd. D., and of Miss Helen L. Dunston, of the Buffalo State Normal School. The increasingly popular section on Natural History was rewritten and enlarged with the addition of many new subjects by Professor Irving P. Bishop, for twenty-five years a successful teacher of natural science.

Notwithstanding the great expense and labor necessary to correct the defects of the first edition and despite the fact that the present edition embodies the closest approach to up-to-dateness yet attained by an American reference work, our standard demands a still higher degree of accuracy and perfection. We, therefore, shall welcome in the future, as always in the past, any intelligent criticism, information or suggestion that will assist us in making the work still more useful.

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HOW TO USE
The Standard Dictionary of Facts

In these swift-moving times the best informed win, the uninformed fail. Exceptions have become so few that everyone nowadays desires to be better informed.

This handbook of ready reference will give correct answers to more than a hundred thousand questions,—a remarkable number for a single volume. More noteworthy still, it has been found to answer ninety-five out of every hundred questions that come up in the average person's life and affairs. This significant fact has been proved by ten years of testing in the hands of nearly a million users. Most important of all, it will perform an equally helpful service for everyone who will faithfully follow a few very simple rules.

First of All, this book must be kept where it can be *quickly* used; not stored in a closet, hidden on a high shelf, or locked behind glass doors to keep it clean. Place this book on the home reading table, the child's study table, the workshop bench, or the office desk, and see to it that it is always within easy reach. In the home and school further encourage its use by frequent personal example and by assisting those who have not yet formed the habit of looking up answers to daily questions.

The Working Plan. The arrangement of the information is very simple and is as easily understood as reading time by the clock. The Table of Contents on pages 4 and 5 indicates its wide range. The keys to this great array of facts are found in the cross-reference Index (pages 867 to 908), by far the largest and most valuable yet placed in a single volume of similar scope. *To learn how to use this index is to learn how to reach the facts in the volume.*

Finding Facts. Most users desire immediate information on single points which arise from time to time. In all such cases one should turn at once to the Index. Suppose one wishes to find which territory had the largest population when admitted to the Union. Turning to the index under T, one finds, page 904, the entry "Territories" in the third column. Note that immediately under the word, and set over a little to the right (sub-indexed), is a group of points about "Territories." Passing down this list to the second entry one finds "Population," followed by a dotted line leading to the figures 625, which is the number of the page where the information may be found. But instead of "territory," suppose one first thought of the word "state." Turning to S in the index, one finds, page 896 second column, the entry "States." Set over to the right beneath it is a sub-indexed list of points about "States." Passing down the column one finds the entry "Population," and is here also referred to page 625. But suppose at the outset one had in mind the word "population" instead of "territory" or "state." Upon turning to the index under P one finds, page 891, the entry "Population" and, sub-indexed under it in proper order, the entries about both "States" and "Territories" with references likewise to page 625 where, in a well arranged table, correct answers to hundreds of similar questions may be found.

The foregoing example is merely one of scores of thousands which may be as readily found by means of the carefully constructed cross-reference Index, making fact finding a keen pleasure to those who wish to be well informed.

If, in any case, the name, subject, or title looked for is not found in the Index, do not conclude that the information sought for is not given. Try other related words, names, subjects or terms. Then, if not successful, read the explanatory Note at the beginning of the Index, page 867, and in case the subject sought for seems related to any of the special dictionaries, continue search among them. Each of about twenty special dictionaries such as Names and Name Origins, Pen Names of Noted Writers, Famous Poems, Mythology, etc., is self indexed in its proper place in the text.

A brief period of earnest practice will enable an inexperienced beginner in the use of reference books to make good progress in finding information.

Form the Right Habit. This work contains vastly more information and will answer an immensely greater number of questions than many purchasers at first realize. Consequently, never hesitate to test the work for points concerning any question that may arise. The result will be a source of increasing satisfaction and surprise at its unexpected range and resources. One will not find answers to merely trivial and nonsensical questions, but as a furnisher of authentic information on matters of consequence, the more thoroughly it is used the more highly it will be prized.

Further, seekers for information sometimes are not aware at the outset that they have started on the wrong track. Yet discoveries are made only by those who seek them, and while seeking one often finds greater things than those which he set out to find. Columbus was looking for the Indies when he discovered America. Likewise, tens of thousands of users have achieved an education and formed the habit of self information as the result of systematically searching this volume.

Finally, remember that this book is designed and planned to be used. By being worn, soiled, and cover-scarred from constant handling it will fulfill its real purpose and repay the owner a thousand fold for his purchase and his pains. To be kept in an unhandled and spotless condition would be the worst fate that could befall it.

CONCORD BRIDGE

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HISTORY

Abdication is the act of giving up an office. It is sometimes compulsory, and sometimes the result of vexation and disappointment. The following monarchs have abdicated:

Abbas II. of Egypt, ... 1914
Abdul-Hamid II. (forced), ... 1909
Amadeus I. (duke of Aosta) of Spain, ... 1873
Boris of Bulgaria, ... 1918
Charles Albert of Sardinia (forced), ... 1849
Charles Emmanuel of Sardinia, ... 1802
Charles I. of Austria-Hungary, ... 1918
Charles IV. of Spain (forced), ... 1808
Charles V. of Spain and Germany, ... 1556
Charles X. of France (forced), ... 1830
Christina of Sweden, ... 1654
Constantine I. of Greece (forced), ... 1917
Diocletian and Maximian, ... 305, 308
Edward II. of England (forced), ... 1327
Ferdinand of Austria, ... 1848
Ferdinand of Bulgaria, ... 1918
Francis II. of the Two Sicilies (forced), ... 1860
Henry VI. of England (forced), ... 1471
James II. of England (forced), ... 1689
Lidj Jeassu of Abyssinia, ... 1916
Louis Philippe of France (forced), ... 1848
Ludwig of Bavaria (forced), ... 1848
Manuel II. of Portugal (forced), ... 1910
Milan of Servia, ... 1889
Napoleon I. of France (forced), ... 1814
Napoleon III. of France (forced), ... 1870
Nicholas I. of Montenegro, ... 1918
Nicholas II. of Russia (forced), ... 1917
Otho of Greece (forced), ... 1862
Pedro II. of Brazil (forced), ... 1889
Poniatowski of Poland (forced), ... 1795
Pu-Yi of China (Hsüan Tung), ... 1912
Richard II. of England (forced), ... 1399
Victor Amadeus of Sardinia, ... 1730
Victor Emmanuel, ... 1821
William I. of Holland, ... 1840
William II. of Germany, ... 1918

Abyssinia. The oldest accounts of the Abyssinians are full of fables, but seem sufficient to prove that they attained some degree of civilization even in remote antiquity. Christianity was introduced about the middle of the Fourth Century, and soon prevailed extensively. Axum was at that time the capital. Two centuries later the Abyssinians were powerful enough to invade Arabia, and conquer part of Yemen. In the Tenth Century a Jewish Princess overthrew the reigning dynasty, the surviving representative of which fled to Shoa. After three centuries of confusion the empire was restored under Icon Amlac, and some progress was made in improvement. Early in the Fifteenth Century the Abyssinians entered into close relations with the Portuguese. Under the influence of the Portuguese missionaries the royal family adopted the Roman Catholic faith, and the old Coptic Church was formally united to the See of Rome. The people and ecclesiastics obstinately resisted the innovation; the emperor gave way; and ultimately, in 1632, the foreign priests were expelled or put to death. Though Christianity is still the professed religion of Abyssinia, it exists only in its lowest form, and is little more than ceremonial. The Church is national and independent, but the visible head, or *Abuna* ("our father"), is ordained by the Coptic Patriarch of Alexandria. The doctrines of the Abyssinian coincide with those of the Coptic Church, especially in the monophysite heresy. While the oldest Abyssinian churches were hewn out of rocks, the modern churches are mostly round or conical buildings, thatched with straw and surrounded by pillars of cedar. In 1860, King Theodore (born 1818, crowned 1855) felt himself insulted by the British Consul, whom he imprisoned, with some missionaries. A large English force under Lord Napier then came to Abyssinia and captured the strong fortress of Magdala in April, 1868. On this occasion Theodore committed suicide. After an interval of anarchy Prince Kassai assumed power as Johannes II., in 1872. He died in 1889, and was succeeded by Menelik II. Abyssinia then practically became an Italian protectorate. During 1895 a war broke out between Abyssinia and Italy, which was closed in 1896. In 1906, an agreement was concluded between Great Britain, France, and Italy, as to their interests in Abyssinia. Upon the death of Menelik, 1913, Lij Yasu became ruler, but was deposed, 1916, when Zauditu, daughter of Menelik, was made empress. A railway from the Gulf of Aden to Adis Abeba, the capital, was completed in 1917. During the World War Abyssinian troops cooperated with the British forces in Africa.

Abyssinian War, The. Between the British and Theodore, King of Abyssinia. This expedition (for the release of missionaries, Captain Crawford, and others) was under Sir R. Napier, who joined the army at Senafé, January, 1868. On April 10th, Colonel Phayre defeated Theodore at Magdala, which was bombarded and taken on April 13th. The return of the British army commenced April 18th, 1868.

Achæan League, The. A confederacy of the twelve towns of Achæa. It was dissolved by Alexander the Great, but reorganized B. C. 280, and again dissolved B. C. 147. The second of these leagues, founded at Megalopŏlis, contained all the chief cities of Peloponnesus. It contended with the Macedonians and the Romans for the liberty of Greece; but, being beaten at Scarphēa by Metellus, and at Leucopĕtra by Mummius, it dissolved soon after the taking of Corinth. The twelve cities of Achæa, in Ionia, were founded by the Heraclīdæ.

Achæan War, The. Roman ambassadors at Corinth enjoin the dismemberment of the Achæan League and are insulted (B. C. 147). Kritolāos, general of the league, at once besieged Heracleia (B. C. 146), but was defeated at Scarphēa by Metellus, and slew himself. Diæos, successor of Kritolāos, was defeated at Leucopĕtra by Mummius (B. C. 146). Corinth was then destroyed, and all Greece was erected into a Roman Province, September, 146.

Actiac War, The. This arose out of the rupture between Octavian and Antony, two of the Triumvirs (B. C. 33). Octavian declared war against Cleopatra, Queen of Egypt, and de-

feated Antony at Actium, 2d September, B. C. 31. Both Cleopatra and Antony killed themselves. Alexandria was taken by Octavian, August 30th (B. C. 33), and Egypt was made a Roman Province, B. C. 30.

Ætolian Confederacy, The, B. C. 323, called into existence by the Lamian War. The states used to assemble annually in the autumn at Thermum, and the assembly was called the Panætolicon. B. C. 189, the Ætolian states were subjected to the Romans.

The object of the Lamian War was (on the death of Alexander the Great) to liberate Greece from Macedonia. The Athenians were the principal insurgents, but were defeated in 322 at Cranon, by Antipater.

Afghanistan. The history of Afghanistan belongs almost to modern times. The collective name of the country itself is of modern and external origin (Persian). In 1738, the country was conquered by the Persians under Nadir Shah. On his death, in 1747, Ahmed Shah, one of his generals, obtained the sovereignty of Afghanistan, and became the founder of a dynasty which lasted about eighty years. At the end of that time Dost Mohammed, the ruler of Cabul, had acquired a preponderating influence in the country. On account of his dealings with the Russians the British resolved to dethrone him and restore Shah Shuja, a former ruler. In April, 1839, a British army under Sir John Keane entered Afghanistan, occupied Cabul, and placed Shah Shuja on the throne, a force of 8,000 being left to support the new sovereign. Sir W. MacNaghten remained as envoy at Cabul, with Sir Alexander Burnes as assistant envoy. The Afghans soon organized a wide-spread insurrection, which came to a head on November 2, 1841, when Burnes and a number of British officers, besides women and children, were murdered, MacNaghten being murdered not long after. The other British leaders now made a treaty with the Afghans, at whose head was Akbar, son of Dost Mohammed, agreeing to withdraw the forces from the country, while the Afghans were to furnish them with provisions and escort them on their way. On January 6, 1842, the British left Cabul and began their most disastrous retreat. The cold was intense, they had almost no food — for the treacherous Afghans did not fulfill their promises — and day after day they were assailed by bodies of the enemy. By the 13th, 20,000 persons, including camp-followers, women, and children, were destroyed. Some were kept as prisoners, but only one man, Dr. Brydon, reached Jelalabad, which, as well as Kandahar, was still held by British troops. In a few months General Pollock, with a fresh army from India, retook Cabul and soon finished the war. Shah Shuja having been assassinated, Dost Mohammed again obtained the throne of Cabul, and acquired extensive power in Afghanistan. He joined with the Sikhs against the British, but afterward made an offensive and defensive alliance with the latter. He died in 1863, having nominated his son Shere Ali his successor. Shere Ali entered into friendly relations with the British, but in 1878, having repulsed a British envoy and having refused to receive a British mission (a Russian mission being meantime at his court), war was declared against him, and the British troops entered Afghanistan. They met with comparatively little resistance; the emir fled to Turkestan, where he soon after died. His son Yakoob Khan having succeeded him concluded a treaty with the British (at Gandamak, May, 1879), in which a certain extension of the British frontier, the control by Britain of the foreign policy of Afghanistan, and the residence of a British envoy in Cabul, were the chief stipulations. The members of the mission were again treacherously attacked and slain, and troops were sent into the country. Cabul was occupied, Kandahar and Ghazni were relieved, and Yakoob Khan was sent to imprisonment in India. In 1880, Abdur-Rahman, a grandson of Dost Mohammed, was recognized by Britain as emir of the country. Until his death in 1901 he was on friendly terms with the British, by whom he was subsidized. Encroachments by the Russians on territory claimed by Afghanistan threatened a rupture between Britain and Russia in 1885, and led to the delimitation of the frontier of Afghanistan on the side next the territory now occupied by Russia. In 1897, a punitive expedition was again sent against the tribes around the Khyber Pass, who disregarded their pledges. In 1905, the Emir Habibullah, son of Abdur-Rahman, ratified a treaty with Great Britain agreeing to accept the advice of the British Government in regard to his foreign relations, and was guaranteed against unprovoked aggressions on his dominions. Afghanistan is divided into four provinces, Cabul, Turkistan, Herat, and Kandahar, each under a hakim or governor.

Alabama. The name, derived from the Indians, denotes "Here we rest." Originally a part of Georgia, the country included in Alabama and Mississippi was organized as a Territory in 1798. In 1812, that part of Florida, then belonging to Spain, lying between the Perdido and Pearl rivers on the Gulf Coast, was seized by the United States troops and annexed to the Territory. Alabama remained a Territory after the western portion was admitted as a State under the name of Mississippi, and was itself admitted as a State in 1819. On January 11, 1861, the Ordinance of Secession was adopted by the Secession Convention, and in February a provisional congress met at Montgomery and organized the Government of the Confederate States. Jefferson Davis was inaugurated President of the Confederacy at Montgomery, February 18, 1861, and the government seat was moved from Montgomery to Richmond in July, 1861. Mobile was finally captured by the Federals, April 12, 1865, and on May 4th the State was included in the surrender made by General Richard Taylor. After the Confederate surrender, the State passed under the phases of provisional and military government until 1868, when it was regularly reconstituted as a State in the Union. In 1901, a Constitutional Convention, called to regulate negro suffrage, was in session from May 21st to September 2d at Montgomery. On November 11, 1901, the new constitution was ratified by popular vote. In 1911 the legislature passed a bill providing for the adoption of a commission form of government by

the municipalities of the State. In January, 1915, the legislature enacted a statutory law enforcing state-wide Prohibition, which took effect July 1, 1915.

Alabama Claims. A series of claims for indemnity made upon Great Britain by the United States, based upon alleged failure of Great Britain to observe certain obligations of international law. These claims chiefly arose from damages inflicted by vessels in the Confederate service which had been fitted out or built in English waters. The history of the Confederate cruiser *Alabama* is typical of the more flagrant cases. This vessel was built at Birkenhead, England, and, although the attention of the British government was repeatedly called to suspicious circumstances, "No. 290," as the ship was called, sailed July 29, 1862, without register or clearance papers. After taking on equipment in the Azores from two English vessels, she assumed the name *Alabama* and began her famous career of destruction. Before being sunk by the *Kearsarge* on June 19, 1864, the *Alabama* is said to have destroyed 70 vessels. The determination of the extent to which Great Britain was responsible for this was the most important problem of diplomacy resulting from the Civil War. By the important treaty of Washington, 1871, it was stipulated that the *Alabama* claims should be submitted to the decision of five arbitrators, — one named by England, one by the United States, and one each by the king of Italy, the emperor of Brazil, and the president of Switzerland. The arbitrators met at Geneva Dec. 15, 1871, and on Sept. 14, 1872, signed the final award in which it was decreed by unanimous vote that England was responsible for the depredations of the cruiser *Alabama* and, in full satisfaction of this and all other claims, was directed to pay an indemnity of $15,500,000. This decision greatly strengthened the principle of arbitration as a means of settling serious international differences.

Alamo, The, a mission church at San Antonio, in what is now Bexar County, Texas, converted into a fort. In 1836 it was occupied by about 150 of the revolutionists in the Texan War of Independence. Though attacked by 4,000 Mexicans under Santa Ana, the Texans held it from February 23d to March 6th, when Santa Ana took it by storm. All but seven of the garrison perished, six of these being murdered after their surrender, and one man escaping to report the affair. In this garrison were the celebrated David Crockett, and Colonel James Bowie, inventor of the bowie-knife. The memory of this massacre became an incitement to the Texans in subsequent encounters, and "Remember the Alamo!" became a war-cry in their struggle for freedom.

Alsace-Lorraine. Originally a part of Roman Gaul and inhabited by Celtic tribes. In the fourth and fifth centuries it was overrun by Teutonic tribes who largely supplanted the older inhabitants so that by the tenth century portions of the country were extensively Germanized. However, in the latter middle ages Lorraine became more and more distinctively French. In 1552 Lorraine became a part of France, not by conquest but by a treaty, signed by all the Protestant princes of Germany, the text of which states that the German language had never been used in the towns of Toul, Verdun, and Metz. Alsace proper became the possession of the Habsburgs and in 1648 was ceded to France by the emperor of Austria who stated in the treaty that "no other emperor, in the future, will ever have any power in any time to affirm any right on these territories." Southern Alsace, including Mülhausen, formerly belonged to Switzerland but during the French revolution decided by popular vote to become a part of the French republic. In 1870, following the defeat of France by the Prussians, Bismarck made the surrender of Alsace-Lorraine a principal condition of peace. Notwithstanding the opposition of the inhabitants and a unanimous protest of their deputies that "Europe cannot allow a people to be seized like a flock of sheep," Alsace-Lorraine was made an imperial territory of Germany under the direct control of the kaiser. Despite strenuous opposition, met by alternating policies of military severity and mildness, the complete Germanization of the provinces was steadily aimed at.

In 1918, following the defeat of Germany in the World War, the French reoccupied the territory. By the Treaty of Versailles, 1919, Alsace-Lorraine was restored to France.

AMERICAN BATTLES, TABULATED

Naval engagements are indicated by *italics;* * means that it was a drawn battle; † means a general estimate.

Date	Name of Battle	Opponent	Victor	Casualties			
				United States		Opponents	
				Killed	Wo'nd'd	Killed	Wo'nd'd
July 2, 1898	Aguadores (including July 1st),	Spanish	U. S.	0	12	10	30
Feb. 11, 1865	Aikens,	Conf.	U. S.	6†	9†	31	160
May 5, 1864	*Albemarle,*	Conf.	U. S.	4	25	0	0
Oct. 27, 1864	*Albemarle,*	Conf.	U. S.	2	0	0	0
Oct. 5, 1864	Allatoona,	Conf.	U. S.	142	352	338	704
Nov. 13, 1776	*Alfred-transports,*	English	U. S.	0	2	3	10
May 28, 1781	*Alliance-squadron,*	English	U. S.	5	20	11	30
Jan. 29, 1814	*Alligator,*	English	U. S.	2	2	8	14†
March 2, 1815	*America-Elizabeth,*	English	U. S.	0	0	2	13
Oct. 2, 1863	Anderson's Cross-Roads,	Conf.	U. S.	8	16	32	41
Aug. 12, 1776	*Andrea Doria-Racehorse,*	English	U. S.	4	8	6	3
March17, 1813	*Antelope-Zephyr,*	English	Eng.	1	3	0	2
Sept. 16, 1862	Antietam (continued),	Conf.	U. S.	....	....	....	....
Sept. 17, 1862	Antietam (ended),	Conf.	U. S.	2,010	9,416	1,842	9,399

AMERICAN BATTLES, TABULATED—Continued

Date	Name of Battle	Opponent	Victor	Casualties			
				United States		Opponents	
				Killed	Wo'nd'd	Killed	Wo'nd'd
April 9, 1865	Appomattox,	Conf.	U. S.	203	297	189	386
Aug. 14, 1813	*Argus-Pelican*,	English	Eng.	6	17	2	5
July 15, 1862	*Arkansas*,	Conf.	U. S.	18	50	10	15
Jan. 10, 1863	Arkansas Post (continued),	Conf.	U. S.	6	25	10†	30†
Jan. 11, 1863	Arkansas Post (ended),	Conf.	U. S.	129	831	60	78
Oct. 12, 1863	Arrow Rock (continued),	Conf.	Conf.	....	....	....	....
Oct. 13, 1863	Arrow Rock (ended),	Conf.	U. S.	45	162	84	205
Oct. 9, 1779	Assault on Savannah,	English	Eng.	68	173	18	37
July 14, 1813	*Asp, attack on the*,	English	Eng.	4	6	10	21
Sept. 23, 1864	Athens, Ala.,	Conf.	U. S.	0	0	12	18
July 22, 1864	Atlanta, Hood's first sortie,	Conf.	U. S.	499	2,142	1,162	7,337
Aug. 3, 1812	*Atlas-Planter and Pursuit*,	English	U. S.	2	5	2	4
Aug. 3, 1804	*Attack on Tripoli*,	Tripolitan	*	1	13	60	70
Aug. 7, 1804	*Attack on Tripoli*,	Tripolitan	*	22	6	50†	80†
Nov. 29, 1813	Autosse,	Indians	U. S.	11	54	204	0
March16, 1865	Averysboro,	Conf.	U. S.	77	477	86	632
Feb. 1, 1864	Bachelor's Creek,	Conf.	Conf.	24	77	13	22
Oct. 21, 1861	Ball's Bluff,	Conf.	Conf.	223	226	58	242
Feb. 4, 1863	Batesville,	Conf.	U. S.	2	4	5†	7†
Aug. 5, 1862	Baton Rouge,	Conf.	U. S.	99	203	125	234
Oct. 4, 1863	Baxter's Springs,	Conf.	Conf.	80	21	12	32
Aug. 27, 1863	Bayou Metea,	Conf.	U. S.	2	8	11	31
Jan. 29, 1863	Bear River,	Indians	U. S.	12	49	224	8
June 24, 1813	Beaver Dam,	English	Eng.	25	50†	30†	34
Nov. 6, 1861	Belmont (continued),	Conf.	Conf.	....	....	....	....
Nov. 7, 1861	Belmont (ended),	Conf.	U. S.	90	173	231	682
Aug. 16, 1777	Bennington,	English	U. S.	30	41	59	81
March18, 1865	Bentonville (continued),	Conf.	U. S.	....	....	....	....
March18, 1865	Bentonville (ended),	Conf.	U. S.	191	1,108	267	1,381
May 26, 1864	Bermuda Hundreds (continued),	Conf.	U. S.	....	....	....	....
May 27, 1864	Bermuda Hundreds (continued),	Conf.	U. S.	....	....	....	....
May 28, 1864	Bermuda Hundreds (continued),	Conf.	U. S.	....	....	....	....
May 29, 1864	Bermuda Hundreds (continued),	Conf.	U. S.	....	....	....	....
May 30, 1864	Bermuda Hundreds (ended),	Conf.	U. S.	201	998	864	2,136
June 9, 1863	Beverly Ford,	Conf.	Conf.	156	289	253	354
Jan. 11, 1865	Beverly, W. Va.,	Conf.	Conf.	5	20	3	6
July 26, 1864	Big Creek,	Conf.	U. S.	18	32	48	102
Oct. 24, 1864	Big Blue (continued),	Conf.	U. S.	....	....	....	....
Oct. 25, 1864	Big Blue (ended),	Conf.	U. S.	41	62	78	135
June 25, 1876	Big Horn,	Indians	Ind.	261	0	81	126
May 17, 1863	Black River,	Conf.	U. S.	29	242	40	186
Aug. 24, 1814	Bladensburg,	English	Eng.	30	42	183	297
Feb. 13, 1862	Blooming Gap,	Conf.	U. S.	0	2	13	26
Oct. 10, 1863	Blue Springs,	Conf.	U. S.	33	62	48	94
Sept. 8, 1862	*Boat attack on Charleston*,	Conf.	Conf.	23	57	0	2
April 3, 1780	*Boats-Black Snake*,	English	U. S.	0	2	3	5
June 3, 1776	*Boats-tender to Nautilus*,	English	U. S.	1	3	4	18
Sept. 23, 1779	*Bonhomme Richard-Serapis*,	English	U. S.	49	67	49	68
Oct. 12, 1800	*Boston-Berceau*,	French	U. S.	4	11	4	17
March31, 1865	Boydton and White Oak Road,	Conf.	U. S.	177	1,134	236	998
Sept. 11, 1777	Brandywine,	English	Eng.	289	568	98	398
June 10, 1864	Brice's Cross-Roads, Miss.,	Conf.	Conf.	223	394	124	582
April 29, 1862	Bridgeport, Ala.,	Conf.	U. S.	3	8	31	42
Oct. 14, 1863	Bristow Station,	Conf.	*	50	150	150	250
Aug. 4, 1812	Brownstown,	English	Eng.	17	30	0	0
Oct. 19, 1863	Buckland's Mills,	Conf.	Conf.	8	23	4	31
Feb. 22, 1847	Buena Vista (continued),	Mexican	U. S.	....	....	....	....
Feb. 23, 1847	Buena Vista (ended),	Mexican	U. S.	267	456	568	1,241
July 21, 1861	Bull Run,	Conf.	Conf.	481	1,011	362	1,390
Aug. 29, 1862	Bull Run No. 2 (continued),	Conf.	Conf.	....	....	....	....
Aug. 30, 1862	Bull Run No. 2 (ended),	Conf.	Conf.	798	4,023	1,090	6,154
June 17, 1775	Bunker Hill,	English	Eng.	145	304	359	695
July 1, 1863	Cabin Creek,	Conf.	U. S.	8	15	42	108
July 7, 1862	Cache Swamp,	Conf.	U. S.	8	45	110	150
Oct. 7, 1812	*Caledonia and Detroit-boats*,	English	U. S.	1	4	5	10
Aug. 16, 1780	Camden,	English	Eng.	94	281	80	245
June 11, 1898	*Camp McCalla* (continued),	Spanish	U. S.	....	....	....	....
June 12, 1898	*Camp McCalla* (continued),	Spanish	U. S.	....	....	....	....
June 13, 1898	*Camp McCalla* (continued),	Spanish	U. S.	....	....	....	....
June 14, 1898	*Camp McCalla* (ended),	Spanish	U. S.	6	11	60†	140†
Nov. 16, 1863	Campbell Station,	Conf.	Conf.	112	186	136	214
Jan. 27, 1814	Camp Defiance,	Indians	U. S.	17	132	37	0
April 23, 1864	Cane River,	Conf.	U. S.	98	152	108	164
April 13, 1813	*Canonnier-Medusa*,	English	Eng.	1	3	0	4
March 1, 1813	*Canonnier-Warspite*,	English	Eng.	1	3	0	1
Nov. 20, 1856	*Canton Forts* (continued),	Chinese	U. S.	....	....	....	....
Nov. 21, 1856	*Canton Forts* (continued),	Chinese	U. S.	....	....	....	....
Nov. 22, 1856	*Canton Forts* (ended),	Chinese	U. S.	12	28	400	540
April 26, 1863	Cape Girardeau,	Conf.	U. S.	6	18	22	43
Jan. 14, 1863	Carney's Bridge,	Conf.	U. S.	7	27	14	36
July 7, 1777	Castletown,	English	Eng.	211	583	35	144
Aug. 19, 1780	Catawba Fords,	English	Eng.	162	281	2	21
Oct. 19, 1864	Cedar Creek,	Conf.	U. S.	588	3,516	961	3,239
Aug. 8, 1862	Cedar Mountain (continued),	Conf.	Conf.	....	....	....	....

AMERICAN BATTLES, TABULATED—Continued

Date	Name of Battle	Opponent	Victor	Casualties			
				United States		Opponents	
				Killed	Wo'nd'd	Killed	Wo'nd'd
Aug. 9, 1862	Cedar Mountain (ended),	Conf.	Conf.	450	660	223	1,060
April 18, 1847	Cerro Gordo,	Mexican	U. S.	63	368	100†	500†
May 16, 1863	Champion Hills,	Conf.	U. S.	426	1,842	486	1,954
April 30, 1863	Chancellorsville (continued),	Conf.	Conf.	....	....	....	....
May 1, 1863	Chancellorsville (continued),	Conf.	Conf.	....	....	....	....
May 2, 1863	Chancellorsville (continued),	Conf.	Conf.	....	....	....	....
May 3, 1863	Chancellorsville (continued),	Conf.	Conf.	....	....	....	....
May 4, 1863	Chancellorsville (ended),	Conf.	Conf.	1,512	9,518	1,718	10,563
Sept. 13, 1847	Chapultepec,	Mexican	U. S.	116	671	1,000†	2,000
June 4, 1782	*Charming Sally-Revenge*,	English	U. S.	1	4	3	6
Feb. 25, 1815	*Chasseur-St. Lawrence*,	English	U. S.	5	8	15	23
July 6, 1864	Chattahoochee (continued),	Conf.	U. S.	....	....	....	....
July 8, 1864	Chattahoochee (continued),	Conf.	U. S.	....	....	....	....
July 10, 1864	Chattahoochee (ended),	Conf.	U. S.	80	450	201	402
Nov. 23, 1863	Chattanooga, including Orchard Knob, Lookout Mountain, and Missionary Ridge (continued),	Conf.	U. S.	....	....	....	....
Nov. 24, 1863	Chattanooga, etc. (continued),	Conf.	U. S.	....	....	....	....
Nov. 25, 1863	Chattanooga, etc. (ended),	Conf.	U. S.	757	4,529	850	2,150
June 1, 1813	*Chesapeake-Shannon*,	English	Eng.	47	99	24	59
Dec. 7, 1777	Chestnut Hill,	English	*	14	36	42	64
Sept. 18, 1863	Chickamauga (continued),	Conf.	Conf.	....	....	....	....
Sept. 19, 1863	Chickamauga (continued),	Conf.	Conf.	....	....	....	....
Sept. 20, 1863	Chickamauga (ended),	Conf.	Conf.	1,644	9,262	6,000	10,000
Feb. 27, 1847	Chihuahua,	Mexican	U. S.	3	5	33	67
July 5, 1814	Chippewa,	English	U. S.	60	244	199	328
Nov. 11, 1813	Chrysler's Fields,	English	*	102	237	22	147
Aug. 20, 1847	Churubusco,	Mexican	U. S.	131	876	1,000†	3,000†
May 9, 1864	Cloyd's M'tain and New River Bridge,	Conf.	U. S.	126	585	248	652
Dec. 5, 1863	Coffeeville,	Conf.	Conf.	38	62	21	32
June 5, 1864	Columbia, Ark.,	Conf.	U. S.	19	73	22	81
April 16, 1865	Columbus, Ala.,	Conf.	U. S.	10	14	30	50
Dec. 9, 1862	Col. Matthews,	Conf.	U. S.	18	22	32	68
April 4, 1864	Col. Gooding,	Conf.	U. S.	8	26	18	39
June 2, 1864	Cold Harbor (continued),	Conf.	Conf.	....	....	....	....
June 3, 1864	Cold Harbor (ended),	Conf.	Conf.	1,905	10,570	364	1,336
Jan. 14, 1813	*Comet-frigate*,	Port'guese	U. S.	1	3	10	14
Aug. 3, 1814	Comoeta Creek,	English	U. S.	2	8	10	20
Dec. 1, 1782	*Commerce-brig and schooners*,	English	*	1	2	14	24
April 19, 1775	Concord,	English	Eng.	49	34	74	199
Sept. 6, 1781	*Congress-Savage*,	English	U. S.	11	19	25	31
Feb. 9, 1799	*Constellation-Insurgent*,	French	U. S.	2	3	29	41
Feb. 2, 1800	*Constellation-Vengeance*,	French	U. S.	14	25	50	110
Aug. 19, 1812	*Constitution-Guerriere*,	English	U. S.	7	7	15	63
Dec. 29, 1812	*Constitution-Java*,	English	U. S.	9	25	60	101
Feb. 20, 1815	*Constitution-Cyane and Levant*,	English	U. S.	4	10	35	42
Aug. 19, 1847	Contreras,	Mexican	U. S.	20	40	700	2,200
Oct. 19, 1814	Cook's Mills,	English	U. S.	11	54	20	60
Feb. 23, 1813	*Cora-boats*,	English	Eng.	1	3	1	2
Oct. 3, 1862	Corinth (continued),	Conf.	U. S.	....	....	....	....
Oct. 4, 1862	Corinth (ended),	Conf.	U. S.	315	1,812	1,423	5,692
Feb. 29, 1812	*Courier-Andromache*,	English	Eng.	0	3	0	1
Jan. 17, 1781	Cowpens,	English	U. S.	12	60	120	199
Sept. 14, 1862	Crampton Gap,	Conf.	U. S.	115	418	98	342
June 22, 1813	*Craney Island*,	English	U. S.	0	0	75†	125†
June 8, 1862	Cross Keys,	Conf.	*	125	498	29	302
Aug. 1, 1863	Culpepper Court-House,	Conf.	*	16	98	22	104
Feb. 21, 1865	Cumberland, Md.,	Conf.	U. S.	1	3	2	8
Feb. 5, 1865	Dabney's Mills (continued),	Conf.	U. S.	....	....	....	....
Feb. 6, 1865	Dabney's Mills (continued),	Conf.	U. S.	....	....	....	....
Feb. 7, 1865	Dabney's Mills (ended),	Conf.	U. S.	232	1,062	249	751
July 11, 1812	*Decatur-Commerce*,	English	U. S.	0	0	4	7
Aug. 5, 1813	*Decatur-Dominica*,	English	U. S.	4	16	18	45
June 17, 1776	*Defense-transports*,	English	U. S.	0	9	18	30†
Sept. 9, 1847	Del Rey,	Mexican	U. S.	8	31	46	89
April 27, 1805	Derne,	Turkish	U. S.	6	8	10†	20†
Dec. 6, 1864	Deveraux's Neck (continued),	Conf.	*	....	....	....	....
Dec. 8, 1864	Deveraux's Neck (continued),	Conf.	*	....	....	....	....
Dec. 9, 1864	Deveraux's Neck (ended),	Conf.	*	39	390	112	228
April 15, 1813	*Diligent-squadron*,	English	Eng.	1	3	0	1
Aug. 22, 1814	*Diomede-Upton*,	English	U. S.	0	0	1	2
Sept. 2, 1812	*Dolphin-two ships*,	English	U. S.	4	7	3	8
Jan. 25, 1813	*Dolphin-squadron*,	English	U. S.	3	8	6	9
June 28, 1863	Donaldsonville,	Conf.	U. S.	1	3	85	114
Feb. 3, 1863	Dover, Col. Harding,	Conf.	U. S.	16	60	150	400
May 15, 1862	Drury's Bluff,	Conf.	Conf.	422	2,380	514	1,086
Nov. 6, 1863	Droop Mountain,	Conf.	U. S.	41	79	82	158
May 5, 1864	Dunn's Bayou,	Conf.	Conf.	38	64	4	18
Aug. 23, 1864	Duvall's Bluff,	Conf.	Conf.	13	42	6	33
Dec. 23, 1813	Econochaca,	Indians	U. S.	1	6	30	0
July 1, 1898	El Caney,	Spanish	U. S.	88	356	120	400
Feb. 10, 1862	*Elizabeth City*,	Conf.	U. S.	2	2	4	10
Jan. 22, 1814	Emucfau,	Indians	U. S.	20	75	220†	0
Nov. 20, 1780	Ennoree Ford,	English	U. S.	3	4	92	102

AMERICAN BATTLES, TABULATED—Continued

Date	Name of Battle	Opponent	Victor	Casualties			
				United States		Opponents	
				Killed	Wo'nd'd	Killed	Wo'nd'd
Jan. 24, 1814	Enotachopco,	Indians	U. S.	40	60	200†	0
Sept 5, 1813	*Enterprise-Boxer*,	English	U. S.	2	10	4	17
Aug. 1, 1801	*Enterprise-Tripoli*,	Tripolitan	U. S.	0	0	20	30
Aug. 13, 1812	*Essex-Alert*,	English	U. S.	0	0	0	3
March28, 1814	*Essex-Phœbe and Cherub*,	English	Eng.	58	66	5	10
Sept. 8, 1781	Eutaw Springs,	English	U. S.	130	349	85	402
July 28, 1864	Ezra Chapel,	Conf.	U. S.	99	601	864	3,778
Oct. 27, 1864	Fair Oaks (continued),	Conf.	*	....	....	....	....
Oct. 28, 1864	Fair Oaks (ended),	Conf.	*	120	783	150	301
July 13, 1863	Falling Waters,	Conf.	U. S.	25	80	125	354
Feb. 26, 1863	Falmouth,	Conf.	Conf.	5†	8†	6	8
Feb. 28, 1862	*Farragut at Vicksburg*,	Conf.	U. S.	15	30	0	0
Aug. 5, 1864	*Farragut in Mobile*,	Conf.	U. S.	145	170	12	20
Oct. 7, 1863	Farmington,	Conf.	U. S.	8	16	22	37
April 18, 1863	Fayetteville,	Conf.	U. S.	4	26	17	36
April 1, 1865	Five Forks,	Conf.	U. S.	124	706	450	750
April 9, 1865	Fort Blakely,	Conf.	U. S.	113	516	242	874
May 20, 1863	Fort Blunt,	Conf.	U. S.	12	38	25	37
Sept. 15, 1814	Fort Bowyer,	English	U. S.	4	5	32	40
Sept. 27, 1864	Fort Davidson,	Conf.	Conf.	47	154	245	756
Feb. 15, 1862	Fort Donelson,	Conf.	U. S.	560	746	466	1,534
Aug. 15, 1814	Fort Erie,	English	U. S.	17	56	222	309
Sept. 17, 1814	Fort Erie (sortie),	English	U. S.	79	216	110	250
March 12, 1864	*Fort De Russey*,	Conf.	U. S.	18	29	14	33
Dec. 24, 1864	*Fort Fisher* (continued),	Conf.	Conf.	....	....	....	....
Dec. 25, 1864	*Fort Fisher* (continued),	Conf.	Conf.	20	63	3	55
Jan. 13, 1865	*Fort Fisher* (continued),	Conf.	U. S.	....	....	....	....
Jan. 14, 1865	*Fort Fisher* (continued),	Conf.	U. S.	....	....	....	....
Jan. 15, 1865	*Fort Fisher* (ended),	Conf.	U. S.	184	749	150	249
May 27, 1813	Fort George,	English	U. S.	39	121	108	163
April 2, 1865	Fort Greggs and Alexander,	Conf.	U. S.	198	304	249	353
Sept. 5, 1812	Fort Harrison,	Indians	U. S.	2	2	8	20
Aug. 28, 1861	*Fort Hatteras*,	Conf.	U. S.	0	0	4	25
Feb. 6, 1862	*Fort Henry*,	Conf.	U. S.	17	27	5	11
April 25, 1862	*Fort Macon*,	Conf.	U. S.	0	3	7	18
March 3, 1863	*Fort McAllister*,	Conf.	Conf.	0	1	0	1
May 5, 1813	Fort Meigs,	English	U. S.	64	124	30†	60†
Oct. 6, 1777	Forts Montgomery and Clinton,	English	Eng.	84	166	62	141
June 28, 1776	Fort Moultrie,	English	U. S.	11	26	68	437
March 11, 1863	*Fort Pemberton* (continued),	Conf.	Conf.	....	....	....	....
March 12, 1863	*Fort Pemberton* (continued),	Conf.	Conf.	....	....	....	....
March 13, 1863	*Fort Pemberton* (continued),	Conf.	Conf.	....	....	....	....
March 14, 1863	*Fort Pemberton* (continued),	Conf.	Conf.	....	....	....	....
March 16, 1863	*Fort Pemberton* (ended),	Conf.	Conf.	7	19	3†	8†
May 10, 1862	*Fort Pillow*,	Conf.	U. S.	0	4	2	1
April 12, 1864	Fort Pillow,	Conf.	Conf.	348	52	19	61
April 11, 1863	Fort Pulaski,	Conf.	Conf.	1	3	1	7
Oct. 17, 1862	Fort Ridgeley,	Indians	U. S.	1	6	44	108
Aug. 6, 1777	Fort Schuyler,	English	Eng.	120	268	86	204
July 27, 1864	Fort Smith,	Conf.	Conf.	10	15	12	19
March25, 1865	Fort Stedman,	Conf.	U. S.	68	337	134	698
Aug. 2, 1813	Fort Stephenson,	English	U. S.	1	7	50	101
July 18, 1863	Fort Wagner,	Conf.	Conf.	624	876	26	74
April 17, 1864	Fort Wessels,	Conf.	Conf.	20	31	29	42
Dec. 18, 1862	Foster's Expedition (ended),	Conf.	U. S.	90	478	201	538
Jan. 6, 1813	*Fox-Lapwing*,	English	U. S.	1	3	14	8
April 10, 1863	Franklin,	Conf.	U. S.	17	20	79	163
Nov. 30, 1864	Franklin, Tenn.,	Conf.	U. S.	189	1,033	1,141	5,113
Dec. 11, 1862	Fredericksburg (continued),	Conf.	Conf.	....	....	....	....
Dec. 12, 1862	Fredericksburg (continued),	Conf.	Conf.	....	....	....	....
Dec. 13, 1862	Fredericksburg (ended),	Conf.	Conf.	1,152	9,101	505	4,061
Jan. 18, 1813	Frenchtown,	English	U. S.	12	55	30†	50†
Jan. 22, 1813	Frenchtown No. 2,	English	Eng.	357	64	150	155
May 23, 1862	Front Royal,	Conf.	Conf.	32	122	0	13
June 27, 1862	Gaines Mill,	Conf.	Conf.	3,000	4,500	2,000	4,000
Jan. 1, 1863	*Galveston*,	Conf.	Conf.	17	20†	26	117
Sept. 7, 1813	*Gen. Armstrong-Queen*,	English	U. S.	0	1	10	19
Aug. 26, 1814	*Gen. Armstrong-British boats*,	English	U. S.	2	7	137	107
June 4, 1780	*Gen. Pickering-Achilles*,	English	U. S.	1	3	8	12
Jan. 16, 1864	Gen. Sturgis,	Conf.	U. S.	8	32	16	49
Sept. 21, 1777	Gen. Wayne,	English	Eng.	94	162	2	5
Feb. 18, 1815	*George Little-Granicus*,	English	Eng.	2	6	0	1
Oct. 4, 1777	Germantown,	English	Eng.	189	542	98	402
July 1, 1863	Gettysburg (continued),	Conf.	U. S.	....	....	....	....
July 2, 1863	Gettysburg (continued),	Conf.	U. S.	....	....	....	....
July 3, 1863	Gettysburg (ended),	Conf.	U. S.	2,834	13,709	4,000	14,000
April 7, 1776	*Glasgow*,	English	Eng.	10	14	1	3
Nov. 8, 1813	*Globe-packets*,	English	U. S.	8	18	9	18
Sept. 25, 1812	*Globe-Sir Simon Clark*,	English	U. S.	2	1	4	4
Nov. 2, 1813	*Governor Tompkins-Mary Ann*,	English	U. S.	0	0	1	4
April 29, 1863	Grand Gulf,	Conf.	Conf.	19	57	8	16
Dec. 15, 1775	Great Bridge,	English	U. S.	0	0	24	81
Nov. 17, 1847	Guaymas,	Mexican	U. S.	0	0	12	18
June 17, 1815	*Guerriere-Mashouda*,	Algerine	U. S.	3	11	12	18

AMERICAN BATTLES, TABULATED—Continued

Date	Name of Battle	Opponent	Victor	Casualties			
				United States		Opponents	
				Killed	Wo'nd'd	Killed	Wo'nd'd
March 15, 1781	Guilford Court-House,	English	Eng.	123	314	231	318
May 21, 1863	Gum Swamp,	Conf.	U. S.	3	8	4	16
May 11, 1777	*Hancock-Fox,*	English	U. S.	3	5	14	18
May 27, 1862	Hanover Court-House,	Conf.	U. S.	53	344	198	732
Sept. 16, 1776	Harlem Plains,	English	*	7	8	2	20
Sept. 13, 1863	Harper's Ferry,	Conf.	Conf.	80	120	0	0
June 5, 1862	Harrisonburg,	Conf.	U. S.	15	32	20	50
Oct. 1, 1864	Harrison,	Conf.	U. S.	8	24	16	46
Dec. 7, 1862	Hartsville,	Conf.	Conf.	48	102	35	115
Jan. 10, 1863	Hartsville,	Conf.	U. S.	7	69	18	74
Oct. 27, 1864	Hatcher's Run,	Conf.	*	56	1,047	247	763
Jan. 11, 1863	*Hatteras-Alabama,*	Conf.	Conf.	2	6	0	1
March 16, 1779	*Hazard-Active,*	English	U. S.	3	5	13	20
Feb. 22, 1812	*Hazard-Caledonia,*	English	U. S.	0	7	2	11
July 9, 1780	*Hazard-Duff,*	English	U. S.	2	4	31	64
July 4, 1863	Helena,	Conf.	U. S.	98	152	205	504
March 21, 1864	Henderson's Hill,	Conf.	U. S.	1	3	5	18
April 5, 1779	*Hibernia-brig of war,*	English	*	1	3	3	9
July 22, 1812	*Highflyer-Caledonia,*	English	U. S.	0	7	3	9
Feb. 17, 1813	*Highflyer-Poictiers,*	English	Eng.	1	3	0	0
Nov. 18, 1813	Hillabee towns,	Indians	U. S.	0	0	61	0
April 25, 1781	Hobkirk's Hill,	English	Eng.	52	141	38	104
July 30, 1779	*Holker-brig,*	English	U. S.	6	16	6	20
Feb. 17, 1781	*Holker-Hypocrite,*	English	U. S.	3	1	4	7
Dec. 20, 1862	Holly Springs,	Conf.	Conf.	3	4	2	21
Nov. 30, 1864	Honey Hill, S. C.,	Conf.	Conf.	66	645	18	114
July 17, 1863	Honey Springs,	Conf.	U. S.	17	60	153	378
Feb. 24, 1813	*Hornet-Peacock,*	English	U. S.	1	4	5	33
March 23, 1815	*Hornet-Penguin,*	English	U. S.	1	11	10	28
March 27, 1814	Horseshoe Bend,	Indians	U. S.	26	106	557	0
April 14, 1779	*Hunter-armed ship,*	English	*	0	4	3	6
Jan. 4, 1862	Huntersville, Va.,	Conf.	*	1	3	2	4
April 8, 1782	*Hyder Ally-Gen. Monk,*	English	U. S.	4	11	20	33
Nov. 15, 1779	*Impertinent-Harlem,*	English	U. S.	0	1	8	3
Feb. 24, 1863	*Indianola,*	Conf.	Conf.	1	1	2	5
Nov. 16, 1776	*Industry-brig,*	English	*	2	6	3	8
March 19, 1776	*Industry-brig,*	English	Eng.	0	3	2	6
Sept. 4, 1804	*Intrepid,*	Tripolitan	Trip	13	0	20	30
April 7, 1863	*Ironclads at Charleston,*	Conf.	*	3	18	0	3
April 7, 1862	Island No. 10,	Conf.	U. S.	19	32	1	3
Sept. 19, 1862	Iuka,	Conf.	U. S.	144	598	385	692
July 12, 1863	Jackson,	Conf.	U. S.	88	765	71	504
May 14, 1863	Jackson,	Conf.	U. S.	37	228	64	392
July 16, 1863	James Island,	Conf.	U. S.	24	76	48	152
July 6, 1781	Jamestown Island,	English	Eng.	37	81	21	49
Nov. 1, 1779	*Jason-Perseus,*	English	Eng.	18	12	7	9
July 25, 1779	*Jason-privateer,*	English	U. S.	1	3	3	6
April 30, 1864	Jenkins Ferry,	Conf.	U. S.	222	978	842	1,458
Aug. 31, 1864	Jonesboro, Ga. (continued),	Conf.	U. S.	....	....	....	....
Sept. 1, 1864	Jonesboro (ended),	Conf.	U. S.	0	1,149	498	1,502
July 31, 1812	*Julia-Gloucester,*	English	U. S.	0	0	0	3
June 19, 1864	*Kearsarge-Alabama,*	Conf.	U. S.	1	2	9	21
June 10, 1864	Kellar's Bridge,	Conf.	U. S.	13	54	0	0
Jan. 30, 1862	Kelly's Stores,	Conf.	*	24	80	22	28
Dec. 3, 1815	*Kemp-merchantmen (armed),*	English	U. S.	1	4	3	8
March 23, 1862	Kernstown,	Conf.	U. S.	103	441	80	342
Oct. 7, 1780	King's Mountain,	English	U. S.	28	60	168	284
Dec. 14, 1862	Kingston,	Conf.	U. S.	90	478	71	268
Aug. 6, 1862	Kirksville,	Conf.	U. S.	28	60	180	498
Nov. 17, 1863	Knoxville,	Conf.	*	24	72	18	64
Nov. 29, 1863	Knoxville,	Conf.	U. S.	24	68	259	432
March 30, 1814	La Colle Mill,	English	Eng.	8	66	11	47
June 3, 1776	*Lady Washington-barges,*	English	U. S.	0	2	3	11
Dec. 14, 1814	*Lake Borgne,*	English	Eng.	6	35	17	77
Oct. 11, 1776	*Lake Champlain,*	English	Eng.	30	50	15	26
Sept. 11, 1814	*Lake Champlain,*	English	U. S.	52	58	84	110
Sept. 10, 1813	*Lake Erie,*	English	U. S.	27	96	41	94
Sept. 28, 1813	*Lake Ontario,*	English	U. S.	10	17	12	20
June 24, 1898	Las Guasimas,	Spanish	U. S.	16	50	28	124
Aug. 21, 1863	Lawrence,	Conf.	Conf.	140	22	3	14
July 5, 1862	Lebanon,	Conf.	Conf.	4	8	3	4
Nov. 22, 1776	*Lee-ship,*	English	*	1	3	2	8
July 7, 1864	Legareville,	Conf.	Conf.	36	61	12	25
May 23, 1862	Lewisburg,	Conf.	U. S.	11	52	49	76
April 19, 1775	Lexington,	English	Eng.	7	9	0	0
Sept. 20, 1777	*Lexington-Alert,*	English	Eng.	3	10	2	3
April 17, 1776	*Lexington-Edward,*	English	U. S.	2	2	5†	8†
Sept. 12, 1861	Lexington, Mo.,	Conf.	*	42	108	33	65
April 12, 1864	Lexington, Red River,	Conf.	U. S.	0	0	164	341
Sept. 10, 1863	Little Rock,	Conf.	U. S.	22	59	31	45
Aug. 17, 1862	London, Ky.,	Conf.	Conf.	12	18	3	8
Aug. 27, 1776	Long Island,	English	Eng.	62	188	61	257
Feb. 14, 1813	*Lottery-boats,*	English	Eng.	8	10	2	4
June 17, 1864	Lynchburg (continued),	Conf.	Conf.	....	....	....	....

AMERICAN BATTLES, TABULATED—Continued

Date	Name of Battle	Opponent	Victor	Casualties			
				United States		Opponents	
				Killed	Wo'nd'd	Killed	Wo'nd'd
June 18, 1864	Lynchburg (ended),	Conf.	Conf.	99	503	47	157
Aug. 9, 1812	Maguaga,	English	U. S.	18	58	50	75
Sept. 30, 1863	Major Montgomery,	Conf.	Conf.	14	40	0	2
July 1, 1862	Malvern Hill,	Conf.	U. S.	2,860	3,500	3,023	4,077
Aug. 4, 1862	Malvern No. 2,	Conf.	U. S.	6	8	10	18
July 24, 1863	Manassas Gap,	Conf.	U. S.	30	59	41	79
Aug. 27, 1862	Manassas Junction,	Conf.	Conf.	14	28	11	16
May 1, 1898	*Manila,*	Spanish	U. S.	0	7	318	298
Aug. 13, 1898	Manila,	Spanish	U. S.	8	40	....	....
Aug. 12, 1898	*Manzanillo,*	Spanish	U. S.	0	0	10†	(?)
Nov. 4, 1812	*Marengo-Leonidas,*	English	U. S.	0	0	0	1
April 25, 1864	Mark's Mills,	Conf.	Conf.	98	142	126	394
May 16, 1864	Marksville,	Conf.	U. S.	9	18	32	64
Aug. 20, 1779	*Mars-Active,*	English	U. S.	0	3	2	7
July 23, 1864	Martinsburg (continued),	Conf.	U. S.	....	....	....	....
July 24, 1864	Martinsburg (ended),	Conf.	U. S.	342	836	26	152
Dec. 2, 1777	*Massachusetts-Lawnsdale,*	English	U. S.	3	5	6	13
Dec. 17, 1812	Massasinewa,	Indians	U. S.	11	26	39	0
June 27, 1861	*Mathias Point,*	Conf.	Conf.	1	4	0	0
May 8, 1862	McDowell's,	Conf.	Conf.	80	176	71	390
April 20, 1863	McMinnville,	Conf.	U. S.	0	0	4	8
June 26, 1862	Mechanicsville,	Conf.	U. S.	149	224	156	236
June 6, 1862	*Memphis,*	Conf.	U. S.	10	4	20†	30†
March 8, 1862	*Merrimac in Hampton Roads,*	Conf.	Conf.	250	301	8	11
Jan. 7, 1862	Middle Creek,	Conf.	U. S.	3	8	11	32
June 12, 1863	Middletown,	Conf.	U. S.	1	4	18	32
June 7, 1863	Milliken's Bend,	Conf.	U. S.	154	223	148	294
Jan. 19, 1862	Mill Spring (Logan Cross Roads),	Conf.	U. S.	39	207	192	132
Nov. 28, 1863	Mine Run (ended),	Conf.	U. S.	99	398	121	432
Feb. 3, 1863	Mingo Swamp,	Conf.	U. S.	0	0	8	20
April 14, 1780	Monk's Corner,	English	Eng.	26	73	3	6
March 9, 1862	*Monitor-Merrimac,*	Conf.	U. S.	0	1	0	2
June 28, 1778	Monmouth,	English	U. S.	72	160	294	170
July 9, 1864	Monocacy,	Conf.	Conf.	90	579	78	322
Sept. 24, 1846	Monterey,	Mexican	U. S.	142	364	200†	450
Dec. 6, 1812	*Montgomery, armed-ship,*	English	U. S.	4	13	6	21
Feb. 14, 1776	Moore's Creek,	English	U. S.	0	3	13	22
Aug. 30, 1814	Moorfields,	English	U. S.	0	3	13	20
Oct. 5, 1813	Moravian towns,	English	U. S.	7	22	80	101
Nov. 16, 1776	Mount Washington,	English	Eng.	48	101	252	448
Sept. 14, 1862	Mumfordsville,	Conf.	Conf.	15	22	29	31
July 13, 1862	Murfreesboro,	Conf.	U. S.	33	62	47	103
Dec. 30, 1862	Murfreesboro (continued),	Conf.	U. S.	....	....	....	....
Dec. 31, 1862	Murfreesboro (continued),	Conf.	U. S.	....	....	....	....
Jan. 1, 1863	Murfreesboro (continued),	Conf.	U. S.	....	....	....	....
Jan. 2, 1863	Murfreesboro (ended),	Conf.	U. S.	1,533	7,245	1,384	6,892
Dec. 15, 1864	Nashville (continued),	Conf.	U. S.	....	....	....	....
Dec. 16, 1864	Nashville (ended),	Conf.	U. S.	399	1,741	584	3,021
Sept. 13, 1814	Near Baltimore,	English	Eng.	24	139	80	301
July 12, 1863	Near Donaldsonville,	Conf.	Conf.	151	349	88	126
Dec. 23, 1814	Near New Orleans,	English	Eng.	24	113	99	230
Dec. 28, 1814	Near New Orleans,	English	U. S.	7	8	120	149
Nov. 3, 1863	Near Opelousas,	Conf.	*	26	124	58	298
July 19, 1863	Near Pomeroy,	Conf.	U. S.	2	8	12	41
June 15, 1847	*Near Tabasco,*	Mexican	U. S.	0	7	20†	30†
March 14, 1862	*New Berne,*	Conf.	U. S.	102	432	50	152
May 24, 1862	New Bridge,	Conf.	U. S.	3	5	4	15
July 26, 1863	New Lisbon,	Conf.	U. S.	1	12	22	43
Sept. 6, 1781	New London,	English	Eng.	88	34	86	142
Sept. 28, 1864	New Market Heights (continued),	Conf.	U. S.	....	....	....	....
Sept. 29, 1864	New Market Heights (continued),	Conf.	U. S.	....	....	....	....
Sept. 30, 1864	New Market Heights (ended),	Conf.	U. S.	398	2,031	399	1,601
May 15, 1864	New Market, Pa.,	Conf.	Conf.	120	563	96	306
Jan. 1, 1815	New Orleans,	English	U. S.	11	23	20	30†
Jan. 8, 1815	New Orleans,	English	U. S.	4	13	700	1,400
April 23, 1862	*New Orleans,*	Conf.	U. S.	37	147	12	40
Aug. 29, 1779	Newtown,	Indians	U. S.	8	22	12	34
Nov. 28, 1812	Niagara batteries,	English	U. S.	8	12	14	30
July 25, 1814	Niagara (Lundy's Lane),	English	U. S.	171	572	201	559
June 18, 1781	Ninety-six,	English	Eng.	48	107	24	61
Sept. 28, 1812	*Nonesuch-privateer,*	English	U. S.	3	8	7	16
Oct. 31, 1799	*Norfolk-Picaroons,*	Picaroons	U. S.	0	0	65	70
May 26, 1864	North Anna (continued),	Conf.	U. S.	....	....	....	....
May 27, 1864	North Anna (ended),	Conf.	U. S.	223	1,460	304	1,513
June 25, 1862	Oak Grove, near Richmond,	Conf.	U. S.	51	401	60	300
Jan. 31, 1863	*Off Charleston,*	Conf	Conf.	23	24	0	0
Oct. 4, 1812	Ogdensburg,	English	U. S.	0	0	3	6
Feb. 10, 1863	Old River,	Conf.	U. S.	5	7	4	7
Feb. 20, 1864	Olustee,	Conf.	Conf.	193	1,175	150	350
Nov. 26, 1863	Operations at Mine Run, Va. (continued),	Conf.	U. S.	....	....	....	....
Nov. 27, 1863	Operations at Mine Run (continued),	Conf.	U. S.	....	....	....	....
Sept. 19, 1864	Opequan,	Conf.	U. S.	653	3,719	1,632	3,868
May 6, 1814	Oswego,	English	U. S.	6	38	70	165

AMERICAN BATTLES, TABULATED—Continued

Date	Name of Battle	Opponent	Victor	Casualties			
				United States		Opponents	
				Killed	Wo'nd'd	Killed	Wo'nd'd
May 8, 1846	Palo Alto,	Mexican	U. S.	4	42	102	127
Dec. 31, 1862	Parker's Cross-Roads,	Conf.	U. S.	23	139	48	152
Feb. 2, 1864	Paterson Creek,	Conf.	Conf.	0	3†	4	5†
Aug. 18, 1779	Paulus Hook,	English	U. S.	2	3	5	12
Nov. 5, 1812	*Paul Jones-Hassan*,	English	U. S.	0	1	1	1
April 29, 1814	*Peacock-Epervier*,	English	U. S.	0	2	8	15
June 30, 1815	*Peacock-Nautilus*,	English	U. S.	0	0	6	8
March 6, 1862	Pea Ridge (continued),	Conf.	U. S.	....	....	....	....
March 7, 1862	Pea Ridge (continued),	Conf.	U. S.	....	....	....	....
March 8, 1862	Pea Ridge (ended),	Conf.	U. S.	203	972	1,040	3,638
July 20, 1864	Peach Tree Creek,	Conf.	U. S.	301	1,411	880	3,916
April 22, 1847	Perote,	Mexican	U. S.	0	3	0	4
Oct. 8, 1862	Perryville,	Conf.	U. S.	916	2,943	980	1,520
April 2, 1865	Petersburg,	Conf.	U. S.	298	2,565	341	3,092
June 19, 1864	Petersburg (from June 15),	Conf.	*	1,298	7,474	984	6,721
June 20, 1864	Petersburg (continued to June 30),	Conf.	U. S.	....	....	....	....
June 30, 1864	Petersburg (ended),	Conf.	U. S.	112	506	801	1,417
July 31, 1864	Petersburg (from July 1, exclusive of losses at the Crater and Deep Bottom),	Conf.	U. S.	419	2,076	799	4,023
Aug. 31, 1864	Petersburg (August 1 to August 31),	Conf.	U. S.	87	484	101	605
Oct. 30, 1864	Petersburg (September 1–October 30)	Conf.	U. S.	170	822	240	761
Feb. 16, 1804	*Philadelphia (frigate)*,	Tripolitans	U. S.	0	1	100†	0
Oct. 20, 1863	Philadelphia, Tenn.,	Conf.	Conf.	26	73	34	62
June 5, 1864	Piedmont,	Conf.	U. S.	130	650	633	2,337
Jan. 5, 1781	*Pilgrim-Mary*,	English	U. S.	4	16	13	22
Oct. 25, 1863	Pine Bluff,	Conf.	U. S.	17	40	39	111
Aug. 13, 1863	Pineville,	Conf.	U. S.	3	18	28	92
April 6, 1862	Pittsburgh Landing (continued),	Conf.	U. S.	....	....	....	....
April 7, 1862	Pittsburgh Landing (ended),	Conf.	U. S.	1,735	7,882	1,128	8,012
Sept. 11, 1814	Plattsburg,	English	U. S.	37	62	50	98
April 8, 1864	Pleasant Hill (continued),	Conf.	U. S.	....	....	....	....
April 9, 1864	Pleasant Hill (ended),	Conf.	U. S.	99	688	348	1,654
April 20, 1864	Plymouth,	Conf.	Conf.	41	59	125	174
Oct. 22, 1862	Pocotaligo (continued),	Conf.	Conf.	....	....	....	....
Oct. 23, 1862	Pocotaligo (ended),	Conf.	Conf.	84	152	14	102
May 1, 1863	Port Gibson,	Conf.	U. S.	130	718	144	832
March 13, 1863	*Port Hudson*,	Conf.	U. S.	8	7	0	0
June 14, 1863	Port Hudson,	Conf.	*	250	680	188	364
May 27, 1863	Port Hudson,	Conf.	Conf.	293	1,549	110	173
June 9, 1862	Port Republic,	Conf.	Conf.	67	361	104	796
Nov. 7, 1861	*Port Royal*,	Conf.	U. S.	8	23	11	48
April 10, 1863	Prairie d'Anne,	Conf.	U. S.	8	15	18	36
Dec. 7, 1862	Prairie Grove,	Conf.	U. S.	167	798	164	817
Sept. 30, 1864	Preble's Farm (continued),	Conf.	U. S.	....	....	....	....
Oct. 1, 1864	Preble's Farm (ended),	Conf.	U. S.	141	788	214	686
June 23, 1812	*President-Belvidere*,	English	U. S.	3	19	2	22
Jan. 15, 1815	*President-Endymion*,	English	Eng.	24	56	11	14
Oct. 9, 1814	*Prince de Neuchatel-Endymion*,	English	U. S.	7	23	33	37
Jan. 3, 1777	Princeton,	English	U. S.	31	64	49	151
Dec. 4, 1781	*Prosperity-privateer*,	English	U. S.	3	8	4	9
Jan. 9, 1779	*Protector-Admiral Duff*,	English	U. S.	1	3	140	3
May 7, 1779	*Providence-Diligent*,	English	U. S.	4	10	8	19
May 15, 1847	Puebla,	Mexican	U. S.	18	62	83	142
Feb. 7, 1832	*Qualla Battoo*,	Malays	U. S.	2	11	120†	200†
Dec. 31, 1775	Quebec,	English	Eng.	18	42	1	8
Oct. 13, 1812	Queenstown,	English	Eng.	90	160	50	101
Sept. 3, 1777	*Raleigh-Druid*,	English	U. S.	1	2	6	26
March 7, 1778	*Randolph-Yarmouth*,	English	Eng.	311	0	5	12
April 24, 1778	*Ranger-Drake*,	English	U. S.	2	6	18	24
Oct. 16, 1776	*Ranger-privateer*,	English	U. S.	3	11	16	24
May 5, 1813	Rapids of Miami,	English	U. S.	80	101	15	45
Nov. 7, 1863	Rappahannock Station,	Conf.	U. S.	149	250	80	160
May 12, 1863	Raymond,	Conf.	U. S.	69	341	103	720
Aug. 25, 1864	Ream's Station,	Conf.	*	127	546	289	1,211
Oct. 22, 1777	Red Bank,	English	U. S.	11	21	142	258
Jan. 14, 1865	Red Hill,	Conf.	U. S.	7	27	14	36
April 7, 1864	Red River,	Conf.	U. S.	23	39	45	88
April 26, 1864	Red River,	Conf.	U. S.	17	31	28	61
May 13, 1864	Resaca,	Conf.	U. S.	598	2,147	861	1,949
May 9, 1847	Resaca de la Palma,	Mexican	U. S.	39	83	160	228
March 29, 1813	*Revenge-Narcissus*,	English	Eng.	0	3	0	1
Aug. 30, 1862	Richmond, Ky.,	Conf.	Conf.	199	689	153	248
Feb. 8, 1862	Roanoke Island,	Conf.	U. S.	47	198	25	30
Feb. 12, 1864	Rock House,	Conf.	U. S.	3	5	15	23†
Nov. 6, 1863	Rogersville,	Conf.	Conf.	5	12	3	24
Sept. 16, 1812	*Rossie-Princess Amelia*,	English	U. S.	0	8	3	0
Dec. 19, 1776	*Rover-Africa*,	English	U. S.	0	3	23	0
April 8, 1864	Sabine Cross-Roads,	Conf.	Conf.	199	893	486	1,024
Sept. 8, 1863	*Sabine Pass*,	Conf.	Conf.	17	19	0	0
Jan. 21, 1863	*Sabine Pass*,	Conf.	Conf.	1	3	0	2
July 6, 1776	*Sachem-privateer*,	English	U. S.	1	3	2	6
May 29, 1813	*Sackett's Harbor*,	English	U. S.	21	84	29	101
April 6, 1865	Sailor's Creek,	Conf.	U. S.	166	1,014	268	2,032

AMERICAN BATTLES, TABULATED—Continued

Date	Name of Battle	Opponent	Victor	Casualties			
				United States		Opponents	
				Killed	Wo'nd'd	Killed	Wo'nd'd
Feb. 3, 1865	Sakelhatchie,	Conf.	U. S.	18	70	20	80
Dec. 21, 1779	*Sally-transports*,	English	*	5	12	6	11
Jan. 12, 1848	San Blas,	Mexican	U. S.	0	2	3	8
April 30, 1814	Sandy Creek,	English	U. S.	1	3	13	28
Jan. 8, 1847	*San Gabriel*,	Mexican	U. S.	2	9	70	150
July 1, 1898	San Juan (continued),	Spanish	U. S.	....	....	....	....
July 2, 1898	San Juan (continued),	Spanish	U. S.	....	....	....	....
July 3, 1898	San Juan (ended),	Spanish	U. S.	151	1,007	204	1,340
Feb. 16, 1847	*San José*,	Mexican	U. S.	3	8	13	30†
Nov. 21, 1847	San José,	Mexican	U. S.	0	3	8	20
July 10, 1898	Santiago (continued),	Spanish	U. S.	....	....	....	....
July 11, 1898	Santiago (continued),	Spanish	U. S.	....	....	....	....
July 12, 1898	Santiago (ended),	Spanish	U. S.	2	13	0	0
June 22, 1898	*Santiago forts bombarded*,	Spanish	*	1	11	(?)	(?)
Oct. 7, 1777	Saratoga,	English	U. S.	32	61	98	156
Dec. 22, 1778	*Saratoga-Chance*,	English	U. S.	4	9	5	13
Oct. 8, 1780	*Saratoga-Molly*,	English	U. S.	2	4	6	10
Dec. 10, 1812	*Saratoga-Morgiana*,	English	U. S.	3	7	2	5
April 30, 1814	*Saucy Jack-Pelham*,	English	U. S.	2	9	4	11
Nov. 10, 1813	*Saucy Jack-Sherbroke*,	English	U. S.	0	3	2	5
Oct. 3, 1814	*Saucy Jack-troop ship*,	English	U. S.	8	15	3	2
Dec. 29, 1778	Savannah,	English	Eng.	28	69	7	19
Oct. 8, 1779	Savannah,	English	Eng.	98	136	20	35
Jan. 10, 1865	Scottsboro,	Conf.	U. S.	1	8	14	32
June 16, 1862	Secessionville,	Conf.	Conf.	137	438	63	141
April 2, 1865	Selma,	Conf.	U. S.	153	347	198	409
May 31, 1862	Seven Pines, or Fair Oaks,	Conf.	*	891	3,627	1,987	2,233
June 27, 1863	Shelbyville,	Conf.	U. S.	143	361	164	344
July 15, 1863	Shepardstown,	Conf.	*	22	78	34	66
May 12, 1780	Siege of Charleston (ended),	English	Eng.	92	142	76	189
May 3, 1863	Siege of Suffolk, N. C. (ended),	Conf.	U. S.	15	94	898	1,202
Aug. 18, 1864	Six-Mile House (continued),	Conf.	U. S.	....	....	....	....
Aug. 19, 1864	Six-Mile House (continued),	Conf.	U. S.	....	....	....	....
Aug. 20, 1864	Six-Mile House (continued),	Conf.	U. S.	....	....	....	....
Aug. 21, 1864	Six-Mile House (ended),	Conf.	U. S.	212	1,155	862	3,138
March 30, 1863	Somerset,	Conf.	U. S.	11	38	24	73
April 19, 1864	*Southfield-Albemarle*,	Conf.	Conf.	2	12	0	0
April 20, 1862	South Mills or Camden,	Conf.	U. S.	15	98	12	67
Sept. 14, 1862	South Mountain,	Conf.	U. S.	312	1,234	224	860
March 26, 1865	Spanish Fort (to April 8),	Conf.	U. S.	99	695	152	401
July 3, 1898	*Spanish squadron destroyed off Santiago*	Spanish	U. S.	1	1	342	461
May 8, 1864	Spottsylvania (continued),	Conf.	U. S.	....	....	....	....
May 9, 1864	Spottsylvania (continued),	Conf.	U. S.	....	....	....	....
May 11, 1864	Spottsylvania (ended),	Conf.	U. S.	3,288	19,278	3,342	20,187
May 18, 1864	Spottsylvania (continued),	Conf.	U. S.	2,031	7,956	1,752	7,248
Jan. 8, 1863	Springfield,	Conf.	U. S.	14	145	23	164
March 5, 1863	Spring Hill,	Conf.	Conf.	8	14	1	4
June 17, 1863	St. Charles,	Conf.	U. S.	136	20	6	8
Dec. 26, 1781	*St. James-ship (armed)*,	English	*	1	4	3	8
Sept. 19, 1777	Stillwater,	English	U. S.	98	252	161	328
June 28, 1779	Stone Ferry,	English	Eng.	51	99	31	63
Aug. 11, 1814	Stonington,	English	U. S.	1	5	21	55
June 6, 1813	Stony Creek,	English	Eng.	17	38	20†	30
Jan. 23, 1813	Stony Creek,	Indians	Ind.	400	0	0	0
July 29, 1863	Stony Lake,	Indians	U. S.	12	42	32	98
Aug. 18, 1864	Strawberry Plains, etc.,	Conf.	U. S.	401	1,754	338	762
July 16, 1779	Stony Point,	English	U. S.	20	70	63	31
April 28, 1863	Streight's Raid (to May 3),	Conf.	U. S.	12	69	0	0
Jan. 28, 1815	*Surprise-Star*,	English	U. S.	0	0	1	1
Jan. 20, 1864	Sturgis' Raid (January 16-28),	Conf.	U. S.	6	17	30	62
May 9, 1864	Swift Creek (continued),	Conf.	Conf.	....	....	....	....
May 10, 1864	Swift Creek (ended),	Conf.	Conf.	90	401	124	376
Oct. 26, 1846	*Tabasco*,	Mexican	U. S.	0	0	4	10
Nov. 9, 1813	Talladega,	Indians	U. S.	15	86	299	0
Nov. 3, 1813	Talluschatches,	Indians	U. S.	5	41	186	0
June 30, 1847	Tamultay,	Mexican	U. S.	6	53	42	103
March 4, 1863	Thompson's Station (continued),	Conf.	Conf.	....	....	....	....
March 5, 1863	Thompson's Station (ended),	Conf.	Conf.	99	301	152	453
July 4, 1863	Tibb's Bend,	Conf.	U. S.	6	23	280	687
May 10, 1775	Ticonderoga,	English	U. S.	....	....	....	....
Nov. 7, 1811	Tippecanoe,	Indians	U. S.	37	151	120	180
Nov. 12, 1813	*Tom-Townsend*,	English	U. S.	0	2	8	13
Feb. 20, 1865	Town Creek,	Conf.	U. S.	5†	8†	8†	18†
Dec. 25, 1776	Trenton,	English	U. S.	2	4	17	78
June 11, 1864	Trevilian Station (continued),	Conf.	U. S.	....	....	....	....
June 12, 1864	Trevilian Station (ended),	Conf.	U. S.	85	490	124	582
Aug. 7, 1781	*Trumbull-Iris*,	English	Eng.	5	11	0	3
June 2, 1780	*Trumbull-Watt*,	English	*	19	20	39	52
April 9, 1777	*Trumbull-transports*,	English	U. S.	7	8	9	14
Feb. 22, 1864	Tunnel Hill,	Conf.	U. S.	150†	200†	80†	180
July 15, 1864	Tupelo, Harrisonburg, and Old Town Creek,	Conf.	U. S.	85	563	184	516
April 18, 1847	*Tuspan*,	Mexican	U. S.	3	11	25	34
June 13, 1776	*Tyrannicide-Dispatch*.	English	U. S.	1	2	2	5

AMERICAN BATTLES, TABULATED—Continued

Date	Name of Battle	Opponent	Victor	Casualties			
				United States		Opponents	
				Killed	Wo'nd'd	Killed	Wo'nd'd
March 29, 1779	*Tyrannicide-Revenge*,	English	U. S.	0	8	11	22
Jan. 5, 1813	*Ultor-boats*,	English	U. S.	0	2	1	7
Jan. 30, 1864	*Underwriter*,	Conf.	Conf.	9	20	6	32
Jan. 26, 1813	*Union-Iris*,	English	Eng.	1	3	0	2
Oct. 25, 1812	*United States-Macedonian*,	English	U. S.	5	7	36	68
June 21, 1863	Upperville,	Conf.	U. S.	30	70	50	100
Nov. 19, 1847	Urias,	Mexican	U. S.	0	0	8	12
Feb. 28, 1863	Van Buren, Ark.,	Conf.	U. S.	0	3	2	5
March 20, 1863	Vaught's Hill,	Conf.	U. S.	23	33	63	241
Oct. 15, 1779	*Vengeance-Defiance*,	English	U. S.	3	5	4	11
Sept. 18, 1778	*Vengeance-Harriet*,	English	U. S.	1	3	3	8
March 24, 1847	Vera Cruz,	Mexican	U. S.	11	56	981	2,000†
April 21, 1914	Vera Cruz,	Mexican	U. S.	17	70	126	195
April 16, 1863	*Vicksburg*,	Conf.	U. S.	0	3	7	18
May 19, 1863	Vicksburg (continued to May 22),	Conf.	Conf.	....	....	....	....
May 22, 1863	Vicksburg (continued to May 25),	Conf.	Conf.	....	....	....	....
May 25, 1863	Vicksburg (ended),	Conf.	U. S.	1,848	2,378	1,420	2,151
Dec. 27, 1862	Vicksburg assault (continued),	Conf.	Conf.	....	....	....	....
Dec. 28, 1862	Vicksburg assault (ended),	Conf.	Conf.	724	990	63	134
July 4, 1863	Vicksburg (ended),	Conf.	U. S.	545	3,688	25	20
Sept. 1, 1814	*Wasp-Avon*,	English	U. S.	2	1	10	32
Oct. 6, 1782	*Wasp-packet*,	English	U. S.	3	10	4	17
Oct. 18, 1812	*Wasp-Frolic*,	English	U. S.	5	5	15	47
June 28, 1814	*Wasp-Reindeer*,	English	U. S.	11	15	25	42
Oct. 27, 1863	Wauhatchie (continued),	Conf.	U. S.	....	....	....	....
Oct. 28, 1863	Wauhatchie (continued),	Conf.	U. S.	....	....	....	....
Oct. 29, 1863	Wauhatchie (ended),	Conf.	U. S.	76	339	153	208
May 15, 1780	Waxhaws,	English	Eng.	250	130	5	14
June 17, 1863	*Weehawken-Atlanta*,	Conf.	U. S.	0	0	0	8
June 23, 1864	Weldon Railroad,	Conf.	U. S.	604	2,494	156	344
May 7, 1862	West Point,	Conf.	U. S.	84	110	3	15†
June 29, 1862	White Oak Swamp,	Conf.	U. S.	34	42	65	86
Oct. 25, 1776	White Plains,	English	*	24	66	89	144
June 27, 1864	White River,	Conf.	U. S.	52	148	162	341
Sept. 3, 1863	Whitestone Hill,	Indians	U. S.	8	23	194	42
Aug. 26, 1863	White Sulphur Springs,	Conf.	Conf.	63	144	42	75
March 8, 1865	Wilcox's Bridge (continued),	Conf.	Conf.	....	....	....	....
March 9, 1865	Wilcox's Bridge (continued),	Conf.	Conf.	....	....	....	....
March 10, 1865	Wilcox's Bridge (ended),	Conf.	Conf.	80	421	132	643
May 5, 1864	Wilderness (continued),	Conf.	U. S.	....	....	....	....
May 6, 1864	Wilderness (continued),	Conf.	U. S.	....	....	....	....
May 7, 1864	Wilderness (ended),	Conf.	U. S.	2,309	12,188	1,956	10,444
Nov. 14, 1813	*Wile Renard-ship*,	English	U. S.	6	40	82	0
May 5, 1862	Williamsburg,	Conf.	U. S.	456	1,400	351	1,403
Feb. 8, 1865	Williston Station,	Conf.	U. S.	2	3	3	6
Aug. 10, 1861	Wilson Creek,	Conf.	U. S.	223	721	331	764
June 30, 1864	Wilson's Raid (June 22–30),	Conf.	U. S.	76	265	48	252
March 22, 1865	Wilson's Raid (to April 24),	Conf.	U. S.	99	598	352	1,231
May 25, 1862	Winchester,	Conf.	Conf.	38	154	68	329
June 14, 1863	Winchester (continued),	Conf.	Conf.	....	....	....	....
June 15, 1863	Winchester (ended),	Conf.	Conf.	203	397	50	81
Feb. 19, 1862	*Winton, N. C.*,	Conf.	*	0	0	1	4
Sept. 22, 1862	Wood Lake,	Indians	U. S.	8	24	84	138
July 3, 1778	Wyoming, or Fort Forty,	English	Eng.	225	0	2	8
July 16, 1863	*Wyoming-Japanese batteries*,	Japanese	U. S.	6	4	100	200
July 18, 1863	Wytheville,	Conf.	Conf.	21	62	3	8
Aug. 1, 1812	*Yankee-Royal Bounty*,	English	U. S.	0	2	2	7
May 19, 1864	Yellow Bayou,	Conf.	U. S.	42	108	74	158
April 27, 1813	York,	English	U. S.	66	203	100†	302
April 18, 1814	*York-Lord Somers*,	English	*	0	0	6	12
Oct. 19, 1781	Yorktown (ended),	English	U. S.	8	16	199	353

Arabia. The history of Arabia before the time of Mohammed is involved in mystery. The aborigines of Arabia were probably Cushites, most of whom passed over into Abyssinia. A few, however, remained, who inhabited the west coasts. Subsequently another Semitic race, descended from Abraham, settled in the land. The oldest Arabian tribes are now extinct, and only a traditional memory even of their names exists; but the Semitic chiefs, Joktan, or Kahtan, and Ishmael, are generally considered to be the fathers of the present inhabitants. Christianity found an early entrance into Arabia. The Jews, in considerable numbers, migrated into Arabia after the destruction of Jerusalem, and made many proselytes. The great diversity of creeds in the peninsula was favorable to the introduction of the doctrine of Mohammed, which forms the grand epoch in Arabian history, and brings it into close connection with the general history of civilization. Now, for the first time, the people of Arabia became united, and powerful enough to erect new empires in the three quarters of the world. The dominion of the Arabs, from the time of Mohammed to the fall of the caliphate of Bagdad in 1258, or even to the expulsion of the Moors from Spain in 1492, is an important period in the history of civilization. But the movements which had such great effect on the destinies of other nations produced but little change in the interior of Arabia; and after the brilliant career of conquest was ended the peninsula was left in an exhausted condition. Then

followed the subjugation of Yemen by the Turks in the 16th century; their expulsion in the 17th century; the dominion of the Portuguese over Muscat, 1508-1659; the conquests of Oman at the close of the 16th century; and, lastly, the appearance of the Wahhabees, 1770, who became influential in political affairs. Mehemet Ali, the pasha of Egypt, after subjugating the coasts of Hejaz and Yemen, gained a further advantage by the victory of Ibrahim Pasha, 1818. In 1840 events in Syria compelled Mehemet to withdraw from Arabia. From that time until the World War, Hejaz, Yemen, and El Hasa were really Turkish provinces. Oman, in alliance with England, was practically independent, while the Sinaitic peninsula fell to Egyptian hands. In 1916 the Grand Sherif of Mecca, or "Keeper of the Holy Places," proclaimed the independence of Hejaz, and assumed the title of King. His troops cooperated with the British forces under General Allenby against the Turks in Syria.

The new Kingdom of Hejaz extends from Asir northward to Palestine and Syria, and from the Red Sea, the Gulf of Akaba, and Palestine eastward to the boundaries of Central Arabia.

Argentina, Republic of. In 1515, Juan Diaz de Solis, while searching for a passage into the Great South Sea newly seen by Balboa, entered the Rio de La Plata. In 1526, Sebastian Cabot, son of the discoverer of Newfoundland, penetrated nearly to the confluence of the Parana and the Paraguay, being arrested by the rapids, which afterwards gave name to Corrientes. In 1535, Buenos Ayres was founded, to command the only outlet of the country. In conjunction with its own colony of Montevideo, on the opposite bank, it has virtually monopolized the history of a region equal in extent to Western Europe. Gradually other cities were planted, partly by colonists from Spain, and partly by adventurers from Peru, each city generally giving its own name to its own province. The chief staples of the country — horses and cattle — had been largely introduced before 1552. Down to 1775, the basin of the Rio de La Plata was a dependency of the viceroyalty of Peru. In that year, however, was erected the viceroyalty of Buenos Ayres, which, to the basin in question, added Bolivia, under the name of Upper Peru, thus embracing the headwaters of the Amazon, and also most of the plateau of Titicaca. The year 1806 ushered in a new order of things. Spain, as an ally of France, being then at war with England, both Buenos Ayres and Montevideo were occupied by the English — a change which, brief as was its duration, virtually sowed the seeds of revolution. The colonists had felt the inconvenience of belonging to a state which left them, in a great measure, to defend themselves; they had successfully tried their strength against a foe more powerful than their own masters; and they had been encouraged not less by the sayings than by the doings of their invaders to assert their independence. The triumphant militia, after deposing and expelling the legitimate viceroy for cowardice, elected in his stead the French officer who had led them to victory. Thus had the viceroyalty of Buenos Ayres become peculiarly ripe for taking its share in the outbreak which Napoleon's dethronement of the Bourbons, in 1808, almost immediately occasioned throughout Spanish America. The constituents of the Argentine Republic did not, however, submit to the sovereignty of Joseph Bonaparte when he was shuffled on to the Spanish throne to replace Ferdinand VII. In 1810, they organized a government in the name of Ferdinand. After a short and inglorious period, this arrangement ended in utter confusion. In 1816, a General Congress declared the independence of the "United Provinces of Rio de La Plata"; but those provinces, in 1827, returned once more to a state of isolation. In 1831, Buenos Ayres, Entre Rios, Corrientes, and Santa Fé, sometimes classed as the coast or riverine states, entered into a federal compact, and invited the others to form a voluntary alliance with them. This Argentine Confederation led to little but anarchy till 1835, when General Rosas was elected captain general or governor of it, with all but absolute power. He secured quiet and order for a time; but his struggles to achieve the military and commercial supremacy of Buenos Ayres led to his overthrow in 1851. Buenos Ayres, refusing to submit to Urquiza, the next governor of the Argentine Republic, declared itself independent in 1854, but was compelled by a signal defeat at Cepeda in 1859 to reënter the confederation. Continuing restless, however, another war placed that province in the position of supremacy which it still holds. In 1881, the Argentine Republic, in conjunction with Chile, came into possession of Patagonia and Tierra del Fuego. A financial crisis in 1890 did much to temporarily retard the industrial progress of the republic. In 1906–07, immigration was encouraged on an extensive scale, and railroad building received a renewed impetus. The immigration law of 1911 excluded all but able-bodied immigrants. In 1912 Argentina spent more money on education than on her army and navy combined.

Arizona. Evidence contained in numerous ruins indicates Arizona was the home of a highly civilized race before it was visited by Europeans. It was entered by Fray Marcos, a Spanish friar from Mexico, in 1539, and first extensively explored by Coronado in 1540. Indian missions and military posts were from time to time temporarily established but the first permanent settlement dates from the founding of the presidio at Tucson in 1776.

Arizona originally formed a part of Mexico and was ceded to the United States along with New Mexico, February 2, 1848. It was separated from New Mexico and made a territory, February 24, 1863. Indian troubles in some measure hindered the development of the country, but the population of the territory steadily increased in proportion as larger tracts of desert land were reclaimed by irrigation, and the mineral resources of the region were utilized. Arizona was admitted to the Union, February 14, 1912, being the 48th state and last territory admitted. In the same year suffrage was granted to women, and in 1914 state-wide Prohibition was adopted.

Arkansas. The name, derived from the Indian, signifies "smoky water," with a French prefix meaning "bow." The State was originally a portion of the Louisiana Territory purchased from the French in 1803. When the

State of Louisiana was admitted, in 1812, the remaining portion was organized as Missouri Territory, which name it held till 1819, when Missouri formed a State Constitution, and Arkansas became a Territory under its present name. It became a State in 1836. The people passed the ordinance of secession on May 6, 1861. During the Civil War the principal battles fought within the State boundaries were Pea Ridge, Prairie Grove, Arkansas Post, and Helena. Arkansas was temporarily reorganized as a State in the Union in 1864, but it was relegated to military government under the reconstruction acts of 1867. The new constitution was adopted in 1868, and the State resumed permanent federal relations. On February 6, 1915, the legislature, by an overwhelming vote, adopted a statutory enactment enforcing state-wide Prohibition, which took effect January 1, 1916.

Armada. A Spanish word, signifying generally an *armed force*, but applied specially to the great naval expedition sent out against England by Philip of Spain, A. D. 1588. The object of the expedition was to strike a decisive blow at the Protestant interest. The expedition had been long in preparation, and consisted of no fewer than 132 vessels, chiefly galleons, which carried, besides 8,000 sailors and the galley-slaves, an army of 20,000 men. These were destined for the coast of Flanders, where Alexander Farnese, Prince of Parma, was to embark with 35,000 men in addition. The news of these hostile preparations aroused all the enthusiasm of England. Her navy, which had been reduced to thirty-six ships, was rapidly increased until 191 vessels were ready for sea. These were placed under the command of Lord Howard of Effingham, under whom served Drake, Hawkins, Frobisher, and others. The command of the army was given to the Earl of Leicester. The main body of the ships was stationed off Plymouth, while a squadron, under Lord Seymour, was ordered to cruise off the coast of Flanders. The Armada set out from the Tagus on the 29th of May. On the 19th of July, the fleet (which had been delayed by storms) was observed entering the Channel. On the 23d there was a whole day's fighting off Portland, and the 25th saw a similar scene with a similar result — the capture or crippling of Spanish ships — off the Isle of Wight. On the 27th, the fleet anchored off Calais. Two nights later, eight small vessels, daubed with pitch and resin, and filled with explosive substances, were drifted down with the tide towards the floating castles, and were set on fire. In the panic which the fire and the frequent crashes struck through the Spanish fleet, many vessels cut their cables and cleared off from the shore, while others were disabled or seriously injured. Next morning the scattered vessels of the Armada fell an easy prey to the English ships, which, being much smaller than those of the Spaniards, had been more easily maneuvered. Four thousand Spaniards were killed. Many of their vessels were either taken, sunk, or driven ashore. The rest fled northward at the bidding of their admiral, who saw no way home but round the northern coast of Scotland; and, at the end of September, fifty-three weather-beaten and mutilated ships, all that remained of "The Invincible Armada," were brought to anchor in Santander Bay.

Assembly. The four great legislative bodies which succeeded each other during the period of the first French revolution are usually termed: (1) The *National* or *Constituent Assembly*, commenced June 17, 1789, by the resolution of the deputies of the communes in the States-General, constituting themselves a national assembly, to which the deputies of the nobles and clergy afterwards adhered; termed Constituent Assembly from having framed a constitution; dissolved on the acceptance of the constitution by the king, September 30, 1791. (2) The *Legislative Assembly.* It commenced its sittings October 1, 1791; suspended the royal authority by its decree of August 10, 1792; and was dissolved September 21, 1792. (3) The *Convention.* It commenced its sittings September 21, 1792, with a proclamation of the Republic; was dissolved 4 Brumaire, fourth year of the Republic (October 26, 1795). (4) Two-thirds of this assembly were then included in the new body of the *Corps Législatif*, which commenced its sittings October 27, 1795, forming the *Council of the Five Hundred* (des Cinq-Cents), and the *Council of the Ancients* (des Anciens), 250 in number. The latter body was named the *Directory.* This assembly subsisted until the dissolution of the Directory by Bonaparte, 17 Brumaire, eighth year of the Republic (November 10, 1799). The term *Assemblée Nationale* was revived by the legislative body under the second Republic, 1848, and again in 1870.

Assyria (*a-sĭr'-ĭ-a*). We first hear of Assyria as a northern province of the Babylonian Empire in the 19th century B. C. It gradually grew in power, until about 1100 B. C. its king, Tiglath-Pileser I, made himself master of the empire. After his death, however, the realm fell apart. In 745 B. C. an adventurer, Pul, who had been a gardener, seized authority and, as Tiglath-Pileser II, established the strongest empire the world had yet seen. Sargon II, the next great king, used the favorite plan of the Assyrians for subduing rebellious people, when he carried the tribes of Northern Israel into captivity, 723-722 B. C. Sennacherib, son of Sargon, in the course of extending his power westward, met disaster in a siege of Jerusalem, celebrated in Byron's poem beginning, "The Assyrian came down like a wolf on the fold." His son, Esarhaddon, conquered Egypt in 672 B. C. But the slaughterous cruelty and oppressive taxation of this great empire roused hatred among its subject people. Egypt and Babylon revolted, the Scythians invaded from the north, and finally the Medes and Babylonians conquered Nineveh, the capital.

Augur (*au'gŭr*). A public officer appointed to interpret the will of the gods, as expressed by signs or omens, for national or individual guidance. Their office was one of great importance in the state, as no enterprises or ceremonies were performed unless they declared the omens favorable. Accordingly, the members of their college were always elected from the most honorable citizens. Their divinations were called *auguries* or *auspices*, between which there is sometimes a distinction made, the latter meaning such as

were derived from the inspection of birds, the former being extended to all omens or prodigies whatever. The Augurs bore a staff or wand as the ensign of their authority. Their office was suppressed, 390 A. D.

Austria-Hungary. The history of Austria is the history of the House of Habsburg. When Rudolph of Habsburg became Emperor of Germany, and Ottokar, King of Bohemia and Duke of Austria, Styria, and Carinthia, refused to take the oath of allegiance, the emperor succeeded in dispossessing him of his fiefs (1278), and subsequently conferred them on his son (1282). Thus the dynasty of Habsburg was founded. In the first half of the Sixteenth Century, Duke Ferdinand of Austria was elected King of Hungary by one party, John Zapolya of Transylvania by another. After several wars, in which John was supported by the Turks, Ferdinand came out victorious and united Hungary to Austria. Possessed of a large territory, fertile and densely peopled, the House of Habsburg was for several centuries the richest and most powerful family in Europe. But humiliations came with Napoleon. Driven out of Germany, the Emperor Francis assumed, August 11, 1804, the title of Emperor of Austria. After the fall of Napoleon, Austria was restored to its former size, and under the administration of Metternich it also regained its prestige in European politics. But its internal weakness became apparent, first by the revolution of 1848, when only the support of Russia prevented the whole fabric from falling to pieces, and then after the battle of Sadowa, 1866, when, for the second time, it was driven out of Germany, and lost its hold on Italy. The empire was then constituted as a double state — Austria and Hungary. In 1878 the administration of Bosnia and Herzegovina was given to Austria. In 1882 the dual kingdom entered into the Triple Alliance with Germany and Italy. Thereafter the policy of the Habsburg rule became more and more identified with the Hohenzollern ambition for world domination. In 1909 Austria annexed Bosnia and Herzegovina in defiance of Russia. With Germany's support in 1913, Austria, by securing a protectorate over Albania and by denying Servia access to the sea, prevented the Balkan allies from realizing the fruits of their victory over the Turks.

Francis Ferdinand, Austrian heir apparent, was assassinated at Serajevo, June 28, 1914. Accusing Servia of complicity, Austria-Hungary demanded that Servia punish the accomplices and suppress anti-Austrian influence. Rejecting Servia's reply, Austria declared war on Servia, July 28, 1914. Russian mobilization in behalf of Servia began at once. Austria declared war on Russia Aug. 6. Germany supported Austria. Great Britain and France, supporting Russia, declared war upon Austria Aug. 13. The Austrian attack on Servia in 1914 failed. The Russians, invading Galicia, took Lemberg, Sept. 22. March 22, 1915, Przemysl fell to the Russians but, June 3, was retaken. Austria regained Lemberg and in May, 1915, drove the Russian forces out of the Carpathians. Italy, May 23, 1915, declared war on Austria. In Oct., 1915, Austria completely occupied Servia.

Emperor Francis Joseph died, 1916, and was succeeded by Charles I. During the year the Teutonic armies conquered Rumania. In 1917 Austro-German forces advanced to the Piave river in Italy. But, in June, 1918, the Austrian offensive failed, and, in October following, the Austrian armies were utterly defeated. On Nov. 11, Charles I. abdicated, ending more than 600 years of Habsburg rule. By the Treaty of Versailles, 1919, the empire of Austria-Hungary was dismembered. Portions were awarded to Poland, Rumania, and Italy, and to the new states of Czecho-Slovakia and Jugoslavia. This left Austria and Hungary completely separated and greatly reduced in size.

Battles (*The fifteen decisive*), according to Professor Creasy: (1) *Marăthon* (B. C. 490), in which the Greeks, under Miltiădês, defeated Darius, the Persian, and turned the tide of Asiatic invasion. (2) *Syracuse* (B. C. 413), in which the Athenian power was broken, and the extension of Greek domination was prevented. (3) *Arbēla* (B. C. 331), by which Alexander overthrew Darius, and introduced European habits into Asia. (4) *Metaurus* (B. C. 207), in which the Romans defeated Hannibal, and Carthage was brought to ruin. (5) *Arminius* (A. D. 9), in which the Gauls overthrew the Romans under Varus, and established their independence. (6) *Châlons* (A. D. 451), in which Attila, "the Scourge of God," was defeated by Aëtius, and Europe saved from utter devastation. (7) *Tours* (A. D. 732), in which Charles Martel overthrew the Saracens, and broke from Europe the Mohammedan yoke. (8) *Hastings* (A. D. 1066), by which William of Normandy became possessed of the English Crown. (9) *Orléans* (A. D. 1429), by which Jeanne d'Arc raised the siege of the city, and secured the independence of France. (10) *Armada* (*The*), (A. D. 1588), which crushed the hopes of Spain and of the papacy in England. (11) *Blenheim* (A. D. 1704), in which Marlborough, by the defeat of Tallard, broke the ambitious schemes of Louis XIV. (12) *Pultowa* (A. D. 1709), in which Charles XII. of Sweden was defeated by Peter the Great of Russia, and the stability of the Muscovite Empire was established. (13) *Saratoga* (A. D. 1777), in which General Gates defeated Burgoyne, and virtually decided the fate of the American Revolution. (14) *Valmy* (A. D. 1792), in which the allied armies, under the Duke of Brunswick, were defeated by the French revolutionists, and the Revolution was suffered to go on. (15) *Waterloo* (A. D. 1815), in which Wellington defeated Napoleon, and rescued Europe from French domination.

Belgium. The territory now known as Belgium formed only a section of that known to Cæsar as the territory of the Belgæ, extending from the Seine to the Rhine, and to the ocean. This district continued under Roman sway till the decline of the empire; subsequently formed part of the Kingdom of Clovis; and then of that of Charlemagne. After the breaking up of Charlemagne's empire, Belgium formed part of the Kingdom of Lotharingia under Charlemagne's grandson, Lothaire; Artois and Flanders, however, belonged to France by the treaty of Verdun.

For more than a century this kingdom was contended for by the kings of France and the emperors of Germany. In 953, it was conferred by the Emperor Otto upon Bruno, archbishop of Cologne, who assumed the title of archduke, and divided it into two duchies: Upper and Lower Lorraine. In the frequent struggles which took place during the eleventh century, Luxemburg, Namur, Hainaut, and Liége usually sided with France, while Brabant, Holland, and Flanders commonly took the side of Germany. The contest between the civic and industrial organizations and feudalism, which went on through the twelfth and thirteenth centuries, and in which Flanders bore a leading part, was temporarily closed by the defeat of the Ghentese under Van Artevelde in 1382. In 1384, Flanders and Artois fell to the House of Burgundy, which, in less than a century, acquired the whole of the Netherlands. The death of Charles the Bold at Nancy, in his attempt to raise the duchy into a kingdom (1477), was followed by the succession and marriage of his daughter, Mary of Burgundy, by which the Netherlands became an Austrian possession. With the accession, however, of the Austrian House of Habsburg to the Spanish throne, the Netherlands became the scene of increasingly severe persecution under Charles V. and Philip II. of Spain. Driven to rebellion, the seven northern states under William of Orange, the Silent, succeeded in establishing their independence, but the southern portion, or Belgium, continued under the Spanish yoke.

From 1598 to 1621, the Spanish Netherlands were transferred as an independent kingdom to the Austrian branch of the family by the marriage of Isabella, daughter of Philip II., with the Archduke Albert of Austria. He died childless, and they reverted to Spain. Twice conquered by Louis XIV., conquered by Marlborough, coveted by all the powers, deprived of territory by Holland and by France, the Southern Netherlands in 1714, by the peace of Utrecht, again came under the dominion of Austria, with the name of the Austrian Netherlands. During the Austrian war of succession the French, under Saxe, conquered nearly the whole country, but restored it in 1748 by the peace of Aix-la-Chapelle. Belgium regained much of her prosperity under Maria Theresa and Charles of Lorraine. On the succession of Joseph II. a serious insurrection occurred, the Austrian army being defeated at Turnhout, and the provinces forming themselves into an independent state as United Belgium (1790). Scarcely subdued by Austria, they were conquered by the revolutionary armies of France. The Austrian rule practically ended with the battle of Fleurus (1794), and the French possession was confirmed by the treaties of Campo Formio (1797) and Lunéville (1801).

In 1815 Belgium was united by the Congress of Vienna to Holland, forming the Kingdom of the Netherlands. In 1830 a revolution resulted in the separation of the two countries. In 1831 Leopold, Prince of Saxe-Coburg, became king of Belgium. Upon the withdrawal of the Dutch claims in 1839, the neutrality and independence of Belgium were guaranteed by a treaty signed by Great Britain, France, Prussia, and Russia. After a prosperous reign of thirty-four years, Leopold was succeeded by his son Leopold II. in 1865. At the outbreak of the Franco-Prussian war in 1870, Great Britain signed a separate treaty with France and with Prussia, agreeing, in case either belligerent should violate the neutrality of Belgium, to aid the other in upholding the treaty of 1839.

In 1885 the Congress of Berlin constituted the Congo Free State and invited Leopold II. to become its sovereign. In 1890 the Congo Free State passed under the suzerainty of Belgium, and in 1908 was annexed to Belgium. In 1909 Leopold died and was succeeded by his nephew Albert I.

On Aug. 2, 1914, Germany demanded free passage of German troops through Belgium to attack France. Belgium refused, and a German invasion began in direct violation of Germany's own signed guarantees. Liége fell Aug. 7. Belgian forces were defeated and compelled to retreat. Louvain was burned Aug. 27. On Aug. 20 the Germans took Brussels, levying a war tax of $40,000,000. Ghent and other cities were occupied. On Oct. 8 Antwerp fell. Hundreds of thousands of refugees found shelter in England, Holland, France, and America, many countries contributing millions of dollars to their relief. The remaining population was subjected to barbaric indignities and atrocities. Cities and towns were fined, their treasuries looted, their inhabitants shot and imprisoned, and their homes despoiled. The machinery of factories was removed or destroyed and Belgian citizens deported for enforced labor in Germany. But Teutonic frightfulness failed to crush the national spirit. The army continued to fight heroically in the allied lines. The patriotism of the king and the loyalty of the people was unwavering. Finally, the invaders were forced out of the country. On Nov. 22, 1918, King Albert reentered Brussels at the head of the victorious army, and Belgium was proclaimed a free and independent nation.

BISHOPS AND POPES OF ROME

Pontiff	Pontificate	Surname	Nationality
	First Century		
	A. D. A. D.		
St. Peter,	41 67		
Linus,	67 79		
Cletus or Anacletus,	79–91		
Clement,	91–100		
	Second Century		
Evaristus,	100–109		
Alexander I.,	about 109–119		
Sixtus I.,	119–128		Roman.

BISHOPS AND POPES OF ROME—Continued

Pontiff	Pontificate		Surname	Nationality
	A. D.	A. D.		
Telesphorus,	128	139		Greek.
Hyginus,	139	142		Athenian.
Pius I.,	142	157		Native of Aquileia.
Anicetus,	157	168		Syrian.
Soter,	168	176		Greek.
Eleutherus,	177	190		Greek.
Victor I.,	190	202		African.
Zephyrinus,	202	217		
	Third Century			
Calixtus I.,	217	222		Roman.
Urban I.,	222	230		Roman.
Pontianus,	230	235		Roman.
Antherius,	235	236		Greek.
Fabianus,	236	250		Probably Roman.
Cornelius,	251	253		Roman.
Lucius I.,	253	254		Roman.
Stephen I.,	254	257		Roman.
Sixtus II.,	257	258		Roman.
Dionysius,	259	268		Greek.
Felix I.,	269	274		Roman.
Eutychianus,	275	283		Uncertain.
Caius,	283	296		Roman.
	Fourth Century			
Marcellinus,	296	304		Roman.
Marcellus I.,	304	309		Roman.
Eusebius,	309			Roman.
Melchiades,	310	314		African.
Sylvester I.,	314	335		Roman.
Marcus,	336			Roman.
Julius I.,	337	352		Roman.
Liberius,	352	366		Roman.
Damascus I.,	366	384		Spaniard.
Siricius,	384	398		Roman.
Anastasius I.,	398	401		Roman.
	Fifth Century			
Innocent I.,	401	417		Native of Albano.
Zosimus,	417	418		Greek.
Boniface I.,	418	422		Roman.
Celestinus I.,	422	432		Roman.
Sixtus III.,	432	440		Roman.
Leo I., "The Great,"	440	461		Roman.
Hilarius,	461	468		Native of Sardinia.
Simplicius,	468	483		Native of Tibur.
Felix II.,	483	492		Roman.
Gelasius,	492	496		Roman.
Anastasius II.,	496	498		Roman.
	Sixth Century			
Symmachus,	498	514		Native of Sardinia.
Hormisdas,	514	523		Native of Frusino.
John I.,	523	526		Tuscan.
Felix III.,	526	530		Native of Beneventum.
Boniface II.,	530	532		Roman.
John II.,	532	535		Roman.
Agapetus I.,	535	536		Roman.
Sylverius,	536	537		Native of Campania.
Vigilius,	537	555		Roman.
Pelagius I.,	555	560		Roman.
John III.,	560	573		Roman.
Benedict I.,	574	578		Roman.
Pelagius II.,	578	590		Roman.
	Seventh Century			
Gregory I., "The Great,"	590	604		Roman.
Sabinianus,	604	606		Tuscany.
Boniface III.,	607			Roman.
Boniface IV.,	608	615		Native of Abruzzi.
Deusdedit,	615	618		
Boniface V.,	619	625		
Honorius,	625	638		Native of Capua.
Severinus,	638	640		Roman.
John IV.,	640	642		Native of Dalmatia.
Theodore,	642	649		Greek.
Martin I.,	649	653		Native of Tudertum.
Eugenius I.,	654	657		Roman.
Vitalianus,	657	672		Native of Signia.
Adeodatus,	672	676		Roman.
Donus I.,	676	678		Roman.
Agatho,	678	681		Sicilian.
Leo II.,	682	683		
Benedict II.,	684	685		Roman.
John V.,	685	686		Native of Syria.
Conon,	686	687		Native of Thrace.

BISHOPS AND POPES OF ROME — Continued

Pontiff	Pontificate		Surname	Nationality
	Eighth Century			
	A. D.	A. D.		
Sergius,	687	701		
John VI.,	701	705		Native of Palermo.
John VII.,	705	707		Native of Greece.
Sisinnius,	708			Greek.
Constantinus I.,	708	715		Syrian.
Gregory II.,	715	731		
Gregory III.,	731	741		Roman.
Zachary,	741	752		Syrian.
Stephen II.,	752	757		Greek.
Paul I.,	757	767		
Stephen III.,	768	772		Roman.
Adrian I.,	772	795		Sicilian.
				Roman.
	Ninth Century			
Leo III.,	795	816		Roman.
Stephen IV.,	816	817		Roman.
Pascal I.,	817	824		Roman.
Eugenius II.,	824	827		Roman.
Valentine,	827			Roman.
Gregory IV.,	827	844		Roman.
Sergius II.,	844	847		Roman.
Leo IV.,	847	855		Roman.
Benedict III.,	855	858		Roman.
Nicholas I.,	858	867		Roman.
Adrian II.,	867	872		Roman.
John VIII.,	872	882		Roman.
Martin II.,	882	884		
Adrian III.,	884	885		Roman.
Stephen V.,	885	891		Roman.
Formosus,	891	896		Bishop of Parto.
Boniface VI.,	896			
Stephen VI.,	896	897		Roman.
Romanus,	897			
Theodore II.,	897			
John IX.,	898	900		Native of Tiber.
	Tenth Century			
Benedict IV.,	900	903		Roman.
Leo V.,	903			Native of Ardea.
Sergius III.,	904	911		
Anastasius III.,	911	913		Roman.
Landon,	913	914		Native of Sabina.
John X.,	914	929		Roman.
Leo VI.,	929			Native of Rome.
Stephen VII.,	929	931		Roman.
John XI.,	931	936		
Leo VII.,	936	939		Roman.
Stephen VIII.,	939	942		Roman.
Matin III,	942	946		
Agapetus II,	946	955		
John XII.,	955	964	Ottaviano Conti. He was the first who changed his name on his elevation.	
Benedict V.,	965			Roman.
John XIII.,	965	972		Roman.
Benedict VI.,	973	974		
Benedict VII.,	974	983	(Conti),	Roman.
John XIV.,	983	984	(Boniface VII., Franco, anti-pope.)	
John XV.,	985	996		Roman.
	Eleventh Century			
Gregory V.,	996	999	Bruno.	
Sylvester II.,	999	1003	Gerbert,	Native of Auvergne.
John XVII.,	1003		Philagathus.	
John XVIII.,	1003	1009	Secco,	Roman.
Sergius IV.,	1009	1012		
Benedict VIII.,	1012	1024	Fasio,	Roman.
John XIX.,	1024	1033		
Benedict IX.,	1033	1045	Sylvester,	Native of Tusculum.
Gregory VI.,	1045	1046	Giovanni Braziano,	Roman.
Clement II.,	1046	1047	Suger,	Native of Saxony.
Damascus II.,	1048		Pappo.	
Leo IX.,	1048	1054	Bruno,	Bishop of Toul.
Victor II.,	1054	1057	Gebhard,	Bishop of Eichstadt.
Stephen IX.,	1057	1058	Frederick,	Abbot of Monte Cassino.
Nicholas II.,	1058	1061		Native of Burgundy.
Alexander II.,	1061	1073		Native of Milan.
Gregory VII.,	1073	1085	Hildebrand,	Native of Tuscany.
Victor III.,	1086	1087		Native of Beneventum.
Urban II.,	1088	1099	Otho or Endes,	Native of France.
	Twelfth Century			
Pascal,	1099	1118		Native of Tuscany.
Gelasius,	1118	1119		Native of Gaeta.

BISHOPS AND POPES OF ROME—Continued

Pontiff	Pontificate		Surname	Nationality
	A. D.	A. D.		
Calixtus II.,	1119	1124		Native of Burgundy.
Honorius II.,	1124	1130	Cardinal Lamberti,	Bishop of Ostia.
Innocent II.,	1130	1143		Roman.
Celestine II.,	1143	1144		Tuscan.
Lucius II.,	1144	1145		Native of Bologna.
Eugenius III.,	1145	1153		Native of Pisa.
Anastasius IV.,	1153	1154		Roman.
Adrian IV.,	1154	1159	Nicholas Breakspear,	Englishman.
Alexander III.,	1159	1181	Cardinal Orlando Bandinello,	Native of Siena.
Lucius III.,	1181	1185	Cardinal Ubaldo,	Native of Lucca.
Urban III.,	1185	1187	Uberto Crivelli,	Archbishop of Milan.
Gregory VIII.,	1187			Native of Beneventum.
Clement III.,	1187	1191	Paul,	Bishop of Prænestе.
Celestine III.,	1191	1198	Cardinal Hyacinthus,	Roman.
	Thirteenth Century			
Innocent III.,	1198	1216	Cardinal Lotharius,	Native of Signia.
Honorius III.,	1216	1227	Cardinal Savelli,	Roman.
Gregory IX.,	1227	1241	Cardinal Hugo,	Native of Anagni.
Celestine IV.,	1241			Native of Milan.
Innocent IV.,	1243	1254	Sinibaldo Fieschi,	Native of Genoa.
Alexander IV.,	1254	1261	Cardinal Rinaldo Conti,	Native of Anagni.
Urban IV.,	1261	1264	James, Patriarch of Jerusalem,	Frenchman.
Clement IV.,	1265	1268	Guy,	Native of St. Gilles, in Languedoc.
Gregory X.,	1271	1276	Tebaldo Visconti,	Native of Placenzi.
Innocent V.,	1276		Cardinal Peter,	Native of Tarentaise.
Adrian V.,	1276		Ottobono Fieschi,	Native of Genoa.
John XXI.,	1276	1277		Native of Lisbon.
Nicholas III.,	1277	1281	Cardinal Orsini,	Native of Rome.
Martin IV.,	1281	1285	Cardinal Simon de Brie,	Frenchman.
Honorius IV.,	1285	1288	Cardinal James Sevelli,	Roman.
Nicholas IV.,	1288	1292	Cardinal Jerome,	Native of Ascoli.
Celestine V.,	1294		Pietro da Morrone,	Native of Abruzzi.
Boniface VIII.,	1294	1303	Cardinal Benedetto Gaetani,	Native of Anagni.
	Fourteenth Century			
Benedict XI.,	1303	1304	Cardinal Nicholas,	Native of Treviso.
Clement V.,	1305	1314	Bertrand, removed Papal See to Avignon,	Native of Bordeaux.
John XXII.,	1316	1334	James,	Native of Cahors in France.
Benedict XII.,	1334	1342	James Fournier,	Frenchman.
Clement VI.,	1342	1352	Peter Roger,	Native of Limoges in France.
Innocent VI.,	1352	1362	Stephen Aubert,	Native of Limoges.
Urban V.,	1362	1370	William Grimoard,	Frenchman.
Gregory XI.,	1370	1378	Peter Roger,	Frenchman.
Urban VI.,	1378	1389	Bartolomew Prignano,	Neapolitan.
Boniface IX.,	1389	1404	Peter Tomacelli,	Of Naples.
	Fifteenth Century			
Innocent VII.,	1404	1406	Cosmo Migliorati,	Native of Sulmona.
Gregory XII.,	1406	1415	Angelo Corrari,	Native of Venice.
Martin V.,	1415	1431	Otho Colonna,	Roman.
Eugenius IV.,	1431	1447	Gabriel Condulmero,	Venetian.
Nicholas V.,	1447	1455	Cardinal Thomas,	Native of Sargana.
Calixtus III.,	1455	1458	Alfonso Borgia,	Spaniard.
Pius II.,	1458	1464	Æneas Sylvius Piccolomini,	Native of Siena.
Paul II.,	1464	1471	Peter Barbo,	Native of Venice.
Sixtus IV.,	1471	1484	Francis della Rovere,	Genoese.
Innocent VIII.,	1484	1492	Gian Battista Cibo,	Genoese.
Alexander VI.,	1492	1503	Rodrigo Lenzoli Borgia,	Spaniard.
	Sixteenth Century			
Pius III.,	1503		Francis Todeschini Piccolomini,	Genoese.
Julius II.,	1503	1513	Julian della Rovere,	
Leo X.,	1513	1521	Giovanni de' Medici,	Son of Lorenzo, the Magnificent.
Adrian VI.,	1521	1523		Native of Utrecht.
Clement VII.,	1523	1534	Guilio de' Medici,	Nephew of Lorenzo.
Paul III.,	1534	1549	Alessandro Farnese,	Roman.
Julius III.,	1549	1555	Giovan Maria Giocci,	Roman.
Marcellus,	1555		Cardinal Cervini,	Native of Montepulciano.
Paul IV.,	1555	1559	Gianpietro Caraffa,	Neapolitan.
Pius IV.,	1559	1565	Giovanni Angelo Medichino,	Native of Milan.
Pius V.,	1565	1572	Michelo Chislieri,	Native of Alessandria.
Gregory XIII.,	1572	1585	Hugo Buoncampagni,	Native of Bologna.
Sixtus V.,	1585	1590	Felice Peretti of Montalto,	Native of March Ancona.
Urban VII.,	1590		Gian Battista Castagna,	Genoese.
Gregory XIV.,	1590	1591	Nicola Sfrondati,	Native of Milan.
Innocent IX.,	1591		Gian Antonio Facchinetti,	Native of Bologna.
Clement VIII.,	1591	1605	Ippolito Aldobrandino,	Native of Fano.

BISHOPS AND POPES OF ROME—Continued

Pontiff	Pontificate		Surname	Nationality
	Seventeenth Century			
	A. D.	A. D.		
Leo XI.,	1605		Alessandro de Medici,	Native of Florence.
Paul V.,	1605	1621	Camillo Borghese,	Native of Rome.
Gregory XV.,	1621	1623	Alessandro Ludovici,	Native of Bologna.
Urban VIII.,	1623	1644	Maffeo Barberini,	Florentine.
Innocent X.,	1644	1655	Gian Battista Pamfili,	Roman.
Alexander VII.,	1655	1667	Fabio Chigi,	Native of Siena.
Clement IX.,	1667	1669	Guilio Rospigliosi,	Native of Pistoia.
Clement X.,	1669	1676	Emilio Attieri,	Native of Rome.
Innocent XI.,	1676	1689	Benedetto Odescalchi,	Native of Como.
Alexander VIII.,	1689	1691	Pietro Ottobani,	Native of Venice.
Innocent XII.,	1691	1700	Antonio Pignatelli,	Native of Naples.
	Eighteenth Century			
Clement XI.,	1700	1721	Gian Francesco Albani,	Native of Urbino.
Innocent XIII.,	1721	1724	Michael Angelo Conti,	Native of Rome.
Benedict XIII.,	1724	1730	Vincenzo Maria Orsini,	Native of Rome.
Clement XII.,	1730	1740	Lorenzo Corsini,	Native of Florence.
Benedict XIV.,	1740	1758	Prospero Lambertini,	Native of Bologna.
Clement XIII.,	1758	1769	Carlo Rezzonico,	Native of Venice.
Clement XIV.,	1769	1775	Gian Vencenzo Ganganelli,	Born near Rimini.
Pius VI.,	1775	1799	Angelo Braschi,	Native of Cesena.
	Nineteenth Century			
Pius VII.,	1800	1823	Gregario Barnaba Chiaramonti,	Native of Cesena.
Leo XII.,	1823	1829	Annibale della Genga,	Native of Romagna.
Pius VIII.,	1829	1830	Cardinal Castigliani,	Native of Cingoli.
Gregory XVI.,	1830	1846	Mauro Cappellari,	Native of Belluno.
Pius IX.,	1846	1878	Giovanni Maria Mastai-Ferretti,	Native of Sinigaglia.
Leo XIII.,	1878	1903	Gioacchino Pecci,	Native of Carpinetto.
	Twentieth Century			
Pius X.,	1903	1914	Guiseppe Sarto,	Venice.
Benedict XV.,	1914	1922	Giacomo della Chicsa	Native of Genoa.
Pius XI.,	1922		Achille Ratti,	Native of Italy.

Blue Laws. The code of 1660, a compilation of the earliest laws and customs of Connecticut. It is almost verbally copied from the Mosaic Law. After the restoration of Charles II. "Presbyterian true blue" became a term of derision applied to anything which smattered of Puritanism, and "blue laws" simply meant puritanical laws, or laws with a blue tinge. These laws inflicted the penalty of death for worshiping any god but the God of the Bible; for speaking disrespectfully of the Bible, Christ, or the Holy Ghost; also for witchcraft, adultery, theft, false-swearing, and disobedience to parents. Said to have been drawn up by the Rev. Samuel Peters, but generally supposed to be apocryphal.

Boer War, The. The reinforcing of the British troops in South Africa, along the borders of the Transvaal Republic, together with differences on the franchise question, coupled with grim recollections of former armed clashes between Great Britain and the sturdy, patriotic Boers, all tended to hasten the conflict of 1899-1900, one of the most sanguinary in the world's history. As an effort to avert war, a conference was held May 31, 1899, between Sir Alfred Milner, Governor of Cape Colony, and the Presidents of the Dutch Republics at Bloemfontein, in which terms for the adjustment of the claims of the Outlanders were discussed, but no agreement was reached. Between June 1 and October 10, negotiations proceeded between the governments of Great Britain and the Transvaal, while the legislature of the latter adopted franchise laws which were not acceptable to Great Britain. In the meantime, both countries made energetic preparations for war, and the Orange Free State announced that in case of hostilities it would support the Transvaal.

On October 10th, the Transvaal sent to the British Government an ultimatum demanding: That all points of mutual difference be regulated by friendly recourse to arbitration; that all British troops on the border of the Transvaal Republic should be instantly withdrawn; that Great Britain should withdraw all reinforcements of troops landed in South Africa since June 1, 1899, with assurance that during further negotiations the Republic would not attack any British possessions, and that upon compliance with the ultimatum the Republic would be prepared to withdraw from the borders the armed burghers of the Transvaal; that the British troops then on the high seas should not be landed in any part of Africa; that an answer to the ultimatum be received by the Republic not later than 5 o'clock P. M. on October 11th; that an unsatisfactory answer would be regarded by the Republic as a formal declaration of war by Great Britain.

On October 12, 1899, the reply of the British having been unsatisfactory, the Transvaal Boers invaded Natal, advancing toward Newcastle, which was defended by the British generals White and Symons. The British evacuated Newcastle and fell back on Ladysmith, where, on October 13th, there was a strong British force. On October 20th, the Boers began the siege of Kimberley, and on the same day in Natal was fought the battle of Dundee, in which the British repulsed the Boers, suffering a loss of 215 in killed and wounded. On October 21st, General French captured the Boers' position at Elandslaagte after a hard battle, with a British

loss of 257 killed and wounded. General White repulsed a Free State force at Rietfontein, near Ladysmith, October 24th. Five days later the Boers began the siege of Ladysmith. On October 30th, in a sortie near Ladysmith, the British were entrapped and defeated, and the Boers captured 870 prisoners. Communication with Ladysmith was cut off by the Boers on November 2d, and the next day the British evacuated Colenso, in Natal. The Boers shelled Mafeking November 6th, but were repulsed in an attack on the British position. The first British transport carrying reinforcements reached Cape Town on November 9th, and proceeded to Durban. The Boers wrecked a British armored train near Eastcourt, Natal, on November 16th, capturing fifty-six prisoners, including Winston Churchill. On November 23d, near Gras Pan, Lord Methuen attacked the Boers and drove them from their position, and on November 26th the British won a sanguinary victory at Modder River. A series of Boer successes then followed. On December 10th, the British, under General Gatacre, were led into a Boer ambuscade near Stormberg Junction and lost 1,000 men, including 672 captured, while on the same and following day Lord Methuen failed to take the Boer position at Spytfontein after desperate fighting and heavy losses, General Wauchope being killed. On December 15th, General Buller was severely defeated while attempting to force the Tugela River, near Colenso, he losing 1,000 men and eleven guns. The British losses to this date were 7,630 men killed, wounded, and missing, and the attention of the civilized world was riveted upon the war. After Buller's signal defeat, Field Marshal Lord Roberts was ordered, December 18th, to South Africa, to take command of military operations, with Lord Kitchener as chief of staff, and with a reinforcement of 100,000 men.

General French captured Colesburg on New Year's Day, 1900. On January 6th, Roberts and Kitchener arrived in South Africa, and on the same date the Boers were repulsed with heavy loss in an attack on Ladysmith. On January 23–25th, occurred some of the most desperate and famous fighting of the war, when a British storming party under General Warren captured Spion Kop, but, after heavy losses, withdrew. General Buller made a third attempt to relieve Ladysmith, but failed, February 9th, and Lord Roberts began an invasion of the Orange Free State on February 12th. General French relieved Kimberley on February 15th. On February 22–27th there was severe fighting between Roberts and Cronje, terminating with the capitulation of the latter, with 4,600 men and six guns. Lord Dundonald entered Ladysmith on February 28th, and General Gatacre occupied Stormberg on March 5th. On March 7th, Lord Roberts turned the Boer position near Modder River and advanced triumphantly on Bloemfontein, capital of the Orange Free State, which surrendered to the British on March 13th. The Boer Commander-in-Chief, General Joubert, died on March 27th, and Colonel de Villebois Mareuil, French officer with the Boers, was killed in a skirmish on April 5th. General Cronje and the other Boer prisoners were sent to St. Helena, where they arrived April 14th, and the demoralization of the Boers seemingly began. On April 20th, Mr. Pettigrew, in the United States Senate, introduced a resolution of sympathy with the Boers, but it was voted down, 29 to 20. On May 3d, Lord Roberts began his advance on Pretoria.

The Boers now turned to the United States and Europe for intervention, but the United States was the only government in the world of all those approached by the South African Republic which tendered its good offices to either of the combatants in the interest of the cessation of hostilities.

So the war continued. On May 10th, the British crossed the Zand River and occupied Kroonstad, and on May 15th, General Buller occupied Dundee. The Boer envoys to the United States reached New York on May 16th, the day that Mafeking was relieved, after a siege of 217 days. President McKinley received the envoys unofficially, but they were officially informed by Secretary of State Hay that the United States could not intervene in the war. The end of the struggle was not yet, however, in sight. On May 28th, Lord Roberts proclaimed the annexation of the Orange Free State to the British Empire. The British entered Johannesburg on May 30th, and on the same day President Kruger retired from Pretoria, which city surrendered on June 5th to the British army. General Prinsloo and 3,348 Boers surrendered at Naauwpoort, and Harrismith surrendered to General Macdonald on August 4th. Several conspirators against the life of Lord Roberts were tried at Pretoria August 17th, and their leader was executed. Machadodorp, Kruger's new capital, was occupied by General Buller August 28th. On September 1st, the Transvaal was proclaimed a part of the British Empire by Lord Roberts. Guerilla warfare, which had begun July 1st, was now general in the Transvaal, and the Boer Generals DeWet and Botha continued to harass the British by sporadic raids. Ex-President Kruger, abandoning the Transvaal, began his journey to Europe September 12th. He arrived at Marseilles on November 22d, and had an ovation from the French people, the demonstrations of welcome continuing through his journey to Paris, while the National French Assembly adopted resolutions of sympathy. On November 30th, the supreme military command in South Africa was turned over to Lord Kitchener by Lord Roberts, who departed for home, sailing for England from Cape Town on December 12th. In the meantime, the German Government intimated to Mr. Kruger on December 1st, that a visit by him to Berlin would be inopportune. Queen Wilhelmina of the Netherlands, on the contrary, welcomed Mr. Kruger at a dinner on December 15th. The British met with a severe reverse at Nooltgedacht December 13th, Colonel Legge being killed. On December 14th, Sir Alfred Milner was appointed Administrator of the Orange River and Transvaal colonies, and the year closed with both sides grimly determined to continue the terrible warfare to a definite conclusion.

The first battle of 1901 was at Lindley,

Orange River Colony, where forty British officers and men were killed or wounded. On January 7th, the British position along Delagoa Bay Railway was unsuccessfully attacked by the Boers, who were also driven back on January 17th near Standerton, when they attacked a British column under General Colville. On January 18th, New Zealand troops and Bushmen, under Colonel Gray, routed 800 Boers near Veutersburg. On January 30th, the Bloemfontein-Ladybrand line was crossed by DeWet near Israel's Poort, and the Boers captured the British post at Modderfontein in the Transvaal on February 3d, at about which time the British War Office decided to reinforce Kitchener with 30,000 additional mounted troops. General Smith-Dorrien was attacked by Louis Botha with 2,000 men at Orange Camp February 6th, but repulsed him. On the same date the Boers cut the Delagoa Bay Railroad, near Lorenzo Marques; ten days later DeWet crossed the railroad at Bariman's Siding and was engaged by Crabbe and an armored train, and on February 19th the Boers blew up a supply train at Clip River. Four severe Boer reverses then followed in quick succession. The Boers, 5,000 strong, were defeated by General French at Piet Retief, February 22d; DeWet's force was scattered by Colonel Plummer at Disselfontein, Orange River, February 23d; General French captured 300 Boers, ammunition, cattle, and supplies at Middleburg, February 26th; Lord Kitchener drove DeWet north of the Orange River, with a loss of 280 men captured, March 1st. Lord Kitchener then granted General Botha a seven days' armistice to make communication with other Boer leaders, after which truce hostilities were resumed. The Boers captured a British supply train near Viaklaagte March 22d, but were defeated three days later near Vryheid by General French. On March 27th, Fourie's commando and Bruce Hamilton's command held a running fight for twenty miles. Commandants Prinsloo and Englebrecht surrendered to the British March 30th, and the British reoccupied Pietersburg on April 9th, on which date the Boers captured seventy-five men of the Fifth Infantry and Imperial Yeomanry. General Botha, on April 10th, renewed negotiations for peace. Sir Alfred Milner, returning home from South Africa, was received by the king and created a peer May 21st. The Boers, again for a time, rejoiced over successes. They attacked and partially destroyed the convoy of General Plummer's column May 25th, captured a British post of forty-one men near Maraisburg, May 27th, and attacked General Dixon's brigade of the Seventh Yeomanry near Vlakfontein, May 29th, causing a heavy British loss. On June 3d, an attack by 700 Boers under Scheeper upon Willomore, Cape Colony, was repulsed after a nine hours' fight. The British and Boers lost heavily in an engagement between Elliot and DeWet near Reitz, June 6th, and on the same day Colonel Wilson, with 240 men, routed 400 Boers under Bever, near Warm Baths. The Boers captured 200 members of the Victoria Mounted Rifles at Steenkoolsprint, June 12th, and the Midland Mounted Rifles were overpowered by Commandant Malan at Waterkloof, June 20th.

President Schalk-Burger, of the South African Republic, and President Steyn, of Orange Free State, issued a proclamation for "no peace without independence," June 20th, and on August 7th, Lord Kitchener issued a proclamation of banishment against all Boers in South Africa not surrendering by September 15th. In the meantime, General Benson repulsed the Boers in a mountain pass near Dullstroem, and, though the inevitable end of the warfare was becoming daily more apparent, fighting was continued. Fifty of General French's scouts were captured in Cape Colony August 16th; three officers and sixty-five British, north of Ladybrand, were captured August 21st; the Boers attacked a convoy near Kooipopje and killed nine men of the Seventy-fourth Yeomanry, wounding twenty-three, on August 24th; Colonel Vandeleur and nine men were killed and seventeen wounded by the blowing up of a train in the Transvaal, August 31st; Von Tonder and Delarey engaged General Methuen in the Great Maries valley, September 8th. Then, on September 16th, the British troops captured Lotter's entire command south of Pietersburg, and on the following day the Boers partially evened matters by ambushing and capturing three companies of British mounted infantry under Major Gough, near Scheeper's Nek, and also by capturing a company of mounted British infantry and two guns at Vlakfontein, September 20th. Two Boer commandos were captured September 21st, near Adenburg, and Colonel the Hon. A. Murray and Captain Murray, his adjutant, were killed in a fight with Krintzsinger, who crossed the Orange River. On September 29th, Commandant Delarey attacked Colonel Kekewich's camp at Moedwill, with loss on both sides.

Martial law was declared throughout Cape Colony on October 9th. The following day General Sir Redvers Buller admitted, in a speech, that he advised the surrender of Ladysmith, and was severely criticised for his utterances. Commander Scheeper was captured October 12th, and Captain Bellew and four others were killed in a fight, October 16th, at Twenty-four Streams. On November 1st, in a heavy Boer attack on Colonel Benson's column near Brakenlaagte, the British lost twenty-five officers and 214 men in killed and wounded. During the next sixty days numerous small skirmishes were reported, and during the first three months of 1902 the war was more or less of a desultory character. Negotiations for peace between the Boer leaders and the British Government began on March 23d, the latest notable Boer accomplishment having been the capture of General Methuen and 200 men, forty-one British being killed, on March 11th.

On May 31, 1902, Lord Kitchener announced that a peace treaty had been signed between Great Britain and the Boers, Commandant-General Louis Botha, assisted by General Delarey and Chief Commandant DeWet, acting for the Boers.

Bohemia. The *Boii*, from whom Bohemia derives its name, settled in the country in the Second Century B. C., but were expelled by the Marcomanni about the beginning of the Christian era. The victors themselves soon gave place to

others, and as early as the Fifth Century A. D. we find Bohemia peopled by the Czechs, a Slavic race. In the latter part of the Ninth Century, Swatopluk, the King of Moravia, subjugated Bohemia and introduced Christianity. After his death, the Dukes of Prague, who, in 1061, had the title of king conferred on them by the Emperor Henry IV., ruled the country as a state in the German Empire, until 1306, when the last of the dynasty was assassinated. From 1310 to 1437, Bohemia was ruled by kings of the House of Luxembourg. In the time of Wenzel IV. (Wenceslas), a reformation of religion took place under John Huss and Jerome of Prague. After the death of Wenzel IV., the imprudent measures adopted by the Emperor Sigismund excited in Bohemia a war of sixteen years' duration, which ended in making Bohemia an elective kingdom. In 1458, the shrewd and able Protestant noble, George von Podiebrad, ascended the throne. His successor, Ladislaus (1471–1516), was elected (1490) to the throne of Hungary. After the death of his son and successor, Louis (1516-26), in battle against the Turks at Mohacz (1526), Bohemia and Hungary passed into the hands of Ferdinand I. of Austria. Thenceforth until the World War, 1914-1918, Bohemia remained under Habsburg rule. By the Treaty of Versailles, 1919, Bohemia became a part of Czecho-Slovakia.

Boii. A Celtic people, who emigrated from Transalpine Gaul into Italy, where they occupied the old seat of the Umbrians, between the Po and the Apennines. In B. C. 283, the Boii were defeated by the Romans at the Vadimonian Lake, and thereafter prolonged through numerous campaigns, especially in support of Hannibal, but sometimes single-handed, their resistance to the Roman arms, till their complete defeat by Scipio Nasica, B. C. 191. They were subsequently compelled to recross the Alps, and dwelt for more than a century in a part of modern Bohemia (which derives its name from them), but were ultimately exterminated by the Dacians.

Bonaparte's Egyptian Campaign (1799). Alexandria fell into his hands; he won the great battle of the Pyramids; completed the subjugation of Egypt; passed into Syria, made himself master of Gaza and Jaffa; won the battle of Mount Tabor; returned to Egypt, attacked the Turks at Aboukir, and utterly destroyed their whole army, June 25, 1799.

Bonaparte's Forty Days' Campaign. He left Paris May 6, 1800; marched over the Alps, and reached Aosta May 23d; he entered Milan June 2d; won the battle of Montebello over the Austrians, June 9th, and the great battle of Marengo, June 14th; returned to Paris, July 2d. The forty days count from his arrival at Aosta, May 23d, to his return to Paris, July 2d.

Bonaparte's Italian Campaign (1796-97). He was 27 years of age. April 11th, he defeated Beaulieu, the Austrian general, at Montenotte, in Sardinia; April 14th, he won the battle of Millesimo; April 15th, he won the battle of Dego; April 22d, he won a victory over the Piedmontese at Mondŏvi; May 10th, he defeated the Austrian general, Beaulieu, at the Bridge of Lodi, and entered Milan; June 19th, he occupied Bologna, Ferrara, and Ancona; August 3d, he defeated the Austrian general, Würmser, at Lonato; August 5th, he defeated the same general at Castiglione; September 8th, he defeated him again at Bassano; November 17th, he won the great battle of Arcōla over Alvinzi, the Austrian general; January 14, 1797, he won the battle of Rivoli over Alvinzi and Würmser; January 15th, he won a battle at the faubourg of St. George, near Mantua; January 16th, he won a battle near the palace called The Favorite; March 16th, he defeated the Austrians, led by the Archduke Karl, at Tagliamento; October 17th, the treaty of Campo Formio, and in December he returned to France. He had won fifteen battles; added Savoy and Nice to France, the Netherlands, and Italy; had obtained vast money compensations, and returned to France laden with treasures of art.

Boxer Rebellion, The. The causes of the Boxer outbreak in China were cumulative. For three years prior to the enforced occupation of China by the powers, in 1900, a number of acts of foreign countries had a disquieting effect upon the empire. Since 1898, Russia had taken Port Arthur and the adjacent harbor of Talienwan. Germany had leased Kiaochau and gained great concessions in the province of Shang Tung. France had suggested privileges in portions of Chinese territory adjacent to the French possessions of Tonquin. Great Britain, to cap the climax, had obtained from China a lease of Wei-Hai-Wei, on the south shore of the Gulf of Pechili, opposite Port Arthur, and thus commanded the entrance to the gulf and the water approach to Peking. Many Chinese were resentful of these encroachments by foreigners, but the Dowager Empress did not oppose them, and hence she was bitterly arraigned by her people.

The leader of this opposition was Prince Tuan, the sixth son of the Emperor Kwang-Su's grandfather. Prince Tuan had long been an athlete and had a following of many athletic young men in the kingdom, who, because of their ability in sports, were known as boxers, a name which Tuan's recruits adopted. Tuan proclaimed his nine-year-old son heir presumptive to the throne. The emperor, then but a figurehead, dominated by the Dowager Empress, had little popular support. The Boxers revolted, massacred missionaries at many interior points of the empire, and finally made a concerted attack upon the foreign legations in Peking, in which movement the imperial troops eventually participated.

The Chinese Tsung-li-Yamen, the equivalent to a responsible government ministry in Europe, was in sentiment hostile to foreigners, and hence either would not, or could not, protect the legations or escort them safely from the country. The civilized world received distressing reports of massacres and outrages, and was for several weeks in suspense as to the fate of the foreign ministers in China, their families, legation attaches, and converted Chinese under foreign protection. The offended powers decided upon concerted action and hurried vessels and troops to the ports nearest to the danger points. Upon Chinese resistance to the landing

of marines at Taku, the forts were shelled by all the allies except Americans, and on June 17th, while the Chinese shelled the allies' fleet, the allied troops landed and captured the Taku forts, after a sanguinary conflict. On June 18th the Ninth United States Regiment was ordered from Manila to China, other troops following. On June 20th, German fury and general international indignation was aroused when Baron von Ketteler, the German Minister, while proceeding on a diplomatic mission to the Tsung-li-Yamen in Peking, was beset by Chinese soldiers and butchered. On the same day an allied expedition under Vice-Admiral Seymour, of the British Navy, began a march upon Peking for the relief of the British legationers. Such countless hordes of Chinese opposed him that he was obliged to turn back, suffering casualties of 374. The allied warships shelled Tien-tsin on June 21st, and the combined forces, two days later, occupied the foreign quarters of that city. The Chinese, on June 23d, requested an armistice through Minister Wu at Washington. The United States promptly replied that free communication must first be allowed with the legations, and on July 4th, Secretary of State Hay outlined to the powers the American policy.

On July 13-14th, occurred one of the noted conflicts of history, when the allied forces stormed the Chinese port of Tien-tsin, which they captured with a loss of 800 killed and wounded. Colonel E. H. Liscum, commanding the United States contingent, was among the slain. On July 19th, the Emperor of China appealed to President McKinley for peace. The advance of the allies upon Peking began August 4th, under command of Field Marshal von Waldersee, of the German army, who was unanimously selected to command the allied forces.

The first news from the beleaguered foreigners reached the United States in the form of a cipher message from Minister Conger. It read: "Still besieged. Situation more precarious. Chinese Government insisting on our leaving Peking, which would be certain death. Rifle firing upon us daily by imperial troops. Have abundant courage, but little ammunition or provisions. Two progressive Yamen ministers beheaded. All connected with the legation of the United States well at present moment." The receipt of this message caused intense excitement throughout the United States, for, though it broke the long suspense, it added to public fury and anxiety. On August 8th, Li Hung Chang was appointed Envoy Plenipotentiary to propose to the several powers for the immediate cessation of hostile demonstrations. On August 14th, Peking was captured by the allied forces of the Americans, British, Germans, French, Austrians, Italians, and Japanese. The American troops were the first to enter the city, and Captain Reilly was the first victim. The emperor and empress had fled. The legationers were promptly relieved and told thrilling stories of their danger and distress during the long siege. The Chinese, on August 16th, asked for an armistice, which was refused. Li Hung Chang's appeal was rejected by the United States, and China was informed that the demands of this Government must be complied with. At the same time General Chaffee was given full power to act. The American refugees from Peking reached Tien-tsin safely on August 25th.

On November 19th, the negotiations between the allies and the Chinese authorities for terms of peace and compensation, which were begun when the allies took full possession of Peking, had progressed so far that the German Imperial Chancellor in the Reichstag announced that the allies had unanimously agreed upon the following as their demands upon China:

First. China shall erect a monument to Baron von Ketteler on the site where he was murdered and send an Imperial Prince to Germany to convey an apology. She shall inflict the death penalty upon eleven princes and officials already named, and suspend provincial examinations for five years where the outrages occurred.

Second. In future all officials failing to prevent anti-foreign outrages within their jurisdiction shall be dismissed and punished.

Third. Indemnity shall be paid to states, corporations and individuals. The Tsung-li-Yamen shall be abolished and its functions vested in a Foreign Minister. Rational intercourse shall be permitted with the emperor, as in civilized countries.

Fourth. The forts at Taku and other forts on the coast of Chili shall be razed, and the importation of arms and war material prohibited.

Fifth. Permanent legation guards shall be maintained, and also guards of communication between Peking and the sea.

Sixth. Imperial proclamations shall be posted for two years throughout the empire suppressing Boxers.

Seventh. Indemnity is to include compensation for Chinese who suffered by being employed by foreigners, but not compensation for native Christians.

Eighth. China shall erect expiatory monuments in every foreign or international burial ground where the graves have been profaned.

Ninth. The Chinese Government shall undertake to enter upon negotiations for such changes in existing treaties regarding trade and navigation as the foreign governments deem advisable, and with reference to other matters having in view the facilitation of commercial relations.

In December, 1900, the Chinese authorities had accepted all the foregoing conditions imposed by the allies, and the preliminary note of the demands of the powers was signed by Li Hung Chang and Prince Ching. Peking was evacuated by the American cavalry and artillery May 5th, and General Chaffee embarked for the Philippines May 18th. The powers, on May 9th, demanded of China a formal indemnity of 450,000,000 taels (about $300,000,000), which was agreed to by China, and the powers, on July 26th, formally accepted China's offer to pay the sum named on time at 4½ per cent. interest. Prince Chun, at Berlin, September 4th, formally apologized to Emperor William for the insult to German honor in the murder of Baron von Ketteler. On September 17th, the American and Japanese troops in Peking handed over the Forbidden City to the Chinese.

Brazil. It was only in 1531 that the Portuguese, busy as they were in India, here planted their first settlement. In 1578, Brazil fell with Portugal, under the power of Spain, and became a prey to the Dutch; and, though Portugal regained its own independence in 1640, it was not until 1654 that Brazil was entirely recovered from the Hollanders. In 1807, the royal family of Portugal fled to Brazil; in 1815, the colony was declared "a kingdom"; and the Portuguese court having returned to Europe in 1821, a national congress assembled at Rio de Janeiro, and on May 13, 1822, Dom Pedro, eldest son of King João VI. of Portugal, was chosen "Per-

petual Defender" of Brazil. He proclaimed the independence of the country on September 7, 1822, and was chosen "Constitutional Emperor and Perpetual Defender" on October 12th, following. In 1831, he abdicated in favor of his only son, Dom Pedro II., who reigned until November 15, 1889, when he was dethroned, exiled, and Brazil declared a republic under the title of the United States of Brazil. A new constitution was adopted in 1891, and Fonseca elected first president. Admirals Mello and Da Gama rebelled, 1893, but their revolt was soon suppressed. In 1906-07, Brazil took the lead in an effort to reach a better understanding among the countries of North and South America. A great demonstration was given by the city of Rio de Janeiro, in 1908, to the United States Pacific squadron. After continued sinkings of Brazilian ships by German submarines, Brazil seized all German vessels in her harbors, June 28, 1917, and formally declared war against Germany, Oct. 26, 1917.

Brunswick, The House of. The Duchy of Brunswick, in Lower Saxony, was conquered by Charlemagne, and governed afterward by counts and dukes. Albert-Azzo, Marquis of Italy and Lord of Este, died in 1097, and left by his wife, Cunegonde (the heiress of Guelph, Duke of Carinthia in Bavaria), a son, Guelph. This son was invited into Germany by Imitza, his mother-in-law, and invested with all the possessions of his wife's stepfather, Guelph of Bavaria. His descendant, Henry the Lion, married Matilda, daughter of Henry II. of England, and is always looked upon as the founder of the Brunswick family. His dominions were very extensive; but, having refused to assist the Emperor Frederick Barbarossa in a war against Pope Alexander III., through the emperor's resentment he was proscribed at the Diet at Würzburg, in 1180. The Duchy of Bavaria was given to Otho, from whom is descended the family of Bavaria; the Duchy of Saxony to Bernard Ascanius, founder of the House of Anhalt; and his other territories to different persons. He then retired to England; but, at the intercession of Henry II., Brunswick and Lüneburg were restored to him. The House of Brunswick, in 1409, divided into several branches. Brunswick was included by Napoleon in the Kingdom of Westphalia in 1806, but was restored to the duke in 1815.

Buccaneers. A celebrated association of piratical adventurers, who, from the commencement of the second quarter of the Sixteenth Century to the end of the Seventeenth, maintained themselves in the Caribbean seas, at first by systematic reprisals on the Spaniards, latterly by a less justifiable and indiscriminate piracy. The name is derived from the Caribbee *boucan*, a term for preserved meat, smoke-dried in a peculiar manner. The Buccaneers were also sometimes called "Brethren of the Coast." The assumption by the Spaniards of an exclusive right, based upon the broad claim of initial discovery, to the whole of the New World was stoutly resisted by the enterprising mariners of England and France. The cruelties inflicted by the Spaniards upon all foreign interlopers, of which the history of that time is full, naturally led to an association for mutual defense among the adventurers of all other nations, but particularly among the English and French. The fundamental principles of the policy were close mutual alliance and war with all who were Spanish. The center of their predatory life was Tortuga. Their last great exploit was the capture of Carthagena, 1697.

Bull Run, or Bull's Run. A stream in Virginia, dividing Fairfax and Prince William counties, in the northeastern part of the State, and flowing into the Occoquan River, fourteen miles from the Potomac. On its banks were fought two of the most memorable battles during the Civil War. After a series of heavy skirmishes, July 16–19, 1861, the Union army, under General McDowell, was on the 21st utterly routed by the Confederates, under the command of Generals Beauregard and J. E. Johnston. The Union loss was about 3,000 men, while that of the Confederates was estimated at nearly 2,000 men. The former lost, in addition, twenty-seven guns, besides an immense quantity of small arms, ammunition, stores, provisions, and accoutrements. On August 30, 1862, another great battle was fought here between the Union forces, commanded by General Pope, and the Confederates, under Generals Lee, Longstreet, and "Stonewall" Jackson, when the former were again defeated with heavy loss. The three battles of Groveton, Bull's Run, and Chantilly, fought in three successive days, cost the Union cause about 14,500 men in killed, wounded, missing, and prisoners, thirty guns, and 30,000 small arms. The first battle of Bull Run is sometimes known as the Battle of Manassas.

Bunker Hill, Battle of. A famous engagement between American and British troops, June 17, 1775. The former were commanded by Colonel Prescott and General Putnam, and the latter by General Howe. The British loss in killed and wounded was 1,054; that of the Americans, 450. Although the latter were driven from their position after their powder was exhausted, and the victory remained with the British, the moral effect of this first battle on the Americans, and the heavy loss to the enemy, made it equivalent to a victory for the Continentals. On the ground where the hottest of the battle was fought a granite obelisk, 221 feet in height, has been erected at a cost of $100,000, raised by popular subscriptions. The corner stone was laid by General Lafayette, when on his visit to this country in 1825; it was completed July, 1842, and, on the occasion of its dedication, Daniel Webster delivered his famous oration, generally regarded as his best effort.

Burmah. The Burmese Empire was founded in the middle of the Eighteenth Century by Alompra, the first sovereign of the dynasty, which fell in the person of King Theebaw in 1886. In 1824, the British commenced hostilities against Burmah, and captured Rangoon on May 11th. Successive victories led to the cession of Arracan in 1826. In 1852, further complications resulted in the cession of Pegu to the British Indian Empire. In 1885, King Theebaw, relying upon French assistance, interfered with a British trading company. The British Gov-

ernment took up the case, and demanded of the Burmese monarch security for his future good behavior. Theebaw rejected these demands, whereupon the queen declared war on November 10th. On November 28th, General Prendergast entered Mandalay, the Burmese capital. The king surrendered on the following day, and was immediately deported to British territory. The government was thenceforth administered by a British resident, and on December 31, 1885, Burmah was formally annexed to British India, thus closing the history of Burmah as an independent kingdom.

Cade's Rebellion. In June, 1450, Jack Cade, an Irishman who called himself Mortimer, with 15,000 or 20,000 armed men of Kent, marched on London and encamped at Blackheath whence he kept up a correspondence with the citizens, many of whom were favorable to his enterprise. The court sent to inquire why the good men of Kent had left their homes. Cade, in a paper entitled "The Complaint of the Commons of Kent," replied that the people were robbed of their goods for the king's use, that the men of Kent were especially ill-treated and overtaxed, and that the free election of knights of their shire had been hindered. The court sent its answer in the form of an army, before which Cade retreated to Sevenoaks, where he awaited the attack of a detachment which he defeated. The royal army now objected to fight against their countrymen; the court made some concessions, and Cade entered London on the 3d of July. For two days he maintained the strictest order; but he forced the mayor and judges to pass judgment upon Lord Say, one of the king's hated favorites, whose head Cade's men immediately cut off in Cheapside. A promise of pardon now sowed dissension among his followers, who dispersed, and a price was set upon Cade's head. He attempted to reach the Sussex coast, but was followed by an esquire, named Alexander Iden, who fought and killed him July 11th. His head was stuck upon London Bridge as a terror to traitors, 1450.

Calendar. A systematic division of time into years, months, weeks, and days, or a register of these or similar divisions. The present calendar was adopted in the Sixteenth Century, the Julian, or old Roman calendar, having become grossly erroneous.

Luigi Lilio Ghiraldi, frequently called Aloysius Lilius, a physician of Verona, projected a plan for amending the calendar, which, after his death, was presented by his brother to Pope Gregory XIII. To carry it into execution, the pope assembled a number of prelates and learned men. In 1577, the proposed change was adopted by all the Catholic princes; and in 1582, Gregory issued a brief abolishing the Julian calendar in all Catholic countries, and introducing in its stead the one now in use, under the name of the Gregorian or reformed calendar, or the "new style," as the other was now called the "old style." The amendment ordered was this: Ten days were to be dropped after the 4th of October, 1582, and the 15th was reckoned immediately after the 4th. Every 100th year, which, by the old style was to have been a leap year, was now to be a common year, the fourth excepted; that is, 1600 was to remain a leap year, but 1700, 1800, 1900, to be of the common length, and 2000 a leap year again. In this calendar the length of the solar year was taken to be 365 days, 5 hours, 49 minutes, and 12 seconds, the difference between which and subsequent observations is immaterial. In Spain, Portugal, and the greater part of Italy, the amendment was introduced according to the pope's instructions. In France, the ten days were dropped in December, the 10th being called the 20th. In Catholic Switzerland, Germany, and the Netherlands, the change was introduced in the following year; in Poland, in 1586; in Hungary, in 1587. Protestant Germany, Holland, and Denmark accepted it in 1700, and Switzerland in 1701. In the German Empire a difference still remained for a considerable time as to the period for observing Easter. In England the Gregorian calendar was adopted in 1752, in accordance with an act of Parliament passed the previous year, the day after the 2d of September becoming the 14th. Sweden followed in 1753. The change adopted in the English calendar in 1752 embraced another point. There had been previous to this time, various periods fixed for the commencement of the year in various countries of Europe. In France, from the time of Charles IX., the year was reckoned to begin from the 1st of January; this was also the popular reckoning in England, but the legal and ecclesiastical year began on March 25th. The 1st of January was now adopted as the beginning of the legal year, and it was customary for some time to give two dates for the period intervening between January 1st and March 25th, that of the old and that of the new year, as January $175\frac{2}{3}$. Russia alone retains the old style, which now differs twelve days from the new.

California. The name, signifying "hot furnace," is derived from the Spanish. Though discovered by Sir Francis Drake in 1578, it was first settled by the Spaniards in 1768, at San Diego. Lower California, however, was settled by the Jesuit missionaries in 1683. Spanish power was overthrown by the Mexican Revolution of 1822. By the treaty of peace which followed the Mexican War, California was ceded to the United States for $15,000,000 in 1848. At this time the white population was 15,000. In January, 1848, gold was discovered at Sutter's mill by J. W. Marshall, a verification of Humboldt's prophecy more than a dozen years before. The immigration from all parts of the world soon increased the population to a quarter of a million. The State was admitted to the Union on September 9, 1850.

The history of the Chinese in California has been more remarkable than that of any other foreign element. By 1860, the number of Chinese had reached 34,933; by 1870, 49,310; and by 1880, 75,218. A plebiscitum was taken, and the people of California voted with remarkable unanimity in favor of the restriction of Chinese immigration. In 1882, Congress passed the restriction law which, by successive renewals, has been kept in force till the present time. The Chinese population of California, by 1890, had declined to 71,066; and by 1900, to 45,753.

In 1900, the Japanese numbered 10,151; in 1910, 41,356. They have largely superseded the Chinese as agricultural laborers and domestic servants.

In 1906, the state suffered from one of the most destructive earthquakes of modern times. In 1911 California adopted equal suffrage; also an amendment putting into force the initiative, referendum, and recall. In 1913, the California legislature passed an anti-alien land bill.

The Panama-Pacific international exposition celebrating the opening of the Panama canal was held at San Francisco, Feb. 20-Dec. 4, 1915. Forty-five foreign nations, forty-three states and three territories were represented. More than 18,000,000 people attended.

Caliph, Kalif, or Khalif (*Kāl'ĭf*). The chief sacerdotal dignity among the Saracens or Mohammedans, vested with absolute authority in all matters relating both to religion and political affairs. The government of the original caliphs continued from the death of Mohammed till the 655th year of the Hegira, that is, from A. D. 632 to 1277. The Fatimite caliphs of Africa and the Ommiad sovereigns of Spain, each professed to be the only legitimate successors of Mohammed, in opposition to the Abbasside caliphs of Bagdad, which latter caliphate reached its zenith of power and splendor under Haroun-al-Raschid, in the Ninth Century. The title is now one assumed by the Turkish Sultans, as successors to the Prophet, and also by the Persian Sophis, as successors of Ali.

Campus Martius (Lat., *The field of Mars*). In ancient times, a field by the side of the Tiber, where the Roman youth practiced themselves in warlike exercises. It was consecrated to Mars, god of war, and a temple of that deity stood on it. During the earlier days of the Roman Republic, it was also used for holding the *comitia*, or assemblies of the people; later it was adorned with many fine statues. It constitutes the main part of the modern city of Rome.

Canada. In 1534, Jacques Cartier, a French navigator, entering the St. Lawrence on the festival of the saint of that title, took nominal possession of North America in the name of his king, Francis I. In 1608, Quebec was founded by De Champlain; and here, fifteen years later, he built Fort St. Louis, from which stronghold France ruled for 150 years a vast region extending eastward to Acadia (now Nova Scotia), westward to Lake Superior, and ultimately down the Mississippi as far as Florida and Louisiana. The Recollet and Jesuit missionaries traversed the country in all directions, and underwent incredible hardships in their zeal for the conversion of the Indians. These fearless priests were the pioneers of civilization in the far West, and to one of the most intrepid — La Salle—is due the discovery of the Mississippi valley. In 1670, Charles II. granted to Prince Rupert and his company, known ever since as the Hudson Bay Company, the perpetual exclusive right of trading in the territory watered by all the streams flowing into Hudson Bay. Garrisoned forts were now raised at suitable points, and the bitter enmity between the French and the English traders frequently led to bloody struggles, in which sometimes the Indians also took a part. The most warlike native tribe was that of the Iroquois, who were persistent enemies of the French, while the peaceful Hurons were steady allies. Meanwhile, the wars on the American continent followed the course of the wars in Europe, until the long struggle between France and England for the supremacy in America came to a close on the "Plains of Abraham," in 1759, when General Wolfe defeated Montcalm. This victory opened the gates of Quebec. The capitulation of Montreal next year brought to a close the era of French dominion in Canada. The people of the conquered country were secured, by the terms of the treaty agreed to, in the free exercise of their religion; and peace was concluded between Britain and France, 1763, when Canada was formally ceded to England, and Louisiana to Spain. In the same year a small portion of the recently acquired territory was, by royal proclamation, organized under English laws. In 1774, the new province was extended by parliamentary enactment, under French laws, down the Ohio to its confluence with the Mississippi, and up the latter stream to its source. Finally, Canada receded to its present limits in 1783, giving up to the American Republic, at the close of the Revolutionary War, the sites of six States: Minnesota, Wisconsin, Michigan, Ohio, Indiana, and Illinois. In 1791, Canada was divided under separate legislatures into two sections—the eastern retaining French institutions, the western receiving those of England; these sections, after discontent had ripened into armed insurrection, were again reunited for legislative purposes in 1841.

In 1867, March 28, the British North America act for confederation of the colonies passed the imperial parliament. It united Upper Canada, or Ontario, Lower Canada, or Quebec, New Brunswick, and Nova Scotia, into one territory, to be named the Dominion of Canada. Newfoundland declared against joining the confederation, but with that exception all the British territory north of the United States was gradually included within the Dominion — the Hudson Bay Company territory by purchase in 1868, British Columbia in 1871, Prince Edward Island in 1873. In 1870, an insurrection of the Red River settlers, who were under apprehensions as to how their titles to their lands might be affected by the cession of the Hudson Bay Company's rights, took place under the leadership of Louis Riel, and had to be suppressed by a military expedition under Colonel (later Viscount) Wolseley. To reassure the settlers, a part of the newly-purchased territory was erected into an independent province under the name of Manitoba, the unorganized territory beyond receiving the name of the Northwestern Territory. In 1871, the Washington Treaty arranged that the fisheries of both Canada and the United States should be open to each country for the next twelve years, Canada receiving a compensation, afterwards fixed at five and a half million dollars, for the superior value of its fisheries. In 1884, considerable disaffection was caused amongst the half-breeds and Indians in the Saskatchewan and Assiniboia districts, on account of the difficulty of obtaining valid titles to their lands. The discontent at length took shape in an insurrection, which Louis Riel was invited to head.

The rebels seized the government stores at Duck Lake. Some Indian tribes coöperating with them massacred the settlers at Frog's Lake. General Middleton with several thousand volunteers suppressed the rebellion. Riel was tried and executed at Regina on July 28, 1885. After 1883, when the Washington Treaty expired, disputes between American and Canadian fishermen became frequent, and several American fishing vessels were seized on the British North American coasts. For the adjustment of the differences over fisheries a joint British and American commission was instituted in 1887. A treaty was signed in February, 1888, but was rejected by the United States Senate. In 1887, an arbitration board was appointed to settle a dispute with the United States concerning the Bering Sea seal fisheries, and ten years later made an award in favor of the Canadians' claims. Another commission, sitting in London (1903), decided the Alaskan boundary controversy in favor of the United States. In September, 1907, a serious riot, directed against the Japanese and Chinese, broke out in Vancouver, largely organized by the American labor agitators, but supported by the local rowdies of the city. The Dominion authorities at once suppressed the outbreak. In 1910, the Newfoundland fisheries controversy was arbitrated at The Hague. On September 21, 1911, reciprocity of trade with the United States was defeated by Canada, resulting in the downfall of the liberal ministry and the election of Robert Laird Borden as premier at the head of the first conservative ministry in Canada since 1896.

During the World War, 1914-1918, Canada mustered for overseas service more than a half million men, and kept a steady stream of troops, supplies, and munitions passing across the Atlantic. After heavy sacrifices, Canada emerged from the conflict with a new status, both as a dominion within the empire and as a nation before the world. A department of external affairs was added and it was agreed that Canada might have a diplomatic representative at Washington. By various enactments, made chiefly during the war, all of the provinces adopted some form of Prohibition. In 1920 Arthur Meighen became premier, succeeding Sir Robert Laird Borden. Growing criticism of the Conservative government led to the elections of December, 1921. In these the Liberals won a majority, and their leader, W. L. Mackenzie King, became premier. The new Farmers' or Progressive party was second, and the Conservatives, who were overwhelmingly defeated, third.

Carthage (called *Carthago* by the Romans, and by the Greeks, *Karchēdōn*). One of the most celebrated cities of the ancient world, situated on the north coast of Africa, on a peninsula in what is now the state of Tunis. It was founded by the Phœnicians of Tyre, about 100 years before the building of Rome, or, according to tradition, 853 B. C. The builder of the city was said to be Dido. It became the seat of a powerful kingdom; maintained three wars against Rome, which are usually called the three *Punic Wars*, and in the third of these wars was totally destroyed by Scipio Æmilianus, 146 B. C. The greatness of the city at this time may be judged from the fact that it took seventeen days to burn. It is said to have been twenty-three miles in circumference, and to have contained within its walls a population of 700,000. Cæsar afterwards planted a colony on the site, which he called *Colonia Carthago*. It became again the first city in Africa, and occupied an important part in ecclesiastical as well as in civil history.

Charter Oak, a tree which formerly stood in Hartford, Conn., in the hollow trunk of which the colonial charter is said to have been hidden. The story is that when Governor Andros went to Hartford in 1687, to demand the surrender of the charter, the debate in the Assembly was prolonged until dark, when the lights were extinguished, and Captain Wadsworth escaped with the document and hid it in the oak. The venerable tree was preserved with great care until 1856, when it was blown down.

Chile. Chile originally belonged to the Incas of Peru, from whom it was wrested by the Spaniards under Pizarro and Almagro, in 1535. From this period Chile continued a colony of Spain until 1810, when a revolution commenced, which terminated in 1818 in the independence of Chile. Several internal commotions have since occurred; but the country has been free from these compared with other South American States. A war begun with Spain, in 1865, led to the blockade of the coast by the Spanish fleet, and the bombardment of Valparaiso in 1866. In 1879, a war broke out with Bolivia and Peru in reference to the rights of Chile in the mineral district of Atacama. This war was virtually finished in 1881, and the victorious Chileans gained a large accession of territory from both Bolivia and Peru. In 1891, an insurrection caused by dissatisfaction with President Balmaceda's administration resulted in his overthrow. In 1907, a number of labor disturbances in the mining regions called for armed intervention.

China. The early history of the Chinese is shrouded in fable, but it is certain that civilization had advanced much among them when it was only beginning to dawn on the nations of Europe. The Chow dynasty, which was founded by Woo-wang and lasted from about 1100 B. C. to 258 B. C., is perhaps the earliest that can be regarded as historic. Under Ling-wang, one of the sovereigns of this dynasty, Confucius is said to have been born, some time in the sixth century B. C. During the latter half of the Chow dynasty there appear to have been a number of rival kings in China. Chow-siang, who was the founder of the Tsin dynasty, from which China takes its name, gained the superiority over his rivals, and died in 251 B. C. His great-grandson, a national hero of the Chinese, was the first to assume the title of "Hoang" (emperor), and called himself Che-Hoang-ti. In his reign, the great wall, which was designed as a protection against marauding Tartars, was begun about 214 B. C. Buddhism was introduced in 65 A. D. Subsequently, the empire broke up into three or more states, and a long period of confusion and weak government ensued. In 960, a strong ruler managed to consolidate the empire, but the attacks of the Tartars were now causing much trouble. In the thirteenth century the Mongols, under Jenghis

Khan and his son, Ogdai, conquered China, and in 1259 the celebrated Kublai Khan, a nephew of the latter, ascended the throne and founded the Mongol dynasty. His ninth descendant was driven from the throne, and a native dynasty, called Ming, again succeeded in 1368, in the person of Hungwu. A long period of peace ensued, but was broken about 1618, when the Manchus gained the ascendency, and, after a war of twenty-seven years, founded the Tartar dynasty in the person of Tungchi, establishing their capital in the northern city of Peking, which was nearer their native country than the old capital Nanking. The earliest authentic accounts of China are those of Marco Polo, who visited the country in the Thirteenth Century. The first British intercourse was attempted under Queen Elizabeth, in 1596, and a trade was subsequently established by the East India Company, but no direct intercourse between the governments took place till the embassy of Lord Macartney, in 1792. A second embassy in 1816, by Lord Amherst, was treated with insolence. In 1840, the British, on being refused redress for injuries partly real and partly alleged, proceeded to hostilities, and, after scattering every force which was opposed to them, were preparing to lay siege to Nanking when the Chinese sued for peace. A treaty was then concluded (1842) by which the five ports of Canton, Amoy, Foo-chow-foo, Ningpo, and Shanghai were opened to British merchants, the island of Hong-Kong ceded to the British in perpetuity, and the payment of $21,000,000 agreed to be made by the Chinese. In 1850, an insurrection broke out in the provinces adjoining Canton, with the object of expelling the Manchu dynasty from the throne, as well as of restoring the ancient national religion of Shan-ti, and of making Tien-te the founder of a new dynasty, which he called that of Tai-ping, or Universal Peace. After a long period of civil war, the Tai-ping rebellion was at length suppressed in 1865, chiefly by the exertions of General Gordon and other British and American officers at the head of the Chinese army. In October, 1856, the crew of a vessel belonging to Hong-Kong were seized by the Chinese. The men were afterwards brought back, but all reparation or apology was refused. In consequence of this, a war with China commenced, in which the French took part with the British. Peking had to be taken (in 1860) before the Chinese Government finally gave way, and granted a treaty securing important privileges to the allies. The child emperor, Tsaitien, succeeded in 1875, but only assumed the reins of government in 1887, on reaching the age of sixteen. War was declared between China and Japan on July 31, 1894. Japan, by a series of brilliant victories, both on land and sea, brought the war to an end in April, 1895. Corea was declared independent, Formosa ceded to Japan, and China was forced to pay a very large war indemnity. The following succinct statement of recent progress in China was lately made by a missionary who has labored in that country since 1863: "Who among us, ten years ago, would have dared to imagine that to-day China would have (1) a national fleet; (2) the telegraph radiating to the most distant provinces; (3) government colleges for engineering, navigation, military tactics, electricity, and medicine; (4) the Kai-ping mines supplying steamers and the north ports with excellent and cheap coal?" During 1898, both Russia and Germany had taken possession of certain provinces of China. In 1900, the Boxers rose against the foreigners (See Boxer Rebellion). A punitive war by the powers followed; indemnity and future guarantees and punishment of the principals were demanded and paid.

In 1903, insurrection and rebellion occurred in several provinces. Rebels in North China proclaimed Pu Chun, Prince Tuan's son, as emperor, but the movement was quickly suppressed. As a result of the rebellion in the Province of Kwang-si, the country was desolated and a serious famine threatened. It was reported that 1,000,000 persons were starving, and that men were selling their wives and children in order to get food. In 1907-08, edicts were issued looking to the extension of self-government in the cities and a larger degree of civil liberty.

A grand council was instituted by the emperor, and in 1910 in response to popular demands he announced the establishment of representative government in 1913.

In 1911 a revolution began in China between those who advocated the retention of the monarchy and those who favored the establishment of a republic. In 1912, with the formal abdication of the Manchu dynasty, which ruled China for three centuries, an end came to an empire nearly 5,000 years old. China was proclaimed a republic and Yuan-Shi-Kai was elected president.

In 1914, a new constitution concentrated power in the president. In November, Japan seized the province of Kiaochow, leased by China to Germany. Japan made demands upon China, in January, 1915, regarding concessions to foreigners and the transfer to Japan of German and Austrian concessions. A Japanese ultimatum followed in May which China was compelled to accept. The Chinese republic ended in 1915, China by popular vote restoring the monarchy with Yuan-Shi-Kai as emperor. He formally accepted the throne Dec. 11, 1915, but upon his death June 6, 1916, China again became a republic.

Cisalpine Republic. A former political division of Italy, embracing portions of Mantua, Milan, the Valtellina, Venetia west and south of the Adige, Modena, and the northern Pontifical States. Inaugurated by Napoleon I. in 1797, it was named the *Italian Republic* in 1802, and three years later constituted the principal part of the Italian Kingdom.

Colorado. Colorado was first organized as a territory in 1861, from parts of Kansas, Nebraska, New Mexico, and Utah. A portion of it was derived from the Louisiana purchase of 1803, and a part from the Mexican cession of 1848. This region was first settled by Coronado in 1540. It was thoroughly explored by expeditions sent out by the government, under Major Zebulon M. Pike, in 1806; under Colonel S. H. Long, in 1819; and under Colonel J. C. Frémont, in 1842-44. The first American settlements were made by mining parties in 1858-59, since which time Colorado has become even

more prolific than California in its yield of the precious metals. The State was admitted August 1, 1876. The famous Leadville mines were opened in 1879, and the same year saw the Ute uprising. In 1891 the Cripple Creek gold discoveries were made. In 1893 the legislature passed a bill, making equal suffrage for men and women a law. The Gunnison tunnel, the largest single irrigation project ever undertaken by the United States government, was opened by President Taft, Sept., 1909. In 1909 the state adopted the initiative and referendum and in 1914 a Prohibition amendment which took effect in 1916.

Committee of Public Safety. A committee of nine created by the French Convention, April 6, 1793, to concentrate the power of the executive, "the conscience of Marat, who could see salvation in one thing only, in the fall of 260,000 aristocrats' heads."

Confederation of the Rhine. During the war of 1805, so disastrous for Austria, several German princes, too weak to remain neutral, were forced to ally themselves with France. The first to do so were the Electors of Bavaria and Württemberg, who, in recompense of their services, were elevated to the dignity of kings by the Peace of Pressburg, December 26, 1805. Some months after (May 28, 1806), the archchancellor of the empire announced at the Diet that he had chosen as his coadjutor and successor Cardinal Fesch, the uncle of Napoleon, a thing entirely contrary to the constitution of the Germanic Empire. Finally, at Paris, on the 12th of July, 1806, sixteen German princes formally signed an act of confederation, dissolving their connection with the Germanic Empire, and allying themselves with France. These sixteen princes were: the kings of Bavaria and Württemberg, the archchancellor, the Elector of Baden, the new Duke of Cleves and Berg (Joachim Murat), the Landgraf of Hesse-Darmstadt, the princes of Nassau-Usingen, Nassau-Weilburg Hohenzollern-Hechingen, Hohenzollern-Sigmaringen, Salm-Salm, Salm-Kyrburg, the Duke of Arenberg, the princes of Isenburg-Birstein and Lichtenstein, and the Count of Leyen.

Connecticut. One of the thirteen original States. Its name was derived from the Indian, and signifies "Long River." The territory, originally claimed by the Dutch of New Netherlands by right of prior exploration, was finally acquired by the English under a patent granted to Lord Say and Sele, and Brooke and associates, in 1631. Permanent settlements were made, 1633–36, by colonists from Massachusetts, at Hartford, Windsor, and Wethersfield. In 1638, New Haven was settled by a distinguished company of emigrants from England. The first constitution was adopted in 1639, being the first time in history when a government was organized and defined by a written constitution. Its leading features were afterward copied in the constitutions of the other States and of the United States, and it was the basis of the charter of 1662. The attempt to revoke and supersede this charter by James II. through his representative, Sir Edmund Andros, in 1687, led to what might be called the first colonial act of rebellion against royal authority. During the Civil War, 54,882 men were furnished by the State.

Consul. The title of the two chief magistrates of Rome, whose power was in a certain degree absolute, but who were chosen for only one year; they were instituted B. C. 509. The authority of the two consuls was equal; yet the Valerian law gave the right of priority to the elder, and the Julian law to him who had the greater number of children; and this one was generally called *Consul major* or *prior*. In the first ages of the republic, they were elected from patrician families; but in the year of Rome, 388, the people obtained the privilege of electing one of the consuls from their own body, and sometimes both were plebeians. After the establishment of the empire in 91, the office of consul became merely honorary; the last holder of the dignity at Rome was Decimus Theodorus Paulinus, A. D. 536; at Constantinople, Flavius Basilius Junius, 541.

Consulate. A body of three persons, to whom, after the dissolution of the French Directory in 1799, the provisional government was intrusted. Napoleon, Cambacérès, and Lebrun, were elected as first, second, and third consuls, respectively, with different degrees of authority, 1800; but the influence of the first becoming gradually augmented, the transition to imperial dignity became easy to him. On August 4, 1802, he was made consul for life, and on May 18, 1804, the title of emperor was substituted for that of consul.

Continental System. A plan devised by Napoleon to exclude Britain from all intercourse with the continent of Europe. It began with the decree of Berlin of November 21, 1806, by which the British Islands were declared to be in a state of blockade; all commerce, intercourse, and correspondence were prohibited; every Briton found in France, or a country occupied by French troops, was declared a prisoner of war; all property belonging to Britons, fair prize; and all trade in goods from Britain or British colonies entirely prohibited. Britain replied by orders in council prohibiting trade with French ports, and declaring all harbors of France and her allies subjected to the same restrictions as if they were closely blockaded. Further decrees on the part of France, of a still more stringent kind, declared all vessels of whatever flag, which had been searched by a British vessel or paid duty to Britain, denationalized, and directed the burning of all British goods, etc. These decrees caused great annoyance, and gave rise to much smuggling, till annulled at the fall of Napoleon, 1814.

Convention, National. A revolutionary convention in France, which, on September 20, 1792, succeeded the Legislative Assembly, proclaimed the republic, and condemned the king to death. It succeeded in crushing the royalists of La Vendée and the south, in defeating all Europe leagued against France, and in founding institutions of benefit to France to this day. It was dissolved on October 26, 1795, to make way for the Directory.

Corea or Korea. The seeds of Christianity were sown in Corea in 1592, by the invading army, composed chiefly of Christian converts of the Japanese usurper, Tiacosama. Hamel, a Dutch sailor, was wrecked here and

detained for thirteen years; from his narrative it was that, till very recently, most of our scanty knowledge of Corea was obtained. In 1784, Jesuit missionaries found their way into Corea and had great success among the people. From 1835 till 1860, several intrepid and devoted French missionaries contrived to find shelter, and, in spite of incessant persecutions, the Christian community continued rather to increase, rising in 1852 to 11,000 souls. The massacre of nine missionaries, in 1866, led to an invasion of Corea by a small French force, but without success. Nor did two successive American expeditions, provoked by attack on an American vessel, succeed in breaking down the barriers that separated the Coreans from the rest of the world. The pseudonym of "Hermit Nation" has attached to Corea, not because of vast deserts and deadly jungles which interposed as physical barriers to constitute the Nile sources a region of myths and mysteries — for Corea, situated in the open sea, had none of these to bar ingress — but because of a persistent policy of isolation which, consecrated by time, became in fact, a sort of Corean religion. To be let alone by the *So Yang Saram* ("men from the Western Ocean"), this was the policy of government until our own day. About 1881, however, Corea made a treaty with Japan, and, later on, through Admiral Shufeldt, U. S. N., with the United States—followed by others with England, Russia, France, Germany, and Italy. After Japan's victory over China, in 1895, Corea was made independent. In 1907, Corea practically passed under a Japanese protectorate and, in 1910, was annexed to that empire.

Covenanters. In Scottish history, the name given to the party which struggled for religious liberty from 1637 on to the revolution; but more especially applied to the insurgents who took up arms in defense of the Presbyterian form of church government. The Presbyterian ministers who refused to acknowledge the bishops were ejected from their parishes and gathered around them crowds of their people on the hillsides to attend their ministrations. The first outbreaks took place in the hill country on the borders of Ayr and Lanark shires. The murder of Archbishop Sharp, on Magus Moor, and a skirmish near there alarmed the government, who sent troops to put down the insurgents, who had increased in number rapidly. The two armies met at Bothwell Bridge, when the Covenanters were totally defeated, June 22, 1679.

In consequence of the rebellious protest, called the "Sandquhar Declaration," put forth in 1680, by Cameron, Cargill, and others, as representing the more irreconcilable of the Covenanters, and a subsequent proclamation in 1684, the government proceeded to more severe measures. An oath was now required of all who would free themselves of suspicion of complicity with the Covenanters; and the dragoons, who were sent out to hunt down the rebels, were empowered to kill anyone who refused to take the oath. After the accession of William, some of the extreme Covenanters refused to acknowledge him, owing to his acceptance of Episcopacy in England, and formed the earliest dissenting sect in Scotland.

Crimean War. In 1854, the Crimea became the theater of a sanguinary war, undertaken by England, France, Turkey, and Sardinia in support of the integrity of the sultan's power and to check the growing ascendency of Russia on the Black Sea. The allies landed near Eupatoria, and defeated the Russians at the River Alma, September 20, 1854; at Balaklava, October 25th; at Inkerman, November 5th; at the River Tchernaya, August 16, 1855. The siege of Sebastopol continued from October 9, 1854, to September 8, 1855, when the important fortresses known as the Malakoff and the Redan were stormed by the French and English, and the Russians evacuated the city. An armistice was concluded February 26, 1856, and peace was proclaimed in April of the same year. The British loss, during the war, was nearly 24,000, of which number, however, 16,500 died of disease and privation. The French lost about 63,500. The Russian loss was estimated at 500,000.

Crusades (Lat. *crux*, a cross). The name given to the religious wars which were carried on during the middle ages between the Christian nations of Western Europe and the Mohammedans of Eastern Europe and Western Asia. Originally, the object of the Crusades was to obtain free access for pilgrims to the Holy Sepulchre, but they afterwards developed into a contest for the possession of Jerusalem itself. The Crusades lasted for nearly two centuries. They are usually divided into eight, as follows: First (1096–1100), led by Godfrey of Bouillon, and preached up by Peter the Hermit; second (1147–1149), led by Louis VII. and the Emperor Konrad, at the instigation of St. Bernard; third (1189–1193), led against Saladin, the Sultan of Syria and Egypt, by Richard the Lion-hearted of England and Philip Augustus of France; fourth (1202–1204), led by Baldwin of Flanders and the Doge of Venice; fifth (1217), led by John Brienne, titular sovereign of Jerusalem; sixth (1228–1229), led by Frederick II. of Germany; seventh and eighth (1248–1254 and 1268–1270), to satisfy the religious scruples of Louis IX. of France. Although the Crusades did not accomplish their main object, and the "Holy City" remained finally in the hands of the "Infidels," they yet called forth an amount of enterprise that has exerted a powerful influence upon modern civilization. On the other hand, they cost many millions of lives, and the deeds that were done during the Crusades in the sacred name of Christ would be altogether repugnant to all modern ideas of religion or even of humanity. The name *Crusades* was derived from the symbol of the cross, which the warriors engaged in them wore over their armor.

Cuba, spoken of as the "Queen of the Antilles," was discovered by Columbus in 1492, the discoverer calling it "the most beautiful land that eyes ever beheld." It was first settled by Spaniards at Baracoa in 1511. Havana, first settled in 1519, was reduced to ashes by the French in 1538, and again in 1554. For about one and a half centuries, Cuba was in constant danger from French, Dutch, English, and West Indian filibusters. In 1762, the English, under Lord Albemarle, took Havana,

which, however, was by the treaty of Paris next year restored to Spain. From 1789 to 1845, the island was a vast slave-trading center. Negro insurrections occurred in 1845 and 1848. In the latter year the United States offered $100,000,000 to Spain for the island. Rebellions against Spanish rule broke out in 1849 and in 1868. They were put down after long campaigns; another insurrection, begun in 1895, gained formidable proportions by 1898. The United States battleship "Maine," while on a friendly visit, was blown up in Havana harbor, February 15, 1898, and on April 19th, the Congress of the United States adopted resolutions declaring Cuba independent. War with Spain began at once. Cervera's Spanish fleet was destroyed at Santiago de Cuba, July 3d, and Santiago and its large army were surrendered on July 17th. The leading military events of the war, so far as Cuba was concerned, were the fights at El Caney and San Juan, the battle at Santiago, and the destruction of Cervera's fleet. A Constitutional Convention assembled in November, 1900, and adopted a constitution providing for a republican form of government, with a president, vice-president, senate, and house of representatives. Thereupon, the United States Congress authorized the transfer of the government to the people of Cuba on condition that: (1) No treaty should be made with any other foreign power impairing the independence of Cuba, or allowing military or naval occupation of the island; (2) the United States should have the right to intervene for the discharge of her obligations under the Treaty of Paris; (3) the United States should have certain naval stations (at Bahia Honda and Guantanamo). These conditions were included in the Law of Constitution, and confirmed in the permanent treaty between Cuba and the United States, which was signed in May, 1903.

The formal transfer of the government to the Cuban authorities took place on May 20, 1902. Tomas Estrada Palma was elected first president, and Luis Esteves, vice-president. An insurrection in 1906 led to American intervention and the appointment of Charles E. Magoon as provisional governor. Cuban Government again became independent in 1909, with José Gomez as president. In 1913 Gomez was succeeded by Mario Menocal, who was re-elected in 1917. On the eve of the election a revolt broke out among the troops. The government, with the moral support of the United States, acted with decision and promptly suppressed the disturbance. Following the lead of the United States, Cuba declared war on Germany, April 7, 1917, and cooperated effectively with the Allies throughout the final period of the World War. In 1921 Alfredo Zayas was elected president. Under the stabilizing influence of the United States, Cuba has made notable progress.

Decemviri (*de-sĕm've-re*). A body of men who were elected by the patricians, B. C. 451, for the purpose of drawing up a body of laws, founded on the most approved institutions of Greece. They compiled a code, which they inscribed on ten tables, and stated that their labors were not yet complete. Next year, therefore, another body of ten, which probably included some of the patricians, was appointed with the same powers; and these added two more tables, altogether making the famous *Twelve Tables*, which were from that time the foundation of all Roman law. The second body of decemvirs attempted to prolong their period of office, committed some acts of violence, and altogether gave such dissatisfaction that they were dissolved. The traditionary history of the decemviri is, however, very doubtful. There were other decemvirs, who were appointed for judicial and other purposes.

Defenestration of Prague, The (May 23, 1618). That is, the ejection out of windows by the Bohemians. The Bohemians had two Protestant churches, one in the diocese of Prague, and the other in the territory of the abbot of Braunau. The Archbishop of Prague and the abbot pulled down these reformed churches, and when the Protestants remonstrated they were told it was the king's pleasure. So Count Thurn of Bohemia headed a deputation, which went to the royal castle of Prague to lay their grievance before the king. Being admitted into the council hall, they were so insolently received that they *threw* two of the councillors and the king's private secretary *out of the windows* into the moat. This was the beginning of the Thirty Years' War.

Delaware. Though the State was first discovered by the Dutch in 1609, Lord Delaware, Governor of Virginia, who visited it the following year, and afterward gave name to it, claimed it on behalf of England. In 1637, colonies were planted near Wilmington by the Swedish East India Company, which brought on a conflict with the Dutch and led to the expulsion of the Swedes in 1655. When New Netherlands was conquered by the English, this territory went with it. William Penn, having received the Pennsylvania grant, secured, also, from the Duke of York rights over Delaware by patent, and until the Revolution the territory was governed under the same proprietary. In 1776, the people declared themselves an independent State, and as such fought in the Continental ranks. Delaware was the first State to ratify the Federal Constitution, and its own constitution, adopted in 1792, still forms the fundamental law.

Deluge. The Deluge was threatened in the year of the world 1536, and began December 7, 1656, and continued 377 days. (*Genesis* vi, vii, viii). The ark rested on Mount Ararat, May 6, 1657, and Noah left the ark December 18th, following. The year corresponds with that of 2348 B. C. The following are the epochs of the Deluge, according to Dr. Hales:

	B. C.		B. C.
Septuagint,	3246	Clinton,	2482
Jackson,	3170	Playfair,	2352
Hales,	3155	Usher and E. Bible,	2348
Josephus,	3146	Marsham,	2344
Persian,	3103	Petavius,	2329
Hindoo,	3102	Strauchius,	2293
Samaritan,	2998	Hebrew,	2288
Howard,	2698	Vulgar Jewish,	2104

In the reign of Ogyges, King of Attica, 1764 B. C., a deluge so inundated Attica that it lay waste for nearly 200 years. Buffon thinks that the Hebrew and Grecian deluges were the same,

and arose from the Atlantic and Bosporus bursting into the Valley of the Mediterranean.

The deluge of Deucalion in Thessaly is placed 1503 B. C. according to *Eusebius*. It was often confounded by the ancients with the general flood but considered to be merely a local inundation occasioned by the overflowing of the River Pineus whose course was stopped by an earthquake between the Mounts Olympus and Ossa. Deucalion, who then reigned in Thessaly, with his wife Pyrrha and some of their subjects, are stated to have saved themselves by climbing up Mount Parnassus.

Denmark. The Kymri were the earliest known inhabitants of Scandinavia and made themselves formidable to the Romans 100 years B. C. To them succeeded the Goths who, under their mythical leader, Odin, established their rule over the Scandinavian lands. Odin's son, Skjold, is reputed to have been the first ruler of Denmark; but the little that is known of Danish history in these remote ages seems to indicate that the country was split up into many small territories, whose inhabitants lived by piracy. The people were divided into "Bönder" and "Trælle," freemen and bondmen. The former busied themselves with war and "Vikingetog," or piracy, and the government of the land; while to the latter were left the peaceful pursuits of hunting, fishing, and tilling the soil. The mission of Ansgarius the Apostle of the North to South Jutland, in 826, when he baptized Harald Klak, one of the Smaa Kongar, or the little kings of Denmark, was the means of first opening the Danish territories to the knowledge of the more civilized nations. The country was soon torn by civil dissensions between the adherents of the ancient and modern faith. Gorm the Old, the first authentic King of Denmark, the bitter enemy of Christianity, died in 935, after having subjugated the several territories to his sway; and, although his death gave fresh vigor to the diffusion of the new faith, paganism kept its ground for 200 years longer, and numbered among its adherents many of those half-mythical heroes, whose deeds are celebrated in the Eddas and the Kæmpeviser of the Middle Ages. The success that attended the piratical incursions of the Northmen drew them from their own homes; and, while Gorm's descendants, Svend and Knud, were reigning in England, Denmark was left a prey to anarchy. On the extinction of Knud's dynasty, in 1042, his sister's son, Svend Estridsen, ascended the throne. Internal dissensions and external wars weakened the country, and the introduction of a feudal system raised up a powerful nobility and ground down the once free people to a condition of oppressed serfage. Valdemar I., by the help of his great minister, Axel Hvide, known in history as Bishop Absalon, subjugated the Wends of Rügen and Pomerania, and forced them, in 1168, to renounce the faith of their god, Svantevit, and accept Christianity. During the time of Knud VI., and in the early part of the reign of Valdemar II.,— sons of Valdemar I. — the conquest of Denmark extended so far into German and Wendic lands that the Baltic was little more than an inland Danish sea. The jealousy of the German princes and the treachery of his vassals combined to rob Valdemar II. of these brilliant family conquests. His death, in 1241, was followed by a century of anarchy and inglorious decadence of the authority of the crown, during which the kingdom was brought to the brink of annihilation under the vicious rule of his sons and grandsons. Under his great-grandson, Valdemar IV., the last of the Estridsen line, Denmark made a quick but transient recovery of the conquests of the older Valdemars, and the national laws were collected into a well-digested, comprehensive code. From his death, in 1375, till 1412, his daughter, the great Margaret, first as regent for her only and early lost son, Olaf, and later as sole monarch, ruled, not only Denmark, but, in course of time, also Sweden and Norway, with such consummate tact, and with so light yet firm a hand, that, for once in the course of their history, the three rival Scandinavian kingdoms were content to act in harmony. Margaret's successor, Erik, the son of her niece, for whose sake she had blended the three sovereignties into one, undid her glorious work with fatal rapidity, and after an inglorious war of twenty-five years with his vassals, the Counts-dukes of Schleswig-Holstein, he lost the allegiance and the crowns of his triple kingdom, and ended his disastrous existence in misery and obscurity. After the short reign of his nephew, Christopher of Bavaria, the Danes, on the death of the latter in 1448, again exercised their long-dormant right of election to the throne, and chose for their king Christian of Oldenburg, a descendant of the old royal family through his maternal ancestress, Rikissa, the great-granddaughter of Valdemar II. Christian I., the father of the Oldenburg line, which continued unbroken until the death of the King of Denmark, Frederick VII., in 1863, laid the foundation of the Schleswig-Holstein troubles which, after maturing for centuries, have ended in our own day in dismembering the Danish monarchy. The insane tyranny of the otherwise able and enlightened Christian II. cost him his throne. Christian III., in whose reign the Reformation was established, united the Schleswig-Holstein duchies in perpetuity to the Crown in 1533. Frederick II., who increased the embarrassments connected with the crown appanages, by making additional partitions in favor of his brother (the founder of the Holstein-Sonderburg family), was succeeded by Christian IV., 1588, who was the ablest of Danish rulers. His liberal policy was, however, cramped by the nobles, by whose supineness Denmark lost all the possessions she had hitherto retained in Sweden. The national abasement which followed led, in 1660, under Christian's son, Frederick III., to the rising of the people against the nobles, and their surrender into the hands of the king of the supreme power. For the next 100 years the peasantry were kept in serfage and the middle classes depressed. The abolition of serfage was begun by Christian VII. in 1767; it was extended to the duchies in 1804. The reign of Christian's son, Frederick VI., brought the country to the verge of ruin. On the accession of Frederick VII. half his subjects were in open rebellion against him. Prince Christian of Schleswig-Holstein-Glücksborg ascended the

throne as Christian IX. in 1863 and was succeeded by his son, Frederick VIII. in 1906. On the death of Frederick VIII. in 1912, Christian X. became king. In December, 1916, the sale of the Danish West Indies to the United States for the sum of $25,000,000 was approved by a referendum vote.

Deposed Kings of England. (1) *Before the Conquest:* Sigebert of Wessex, A. D. 755; Alcred of Northumbria, 774; Ethelred I., 779; Eardwulf and Ethelwulf, 857; Edwy, 957; Ethelred II., 1013; Hardicanute, son of Canute, 1037. (2) *Since the Conquest:* Edward II., 1327; Richard II., 1399; Henry VI., 1461; James II., 1688. Euphemistically called his "abdication," Charles I. was not only deposed but tried for treason against his parliament and beheaded; Charles II. was not exactly deposed, but he was kept from the crown during the Commonwealth. The most absolute and tyrannical of British sovereigns have been the Welsh and Scotch dynasties, but Wales and Scotland are eminently democratic. The Stuarts claimed the "right divine" of kings, but James I. and Charles II. did no honor to the claim.

Deposed Kings of France. Louis XVI., like Charles I., was not only deposed but executed, 1793; Napoleon I. (emperor) was twice deposed, 1814, 1815; Charles X. (1830), like James II., is said to have "abdicated"; Louis-Philippe (1848), also said to have "abdicated"; Napoleon III., 1870, by act of the Corps Legislatif following his surrender at Sedan.

Dictator (*dĭk-tā'tŭr*). A magistrate appointed in times of exigency and peril, and invested with extraordinary powers. They acted as generals-in-chief of the army, and could declare war or make peace at their pleasure. They were originally selected from the patrician order, the first having been Titus Laertius, B. C. 501. In B. C. 356, however, the office of dictator was thrown open to the plebeians, and Marcius Rutilus, one of that class, received the appointment. For 400 years this office was regarded with veneration, until Sulla and Cæsar, by becoming perpetual dictators, converted it into an engine of tyranny, and rendered the very name odious. Hence, it became extinguished by decree of Mark Antony, B. C. 44.

Directory, The. "Le Directoire," the executive of the Constitution of Year III. (October 27, 1795—November 9, 1799). The legislature consisted of two houses, the Council of Elders and the Council of 500. The number of the directors was five, named by the two councils, and they were elected for five years, without power of reëlection. They appointed the ministers and les généraux-en-chef. Abolished by Napoleon in November, 1799.

The military glory of France was never greater than in the Directory. It had for its commanders, Bonaparte, Kléber, Desaix, Masséna, and Moreau.

District of Columbia. The region of the Potomac River was originally a favorite camping and fishing ground of several Indian tribes who lived in its vicinity, and was called by them the "River of Swans." As early as 1660 a portion of the tract was purchased by an Englishman named Pope, who named the whole tract Rome, a stream running through it, the Tiber, and the principal eminence, on which the capitol now stands, Capitoline Hill, and signed all his letters and documents "The Pope of Rome." Some thirty years prior to this, the Potomac had been explored as far as Little Falls, beyond the limits of the District of Columbia, by an Indian trader named William Fleet, with whom Leonard Calvert treated, 1634. The Colonial Congress, for a number of years following its organization, had no permanent seat. The session of 1783 was begun in Philadelphia, but, being disturbed by a riotous demand of the soldiers for their overdue pay, Congress adjourned first to Princeton, thence to Annapolis, and, subsequently, to New York. The question of a permanent seat of government, to be entirely under federal authority, which had been broached several times, was then considered to be urgent; and when the proposed Federal Constitution was being drafted (1787) a clause was inserted in Art. I, Sec. 8, establishing the power of Congress to exercise exclusive legislation over such a district as might subsequently be ceded to the government by particular States for a seat of the Government of the United States. As soon as the intention of Congress to select a site was known, the State of Maryland ceded sixty square miles on one side of the river, and the State of Virginia forty square miles on the other, to constitute the federal district. The site of the national capital was selected in 1790, and the first stone to mark the boundaries of the District of Columbia was set at Jones's Point below Alexandria, April 15, 1791. The commissioners appointed to lay out the district agreed that it should be called "The Territory of Columbia," and the federal city "The City of Washington." The city was laid out in accordance with the plans of Major L'Enfant, a French officer and engineer who had been wounded at Savannah, and who was one of Washington's favorite officers. Public buildings were erected, and official possession was taken, 1800, when Congress removed from Philadelphia and began holding its sessions there. Subsequently, the whole territory was styled the District of Columbia, in memory of Christopher Columbus. In 1846, the area of 100 square miles was reduced to sixty-four square miles by retrocession to Virginia of the section previously included within the bounds of that State. Previous to 1871, legislative power was exercised directly by Congress. An act adopted that year established a territorial form of government, and gave the citizens representation in Congress for the first time. The charters of Georgetown, incorporated December 25, 1789, and Washington, incorporated May 3, 1802, were repealed by the act, though both were allowed to bear the name of "city," and the corporations of the cities as well as that of Washington County, were merged into the new government. Alexander R. Shepherd became president of the Citizens' Reform Association, 1870, vice-president of the Board of Public Works under the new government, 1871, and governor of the district, 1873. In 1874, the territorial government was abolished, and since then all the public affairs of the district have been managed by a

board of three commissioners acting directly under the legislation of Congress.

Divine Right of Kings, The. A Seventeenth Century dogma, implying the belief that kings hold their office by divine appointment, and are the earthly representatives of Deity. The dogma was sanctioned in the Canons of Convocation, 1604; but in the English Bill of Rights, 1689, the right of the people to depose the monarch and to confer the throne on whom they think proper is distinctly set forth.

Dominican Republic, or Santo Domingo. A state formed by the Spanish or eastern section of Hayti. Spain, in 1697, surrendered to France, by the Treaty of Ryswick, the western part of the island, retaining the remainder down to 1795. In the year last mentioned, however, the Spanish portion became nominally French. In 1814, the West having vindicated its independence, France formally relinquished, in favor of Spain, all claim to the East. In 1822, the colony, in imitation of the continental possessions, threw off the yoke of the mother-country, to link itself, more or less closely, with its African neighbors. But in the year 1844 it assumed a separate standing as the Dominican Republic, the anarchy of which it exchanged in 1861 for the despotism of its former masters. In 1863, it again revolted, and Spain gave up the possession.

By a treaty, ratified in 1907, the United States was virtually granted the powers of a protectorate over the affairs of the unstable republic. In 1916, 2000 American marines were landed to guarantee free elections. After these had suppressed the revolutionists, order was maintained under the control of an American military governor. In June, 1921, the United States offered to withdraw within eight months under certain safeguarding conditions.

Dorr Rebellion. In 1840, Connecticut and Rhode Island were the only States that were still governed by their colonial charters. The charter of the latter State, imposing, as it did, a property qualification so high as to disfranchise two-thirds of the citizens, was extremely unpopular. A proposition of Thomas W. Dorr, of Providence, to extend the franchise was voted down. Dorr then took to agitation, and finally a convention prepared a constitution and submitted it to a popular vote. Its supporters claimed a majority for it, which its opponents, known as the law and order party, denied. Nevertheless, in 1842, the constitution was proclaimed to be in force. An election was held under it, only the suffrage party participating. Dorr was elected governor. The suffrage legislature assembled at Providence with Thomas W. Dorr as governor; the charter legislature at Newport, with Samuel W. King as governor. After transacting some business the suffrage legislature adjourned. The charter legislature authorized the governor to take energetic steps, and an appeal for aid was made to the National Government. The suffragists attempted armed resistance, but were dispersed. Dorr fled, but soon returned and gave himself up. He was convicted of high treason in 1844, and sentenced to imprisonment for life, but was pardoned in 1847, and in 1852 was restored to his civil rights. The charter party soon after the rebellion proposed a new constitution, largely extending the suffrage, which was carried and went into effect in May, 1843.

Druids. The priests of the Celts of Gaul and Britain. According to Julius Cæsar, they possessed the greatest authority among the Celtic nations. They had some knowledge of geometry, natural philosophy, etc., superintended the affairs of religion and morality, and performed the office of judges. They had a common superior, who was elected by a majority of votes from their own number, and who enjoyed his dignity for life. They took unusual care to fence themselves round with mysteries, and it is probable that they cherished doctrines unknown to the common people; but that they had a great secret philosophy which was handed down by oral tradition is very unlikely. Of their religious doctrines little is known. Human sacrifice was one of their characteristic rites, the victims being usually prisoners of war.

Eastern Empire. Commenced under Valens, A. D. 364, and ended in the defeat and death of Constantine XIII., the last Christian emperor, in 1453. Mahomet II. resolved to dethrone him and possess himself of Constantinople; he laid siege to that city both by sea and land, and took it by assault after it had held out fifty-eight days. The unfortunate emperor, seeing the Turks enter by the breaches, threw himself into the midst of the enemy, and was cut to pieces; the children of the imperial house were massacred by the soldiers, and the women reserved to gratify the lust of the conqueror; and thus terminated the dynasty of the Constantines, and commenced the present empire of Turkey, May 29, 1453.

Ecuador. After the conquest of the Inca dominions, the Kingdom of Quito was made a presidency of the viceroyalty of Peru, and remained under Spanish rule from 1533 to 1822. In 1809, it revolted, and after many fruitless struggles achieved its independence by the battle of Pichincha, May 22, 1822. The territory was incorporated into the Republic of Colombia, on the disruption of which, in 1830, it became an independent republic under the name of Ecuador. But a series of civil wars ensued, lasting almost without intermission for more than twenty years. From 1852 to 1858, desultory hostilities existed with Peru. War was declared against New Granada, November 20, 1863, and the Ecuadorian army was routed. In August, 1868, a very destructive earthquake occurred. In 1869, Garcia Moreno, the head of the clerical party, overthrew the government. He was assassinated in 1875, and Dr. Antonio Borrero, the candidate of the non-official party, was elected president. A constitution was adopted and a president elected, and until 1884 the republic enjoyed a reasonably peaceable government. In 1884, another constitution was formed, which, with modifications, in 1887 and 1897, has since been in force.

Edict of Nantes (*năntz, Fr. nŏnt*). This was the celebrated edict by which Henry IV. of France granted toleration to his Protestant subjects, in 1598. It was revoked by Louis XIV., October 24, 1685. This bad and unjust policy lost to

France 800,000 Protestants, and gave to England (part of these) 50,000 industrious artisans. Some thousands, who brought with them the art of manufacturing silks, settled in Spitalfields, where their descendants yet remain: others planted themselves in Soho and St. Giles's, and pursued the art of making crystal glasses, and various fine works in which they excelled; among these, jewelry, then little understood in England.

Egypt. The Egyptians are the earliest people known to us as a nation. When Abraham entered the Delta from Canaan, they had been long enjoying the advantages of a settled government. They had built cities, invented hieroglyphic signs, and improved them into syllabic writing, and almost into an alphabet. They had invented records, and wrote their kings' names and actions on the massive temples which they raised. The arrangement of Egyptian chronology is still a much-disputed point amongst scholars. A list of the kings of Egypt, arranged in thirty dynasties, was given by the Priest Manetho (about 250 B. C.), and this division is still used. His list, however, is in a very corrupt condition and his method is not strictly chronological. Hence, in the various systems of chronology adopted by Egyptologists the dates assigned to Mena (or Menes) vary from 5702 to 2440 B. C. According to tradition, Mena formed the old Empire of Egypt and founded its capital Memphis. The Fourth Dynasty is distinguished as the "Pyramid Dynasty." Three of its kings, Khufu, Khafra, and Menkaura (according to Herodotus, *Cheops*, *Chephren*, and *Mykerinos*), built the largest pyramids. The date assigned to these kings in the chronology of Lepsius is 2800–2700. About 2400 the government of the empire seems to have been transferred from Memphis to Thebes, and with the beginning of Dynasty Twelve, the Theban line was firmly established. The chief princes of this dynasty are Amenemhat I. (2380), who seems to have extended the power of Egypt over a part of Nubia; Usurtasan I., who made further conquests in this direction; and Amenemhat III. (2179), who constructed Lake Meri (Mœris), a large reservoir for regulating the water supply of the Nile. About 2100, Egypt was conquered by the Hyksos, or shepherd kings, who invaded Egypt from the east and established their capital at Tanis (Zoan). The Theban princes seem, however, to have preserved a state of semi-independence, and at last a revolt commenced which ended by the shepherd kings being completely driven out of Egypt by King Aahmes (Amāsis) of Thebes (about 1600), the first of the Eighteenth Dynasty. With Aahmes and the expulsion of the shepherd kings began the reigns of those great Theban kings who built the magnificent temples and palaces at Thebes. The kings of the other parts of Egypt sank to the rank of sovereign priests. Thutmes (or Thothmosis II.) added Memphis to his dominions by his marriage with Queen Nitocris. Under Thutmes III. and his successors there were successful expeditions against the Syrians and the Ethiopians. Amenhotep III. set up his two gigantic statues in the plain of Thebes, one of which the Greeks called the musical statue of Memnon. The Ramessides form the Nineteenth Dynasty. They commence with Ramses I., who seems to have been of Lower Egyptian extraction. His grandson, the great Ramses II., or Sesostris, was successful against the neighboring Arabs, and covered Egypt with magnificent buildings. Ramses II. was probably the Pharaoh who oppressed the Hebrews, and the exodus may have occurred under his successor, Meneptah, or Merenptah. Under the later Ramessides the Egyptian Empire began to decay. A new dynasty, Twenty-first, came to the throne with King Hirhor. The seat of their power was Tanis in the Delta. During this period a great number of foreigners, Libyans as well as Asiatics, established themselves in Egypt. About 961, Sheshenk I., the Shishak of the Bible, of a Shemite family from Bubastis, established a new dynasty (Twenty-second). He attempted to restore Egyptian rule in the East, and conquered and plundered Jerusalem. After his death, Egypt was torn by civil wars, and eventually the Ethiopians under Shabak (Sabako) conquered it (Twenty-fifth Dynasty). For a time it was subject alternately to Ethiopian and Assyrian princes, but in the Seventh Century the kings of Sais once more restored its independence and prosperity to Egypt. Psamethik I. (Psammetichus) warred successfully in Syria and Palestine. King Nekho (610–594) defeated Josiah, King of Judah, but his further progress was checked by Nebuchadnezzar. His sailors circumnavigated Africa. Uahbra (the Greek Apries, the Hophrah of the Bible) and Aahmes II. (Greek Amāsis) followed. About 523, Cambyses, King of Persia, overran Egypt and made it a Persian province. During the reign of Cambyses the Egyptians suffered much oppression. After the Persian defeat at Marathon, the Egyptians rose and recovered their independence for a short time, but were again subdued, and, in spite of two other revolts, Egypt remained a Persian province till Persia itself was conquered by Alexander the Great, B. C. 332. Egypt now became a Greek state, many Greeks having been already settled in the country, and the Egyptians were treated as an inferior race. Alexandria was founded as the new Greek capital. On Alexander's death, his general, Ptolemy, took possession of the throne and became the first of a Greek Dynasty that for three hundred years made Egypt one of the chief kingdoms of the world. The Ptolemies were magnificent patrons of letters and arts. Theocritus, Callimachus, Euclid the geometrician, the astronomers Eratosthenes and Aratus, etc., flourished under their rule. But while the Alexandrian Greeks managed to keep down the native Egyptians, they were themselves sinking under the Romans. Ptolemy Auletes went to Rome to ask help against his subjects, and the famous Cleopatra maintained her power only through her personal influence with Julius Cæsar and Mark Antony. On the defeat of Mark Antony by Augustus, B. C. 30, Egypt became a province of Rome. It was still a Greek state, and Alexandria was the chief seat of Greek learning and science. On the spread of Christianity the old Egyptian doctrines lost their sway. Now arose in Alexandria the Christian catechetical school, which produced Clemens and

Origen. The sects of Gnostics united astrology and magic with religion. The school of Alexandrian Platonics produced Plotinus and Proclus. Monasteries were built all over Egypt; Christian monks took the place of the pagan hermits, and the Bible was translated into Coptic.

On the division of the great Roman Empire (A. D. 364), in the time of Theodosius, into the Western and Eastern Empires, Egypt became a province of the latter, and sank deeper and deeper in barbarism and weakness. It was conquered in 640 A. D. by the Saracens under Caliph Omar. As a province of the caliphs it was under the government of the celebrated Abbasides—Harun-al-Rashid and Al-Mamun—and that of the heroic Sultan Saladin. The last dynasty was, however, overthrown by the Mamelukes (1250); and the Mamelukes in their turn were conquered by the Turks (1516-17). The Mamelukes made repeated attempts to cast off the Turkish yoke, and had virtually done so by the end of the 18th century, when the French conquered Egypt and held it till 1801, when they were driven out by the British.

On the expulsion of the French a Turkish force under Mehemet Ali Bey took possession of the country. Mehemet Ali was made pasha, and administered the country vigorously, greatly extending the Egyptian territories. At length he broke with the Porte, and after gaining a decisive victory over the Ottoman troops in Syria, in 1839, he was acknowledged by the sultan as viceroy of Egypt, with the right of succession. Mehemet Ali died in 1849, having survived his son Ibrahim, who died in 1848. He was succeeded by his grandson, Abbas, who, dying in 1854, was succeeded by his uncle, Säid, son of Mehemet. Under his rule railways were opened, and the cutting of the Suez canal commenced. After Säid's death, Ismail Pasha, a grandson of Mehemet Ali, obtained the government in 1863. His administration was vigorous but extravagant, and brought the finances of the country into disorder. In 1866, he obtained a firman from the sultan, granting him the title of khedive. In 1879 he was forced to abdicate under pressure of the British and French governments, and was replaced by his son, Tewfik. In 1882 the "national party" under Arabi Pasha revolted and forced the khedive to flee. On July 11th, a British fleet bombarded Alexandria and restored the khedive, and at Tel-el-Kebir Arabi's forces were totally crushed on September 13. A rebellion in the Sudan, under the leadership of Mohammed Ahmed, the so-called mahdi, now gave the government trouble. In 1883 the mahdi's forces annihilated an Egyptian force under Hicks Pasha in Kordofan. British troops were despatched to Suakin and inflicted two severe defeats on the mahdi's followers. The British cabinet resolved to abandon the Sudan; General Gordon was sent to effect the safe withdrawal of the garrisons (1884). However, the mahdi's forces were strong enough to shut the general up in Khartoum for nearly a year. He perished (January, 1885) before the relief expedition could reach him. Since then Anglo-Egyptian troops have reoccupied it. Prince Abbas succeeded as khedive in 1892—the British still retaining control. The predominant position of Great Britain in Egypt was formally recognized by France under the Anglo-French agreement of 1904.

As a consequence of Great Britain's participation in the war of the nations, Egypt was declared a British protectorate, Dec. 17, 1914. The following day Abbas II was deposed. He was succeeded by Hussein Kemal, with the title of sultan.

El Caney (*el-cä'-nā*), a fortified town of Cuba, on the main road, four miles northeast of Santiago. During the Spanish-American war it was the scene of a decided American victory. At 6 A. M. on July 1, 1898, Captain Capron's battery of four guns opened fire on El Caney from an elevation about a mile and a half distant. The guns were not heavy enough to destroy the enemy's works, and at eight o'clock General Lawton's infantry of Chaffee's brigade, consisting of the 7th, 12th, and 17th United States Infantry, assaulted and captured the hill with many prisoners. In 1901 the United States Government purchased the battlefield and approaches for a public reservation.

Electors, The, or Kurfürsts, of Germany, German princes who enjoyed the privilege of disposing of the imperial crown, ranked next the emperor, and were originally six in number, but grew to eight, and finally nine; three were ecclesiastical — the Archbishops of Mayence, Cologne, and Treves, and three secular—the Electors of Saxony, the Palatinate, and Bohemia, to which were added at successive periods the Electors of Brandenburg, of Bavaria, and Hanover.

Emancipation Proclamation, a proclamation providing for the emancipation of the slaves in certain parts of the Confederate States, issued as a war measure by President Lincoln, January 1, 1863. The number of slaves emancipated by this proclamation was, taking the census of 1860 as a basis, as follows:

Alabama,	435,080
Arkansas,	111,115
Florida,	61,745
Georgia,	462,198
Louisiana,	247,715
Mississippi,	436,631
North Carolina,	331,059
South Carolina	402,046
Texas,	182,566
Virginia,	450,000
Total,	3,120,515

The number of slaves not affected by its provisions was about 832,000. The full text of the proclamation is as follows:

Whereas, on the twenty-second day of September, one thousand eight hundred and sixty-two, a proclamation was issued by the President of the United States, containing, among other things, the following, to-wit:

That on the first day of January, in the year of our Lord one thousand eight hundred and sixty-three, all persons held as slaves within any State, or designated part of State, the people whereof shall be in rebellion against the United States, shall be then, thenceforth and forever free, and the Executive Government of the United States, including the military and naval officers thereof, will recognize and maintain the freedom of such persons, and will do no act or acts to repress such persons, or any of them, in any efforts they may make for their actual freedom.

That the Executive will, on the first day of January aforesaid, by proclamation, designate the States and parts of States, if any, in which the people thereof shall

be in rebellion against the United States, and the fact that any State, or the people thereof, shall, on that day, be, in good faith, represented in the Congress of the United States, by members chosen thereto at elections wherein a majority of the qualified voters of such State shall have participated, shall, in the absence of strong countervailing testimony be deemed conclusive evidence that such State and the people thereof are not then in rebellion against the United States.

Now, therefore, I, Abraham Lincoln, President of the United States, by virtue of the power in me vested as Commander-in-chief of the Army and Navy of the United States in time of actual armed rebellion against the authority and Government of the United States, and as a fit and necessary war measure for suppressing said rebellion, do on this first day of January, in the year of our Lord one thousand eight hundred and sixty-three, and in accordance with my purpose so to do, publicly proclaim for the full period of one hundred days from the day of the first above-mentioned order, and designate, as the States and parts of States wherein the people thereof respectively are this day in rebellion against the United States, the following, to-wit: Arkansas, Texas, Louisiana (except the parishes of St. Barnard, Plaquemines, Jefferson, St. John, St. Charles, St. James, Ascension, Assumption, Terre Bonne, Lafourche, St. Mary, St. Martin, and Orleans, including the City of New Orleans), Mississippi, Alabama, Florida, Georgia, South Carolina, North Carolina, and Virginia (except the forty-eight counties designated as West Virginia, and also the counties of Berkeley, Accomac, Northampton, Elizabeth City, York, Princess Anne, and Norfolk, including the cities of Norfolk and Portsmouth), and which excepted parts are, for the present, left precisely as if this proclamation were not issued.

And by virtue of the power and for the purpose aforesaid, I do order and declare that all persons held as slaves within said designated States and parts of States are, and henceforth shall be, free; and that the Executive Government of the United States, including the military and naval authorities thereof, will recognize and maintain the freedom of said persons.

And I hereby enjoin upon the people so declared to be free to abstain from all violence, unless in necessary self-defense, and I recommend to them that, in all cases, when allowed, they labor faithfully for reasonable wages.

And I further declare and make known, that such persons, of suitable condition, will be received into the armed service of the United States, to garrison forts, positions, stations, and other places, and to man vessels of all sorts in said service.

And upon this act, sincerely believed to be an act of justice, warranted by the Constitution, upon military necessity, I invoke the considerate judgment of mankind and the gracious favor of Almighty God.

In testimony whereof, I have hereunto set my name, and caused the seal of the United States to be affixed.

[L. S.] Done at the City of Washington, this first day of January, in the year of our Lord one thousand eight hundred and sixty-three, and of the Independence of the United States the eighty-seventh.

By the President ABRAHAM LINCOLN.

WILLIAM H. SEWARD,
Secretary of State.

England. The history of England proper begins when it ceased to be a Roman possession. On the withdrawal of the Roman forces, about the beginning of the Fifth Century A. D., the South Britons, or inhabitants of what is now called England, were no longer able to withstand the attacks of their ferocious northern neighbors, the Scots and Picts. They applied for assistance to Aetius, but the Roman general was too much occupied in the struggle with Attila to attend to their petition. In their distress they appear to have sought the aid of the Saxons; and according to the Anglo-Saxon narratives three ships, containing 1,600 men, were dispatched to their help under the command of the brothers Hengest and Horsa. Vortigern, a duke or prince of the Britons, assigned them the isle of Thanet for habitation, and, marching against the northern foe, they obtained a complete victory. The date assigned to these events by the later Anglo-Saxon chronicles is 449 A. D., the narratives asserting further that the Saxons, finding the land desirable, turned their arms against the Britons, and, reinforced by new bands, conquered first Kent and ultimately the larger part of the island. Whatever the credibility of the story of Vortigern, it is certain that in the middle of the Fifth Century the occasional Teutonic incursions gave place to persistent invasion with a view to settlement. These Teutonic invaders were Low German tribes from the country about the mouths of the Elbe and the Weser, the three most prominent being the Angles, the Saxons, and the Jutes. Of these, the Jutes were the first to form a settlement, taking possession of part of Kent, the Isle of Wight, etc.; but the larger conquests of the Saxons in the south and the Angles in the north gave to these tribes the leading place in the kingdom. The struggle continued 150 years, and at the end of that period the whole southern part of Britain, with the exception of Strathclyde, Wales, and West Wales (Cornwall), was in the hands of the Teutonic tribes. This conquered territory was divided among a number of small states or petty chieftaincies, seven of the most conspicuous of which are often spoken of as the *Heptarchy*. These were: (1) The Kingdom of Kent; founded by Hengest in 455; ended in 823. (2) Kingdom of South Saxons, containing Sussex and Surrey; founded by Ella in 477; ended in 689. (3) Kingdom of East Angles, containing Norfolk, Suffolk, Cambridge, Ely (Isle of); founded by Uffa in 571 or 575; ended in 792. (4) Kingdom of West Saxons, containing Devon, Dorset, Somerset, Wilts, Hants, Berks, and part of Cornwall; founded by Cedric 519; swallowed up the rest in 827. (5) Kingdom of Northumbria, containing York, Durham, Cumberland, Westmoreland, Northumberland, and the east coast of Scotland to the Firth of Forth; founded by Ida 547; absorbed by Wessex in 827. (6) Kingdom of East Saxons, containing Essex, Middlesex, Hertford (part); founded by Erchew in 527; ended in 823. (7) Kingdom of Mercia, containing Gloucester, Hereford, Worcester, Warwick, Leicester, Rutland, Northampton, Lincoln, Huntingdon, Bedford, Buckingham, Oxford, Stafford, Derby, Salop, Nottingham, Chester, Hertford (part); founded by Cridda about 584; absorbed by Wessex in 827. Each state was, in its turn, annexed to more powerful neighbors; and at length, in 827, Egbert, by his valor and superior capacity, united in his own person the sovereignty of what had formerly been seven kingdoms, and the whole came to be called England, that is Angle-land.

While this work of conquest and of intertribal strife had been in progress towards the establishment of a united kingdom, certain important changes had occurred. The conquest had been the slow expulsion of a Christian race by a purely heathen race, and the country had returned to something of its old isolation with regard to the rest of Europe. But before the close of the Sixth Century Christianity had secured a footing in the southeast of the island. Ethelbert, king of Kent and suzerain over the kingdoms south of the Humber, married a Christian wife, Bertha, daughter of Charibert of Soissons, and this event indirectly led to the coming of St. Augustine. The conversion of Kent, Essex, and East Anglia was followed by that of Northumberland and

then by that of Mercia, of Wessex, of Sussex, and lastly of Wight, the contest between the two religions being at its height in the Seventh Century. The legal and political changes immediately consequent upon the adoption of Christianity were not great, but there resulted a more intimate relation with Europe and the older civilizations, the introduction of new learning and culture, the formation of a written literature, and the fusion of the tribes and petty kingdoms into a closer and more lasting unity than that which could have been otherwise secured.

The kingdom, however, was still kept in a state of disturbance by the attacks of the Danes, who had made repeated incursions during the whole of the Saxon period, and about half a century after the unification of the kingdom became for the moment masters of nearly the whole of England. But the genius of Alfred the Great, who had ascended the throne in 871, speedily reversed matters by the defeat of the Danes at Ethandune (878). Guthrum, their king, embraced Christianity, became the vassal of the Saxon king, and retired to a strip of land on the east coast including Northumbria and called the Danelagh. The two immediate successors of Alfred, Edward (901–925) and Athelstan (925–940), the son and grandson of Alfred, both vigorous and able rulers, had each in turn to direct his arms against these settlers of the Danelagh. The reigns of the next five kings, Edmund, Edred, Edwy, Edgar, and Edward the Martyr, are chiefly remarkable on account of the conspicuous place occupied in them by Dunstan, who was counsellor to Edmund, minister of Edred, treasurer under Edwy, and supreme during the reigns of Edgar and his successor. It was possibly due to his policy that from the time of Athelstan till after the death of Edward the Martyr (978 or 979) the country had comparative rest from the Danes. During the Tenth Century many changes had taken place in the Teutonic constitution. Feudalism was already taking root; the king's authority had increased; the folkland was being taken over as the king's personal property; the nobles by birth, or ealdormen, were becoming of less importance in administration than the nobility of thegns, the officers of the king's court. Ethelred (978–1016), who succeeded Edward, was a minor, the government was feebly conducted, and no united action being taken against the Danes, their incursions became more frequent and destructive. Animosities between the English and the Danes who had settled among them became daily more violent, and a general massacre of the latter took place in 1002. The following year Sweyn invaded the kingdom with a powerful army and assumed the crown of England. Ethelred was compelled to take refuge in Normandy; and though he afterwards returned, he found in Canute an adversary no less formidable than Sweyn. Ethelred left his kingdom in 1016 to his son Edmund, who displayed great valor, but was compelled to divide his kingdom with Canute; and when he was assassinated in 1017, the Danes succeeded to the sovereignty of the whole.

Canute (Knut), who espoused the widow of Ethelred, that he might reconcile his new subjects, obtained the name of Great, not only on account of his personal qualities, but from the extent of his dominions, being master of Denmark and Norway as well as England. In 1035 he died, and in England was followed by two other Danish kings, Harold and Hardicanute, whose joint reigns lasted till 1042, after which the English line was again restored in the person of Edward the Confessor. Edward was a weak prince, and in the latter years of his reign had far less real power than his brother-in-law Harold, son of the great earl Godwin. On Edward's death in 1066 Harold accordingly obtained the crown. He found, however, a formidable opponent in the second-cousin of Edward, William of Normandy, who instigated the Danes to invade the northern counties, while he, with 60,000 men, landed in the south. Harold vanquished the Danes, and hastening southward met the Normans near Hastings, at Senlac, afterwards called Battle. Harold and his two brothers fell (October 14,1066), and William (1066–87) immediately claimed the government as lawful King of England, being subsequently known as William I., the Conqueror. For some time he conducted the government with great moderation; but being obliged to reward those who had assisted him, he bestowed the chief offices of the government upon Normans, and divided among them a great part of the country. The revolts of the native English which followed were quickly crushed, continental feudalism in a modified form was established, and the English Church reorganized under Lanfranc as Archbishop of Canterbury.

At his death, in 1087, William II., commonly known by the name of Rufus, the conqueror's second son, obtained the crown, Robert, the eldest son, receiving the duchy of Normandy. In 1100, when William II. was accidentally killed in the New Forest, Robert was again cheated of his throne by his younger brother Henry (Henry I.), who in 1106 even wrested from him the duchy of Normandy. Henry's power being secured, he entered into a dispute with Anselm the primate, and with the pope, concerning the right of granting investure to the clergy. He supported his quarrel with firmness, and brought it to a not unfavorable issue. His reign was also marked by the suppression of the greater Norman nobles in England, whose power (like that of many continental feudatories) threatened to overshadow that of the king, and by the substitution of a class of lesser nobles. In 1135 he died in Normandy, leaving behind him only a daughter, Matilda.

By the will of Henry I. his daughter Maud or Matilda, wife of Geoffrey Plantagenet, Count of Anjou, and frequently styled the Empress Matilda, because she had first been married to Henry V., Emperor of Germany, was declared his successor. But Stephen, son of the Count of Blois, and of Adela, daughter of William the Conqueror, raised an army in Normandy, landed in England, and declared himself king. After years of civil war and bloodshed an amicable arrangement was brought about, by which it was agreed that Stephen should continue to reign during the remainder of his life, but that

he should be succeeded by Henry, son of Matilda and the Count of Anjou. Stephen died in 1154, and Henry Plantagenet ascended the throne with the title of Henry II., being the first of the Plantagenet or Angevin kings. A larger dominion was united under his sway than had been held by any previous sovereign of England, for at the time when he became King of England he was already in the possession of Anjou, Normandy, and Aquitaine.

Henry II. found far less difficulty in restraining the license of his barons than in abridging the exorbitant privileges of the clergy, who claimed exemption not only from the taxes of the state, but also from its penal enactments, and who were supported in their demands by the primate Becket. The king's wishes were formulated in the Constitutions of Clarendon (1164), which were first accepted and then repudiated by the primate. The assassination of Becket, however, placed the king at a disadvantage in the struggle, and after his conquest of Ireland (1171) he submitted to the Church, and did penance at Becket's tomb. Henry was the first who placed the common people of England in a situation which led to their having a share in the government. The system of frank-pledge was revived, trial by jury was instituted by the Assize of Clarendon, and the Eyre courts were made permanent by the Assize of Nottingham. To curb the power of the nobles he granted charters to towns, freeing them from all subjection to any but himself, thus laying the foundation of a new order in society.

Richard I., called Cœur de Lion, who in 1189 succeeded to his father, Henry II., spent most of his reign away from England. Having gone to Palestine to join in the third crusade he proved himself an intrepid soldier. Returning homewards in disguise through Germany, he was made prisoner by Leopold, duke of Austria, but was ransomed by his subjects. In the meantime John, his brother, had aspired to the crown, and hoped, by the assistance of the French, to exclude Richard from his right. Richard's presence for a time restored matters to some appearance of order; but having undertaken an expedition against France, he received a mortal wound at the siege of Chalons, in 1199.

John was at once recognized as King of England, and secured possession of Normandy; but Anjou, Maine, and Touraine acknowledged the claim of Arthur, son of Goeffrey, second son of Henry II. On the death of Arthur, while in John's power, these four French provinces were at once lost to England. John's opposition to the pope in electing a successor to the See of Canterbury in 1205 led to the kingdom being placed under an interdict; and the nation being in a disturbed condition, he was at last compelled to receive Stephen Langton as archbishop, and to accept his kingdom as a fief of the papacy (1213). His exactions and misgovernment had equally embroiled him with the nobles. In 1213 they refused to follow him to France, and on his return, defeated, they at once took measures to secure their own privileges and abridge the prerogatives of the crown. King and barons met at Runnymede, and on June 15, 1215, the Great Charter (Magna Charta) was signed. It was speedily declared null and void by the pope, and war broke out between John and the barons, who were aided by the French king. In 1216, however, John died, and his turbulent reign was succeeded by the almost equally turbulent reign of Henry III.

During the first years of the reign of Henry III. the abilities of the Earl of Pembroke, who was regent until 1219, retained the kingdom in tranquillity; but when, in 1227, Henry assumed the reins of government he showed himself incapable of managing them. The Charter was three times reissued in a modified form, and new privileges were added to it, but the king took no pains to observe its provisions. The struggle, long maintained in the great council (henceforward called Parliament) over money grants and other grievances reached an acute stage in 1263, when civil war broke out. Simon de Montfort who had laid the foundations of the house of Commons by summoning representatives of the shire communities to the Mad Parliament of 1258, had by this time engrossed the sole power. He defeated the king and his son Edward at Lewes in 1264, and in his famous parliament of 1265 still further widened the privileges of the people by summoning to it burgesses as well as knights of the shire. The escape of Prince Edward, however, was followed by the battle of Evesham (1265), at which Earl Simon was defeated and slain, and the rest of the reign was undisturbed.

On the death of Henry III., in 1272, Edward I. succeeded without opposition. From 1276 to 1284 he was largely occupied in the conquest and annexation of Wales, which had become practically independent during the barons' wars. In 1292 Balliol, whom Edward had decided to be rightful heir to the Scottish throne, did homage for the fief to the English king; but when, in 1294, war broke out with France, Scotland also declared war. The Scots were defeated at Dunbar (1296), and the country placed under an English regent; but the revolt under Wallace (1297) was followed by that of Bruce (1306), and the Scots remained unsubdued. The reign of Edward was distinguished by many legal and legislative reforms, such as the separation of the old king's court into the Court of Exchequer, Court of King's Bench, and Court of Common Pleas, the passage of the Statute of Mortmain, etc. In 1295 the first perfect parliament was summoned, the clergy and barons by special writ, the commons by writ to the sheriffs directing the election of two knights from each shire, two citizens from each city, two burghers from each borough. Two years later the imposition of taxation without consent of parliament was forbidden by a special act (De Tallagio non Concedendo). The great aim of Edward, however, to include England, Scotland, and Wales in one kingdom proved a failure, and he died in 1307 marching against Robert Bruce.

The reign of his son, Edward II., was unfortunate to himself and to his kingdom. He made a feeble attempt to carry out his father's last and earnest request to prosecute the war with Scotland, but the English were almost constantly unfortunate; and at length, at Bannockburn (1314), they received a defeat from Robert Bruce which ensured the independence of Scot-

land. The king soon proved incapable of regulating the lawless conduct of his barons; and his wife, a woman of bold, intriguing disposition, joined in the confederacy against him, which resulted in his imprisonment and death in 1327.

The reign of Edward III. was as brilliant as that of his father had been the reverse. The main projects of the third Edward were directed against France, the crown of which he claimed in 1328 in virtue of his mother, the daughter of King Philip. The victory won by Edward III. at Crecy (1346), the capture of Calais (1347), and the victory of Poitiers (1356), ultimately led to the Peace of Brétigny in 1360, by which Edward III. received all the west of France on condition of renouncing his claim to the French throne. Before the close of his reign, however, these advantages were all lost again, save a few principal towns on the coast.

Edward III. was succeeded in 1377 by his grandson Richard II., son of Edward the Black Prince. The people of England now began to show, though in a turbulent manner, that they had acquired just notions of government. In 1380 an unjust and oppressive poll-tax brought their grievances to a head, and 100,000 men under Wat Tyler, marched toward London (1381). Wat Tyler was killed while conferring with the king, and the prudence and courage of Richard appeased the insurgents. Despite his conduct on this occasion Richard was deficient in the vigor necessary to curb the lawlessness of the nobles. In 1398 he banished his cousin, Henry Bolingbroke; and on the death of the latter's father, the Duke of Lancaster, unjustly appropriated his cousin's patrimony. To avenge the injustice Bolingbroke landed in England during the king's absence in Ireland, and at the head of 60,000 malcontents compelled Richard to surrender. He was confined in the Tower, and despite the superior claims of Edmund Mortimer, Earl of March, Henry was appointed king (1399), the first of the House of Lancaster. Richard was, in all probability, murdered early in 1400.

The manner in which the Duke of Lancaster, now Henry IV., acquired the crown rendered his reign extremely turbulent, but the vigor of his administration quelled every insurrection. The most important—that of the Percies of Northumberland, Owen Glendower, and Douglas of Scotland—was crushed by the battle of Shrewsbury (1403). During the reign of Henry IV. the clergy of England first began the practice of burning heretics under the act *de hæretico comburendo*, passed in the second year of his reign. The act was chiefly directed against the Lollards, as the followers of Wickliffe now came to be called. Henry died in 1413, leaving his crown to his son, Henry V., who revived the claim of Edward III. to the throne of France in 1415, and invaded that country at the head of 30,000 men. The disjointed councils of the French rendered their country an easy prey; the victory of Agincourt was gained in 1415; and after a second campaign a peace was concluded at Troyes in 1420, by which Henry received the hand of Katherine, daughter of Charles VI., was appointed regent of France during the reign of his father-in-law, and declared heir to his throne on his death. The two kings, however, died within a few weeks of each other in 1422, and the infant son of Henry thus became King of England (as Henry VI.) and France at the age of nine months.

England during the reign of Henry VI. was subjected, in the first place, to all the confusion incident to a long minority, and afterwards to all the misery of a civil war. Henry allowed himself to be managed by anyone who had the courage to assume the conduct of his affairs, and the influence of his wife, Margaret of Anjou, a woman of uncommon capacity, was of no advantage either to himself or the realm. In France (1422–1453) the English forces lost ground, and were finally expelled by the celebrated Joan of Arc, Calais alone being retained. The rebellion of Jack Cade in 1450 was suppressed, only to be succeeded by more serious trouble. In that year Richard, duke of York, the father of Edward, afterwards Edward IV., began to advance his pretentions to the throne which had been so long usurped by the house of Lancaster. His claim was founded on his descent from the third son of Edward III., Lionel, duke of Clarence, who was his great-great-grandfather on the mother's side, while Henry was the great-grandson on the father's side of John of Gaunt, duke of Lancaster, the fourth son of Edward III. Richard of York was also grandson on the father's side of Edmund, fifth son of Edward III. The wars which resulted, called the Wars of the Roses, from the fact that a red rose was the badge of the house of Lancaster and a white one that of the house of York, lasted for thirty years, from the first battle of St. Albans, May 22, 1455, to the battle of Bosworth, August 22, 1485. Henry VI. was twice driven from the throne (in 1461 and 1471) by Edward of York, whose father had previously been killed in battle in 1460. Edward of York reigned as Edward IV. from 1461 till his death in 1483, with a brief interval in 1471; and was succeeded by two other sovereigns of the house of York, first his son Edward V., who reigned for eleven weeks in 1483; and then by his brother Richard III., who reigned from 1483 till 1485, when he was defeated and slain on Bosworth field by Henry Tudor, of the house of Lancaster, who then became Henry VII.

Henry VII. was at this time the representative of the house of Lancaster, and in order at once to strengthen his own title, and to put an end to the rivalry between the houses of York and Lancaster, he married, in 1486, Elizabeth, the sister of Edward V. and heiress of the house of York. His reign was disturbed by insurrections attending the impostures of Lambert Simnel (1487), who pretended to be a son of the Duke of Clarence, brother of Edward IV., and of Perkin Warbeck (1488), who affirmed that he was the Duke of York, younger brother of Edward V.; but neither of these attained any magnitude. The king's worst fault was the avarice which led him to employ in schemes of extortion such instruments as Empson and Dudley. His administration throughout did much to increase the royal power and to establish order and prosperity. He died in 1509.

The authority of the English crown, which had been so much extended by Henry VII.,

was by his son Henry VIII. exerted in a tyrannical and capricious manner. The most important event of the reign was undoubtedly the Reformation; though it had its origin rather in Henry's caprice and in the casual situation of his private affairs than in his conviction of the necessity of a reformation in religion, or in the solidity of reasoning employed by the reformers Henry had been espoused to Catharine of Spain, who was first married to his elder brother Arthur, a prince who died young. Henry became disgusted with his queen, and enamored of one of her maids of honor, Anne Boleyn. He had recourse, therefore, to the pope to dissolve a marriage which had at first been rendered legal only by a dispensation from the pontiff; but failing in his desires he broke away entirely from the Holy See, and in 1534 got himself recognized by act of parliament as the head of the English Church. He died in 1547. He was married six times, and left three children, each of whom reigned in turn. These were: Mary, by his first wife, Catharine of Aragon; Elizabeth, by his second wife, Anne Boleyn; and Edward, by his third wife, Jane Seymour. Edward, who reigned first, with the title of Edward VI., was nine years of age at the time of his succession, and died in 1553, when he was only sixteen. His short reign, or rather the reign of the Earl of Hertford, afterwards Duke of Somerset, who was appointed regent, was distinguished chiefly by the success which attended the measures of the reformers, who acquired great part of the power formerly engrossed by the Catholics. The intrigues of Dudley, Duke of Northumberland, during the reign of Edward, caused Lady Jane Grey to be declared his successor; but her reign, if it could be called such, lasted only a few days. Mary, daughter of Henry VIII., was placed upon the throne, and Lady Jane Grey and her husband were both executed. Mary, a zealous Catholic, seems to have wished for the crown chiefly to aid in reëstablishing the Roman Catholic faith. Political motives had induced Philip of Spain to accept of her as a spouse; but she could never prevail on her subjects to allow him any share of power. She died in 1558.

Elizabeth, who succeeded her sister Mary, was attached to the Protestant faith, and found little difficulty in establishing it in England. Having concluded peace with France (1559), Elizabeth set herself to promote the confusion which prevailed in Scotland, to which her cousin Mary had returned from France as queen in 1561. In this she was so far successful that Mary placed herself in her power (1568), and after many years imprisonment was sent to the scaffold (1587). As the most powerful Protestant nation, and as a rival to Spain in the New World, it was natural that England should become involved in difficulties with that country. The dispersion of the Armada by the English fleet under Howard, Drake, and Hawkins was the most brilliant event of a struggle which abounded in minor feats of valor. In Elizabeth's reign London became the center of the world's trade, the extension of British commercial enterprise being coincident with the ruin of Antwerp in 1585. The parliament was increased by the creation of sixty-two new boroughs, and its members were exempted from arrest. In literature not less than in politics and in commerce the same full life displayed itself, and England began definitely to assume the characteristics which distinguish her from the other European nations of to-day.

To Elizabeth succeeded (in 1603) James VI. of Scotland and I. of England, son of Mary Queen of Scots and Darnley. His accession to the crown of England in addition to that of Scotland did much to unite the two nations, though a certain smoldering animosity still lingered. His dissimulation, however, ended in his satisfying neither of the contending ecclesiastical parties—the Puritans or the Catholics; and his absurd insistance on his divine right made his reign a continuous struggle between the prerogative of the crown and the freedom of the people. His extravagance kept him in constant disputes with the parliament, who would not grant him the sums he demanded, and compelled him to resort to monopolies, loans, benevolences, and other illegal methods. The nation at large, however, continued to prosper through the whole of this inglorious reign. His son, Charles I., who succeeded him in 1625, inherited the same exalted ideas of royal prerogative, and his marriage with a Catholic, his arbitrary rule, and illegal methods of raising money, provoked bitter hostility. Under the guidance of Laud and Strafford things went from bad to worse. Civil war broke out in 1642 between the king's party and that of the parliament, and, the latter proving victorious, in 1649 the king was beheaded.

A commonwealth or republican government was now established, in which the most prominent figure was Oliver Cromwell. Mutinies in the army among Fifth-monarchists and Levellers were subdued by Cromwell and Fairfax, and Cromwell in a series of masterly movements subjugated Ireland and gained the important battles of Dunbar and Worcester. At sea Blake had destroyed the Royalist fleet under Rupert, and was engaged in an honorable struggle with the Dutch under Van Tromp. But within the governing body matters had come to a deadlock. A dissolution was necessary, yet parliament shrank from dissolving itself, and in the meantime the reform of the law, a settlement with regard to the Church, and other important matters remained untouched. In April, 1653, Cromwell cut the knot by forcibly ejecting the members and putting the keys of the house in his pocket. From this time he was practically head of the government, which was vested in a council of thirteen. A parliament—the Little or Barebones Parliament—was summoned and in December of the same year Cromwell was installed Lord Protector of the Commonwealth of England, Scotland, and Ireland. With more than the power of a king, he succeeded in dominating the confusion at home and made the country feared throughout the whole of Europe. Cromwell died in 1658, and the brief and feeble protectorate of his son Richard followed.

There was now a widespread feeling that the country would be better under the old form of government, and Charles II., son of Charles I., was called to the throne by the Restoration of

1660. He took complete advantage of the popular reaction from the narrowness and intolerance of Puritanism, and even latterly endeavored to carry it to the extreme of establishing the Catholic religion. The promises of religious freedom made by him before the Restoration in the Declaration of Breda were broken by the Test and Corporation Acts, and by the Act of Uniformity, which drove two thousand clergymen from the Church and created the great dissenting movement of modern times. The Conventicle and Five-mile Acts followed, and the "Drunken Parliament" restored Episcopacy in Scotland. At one time even civil war seemed again imminent. The abolition of the censorship of the press (1679) and the reaffirmation of the habeas corpus principle are the most praiseworthy incidents of the reign.

As Charles II. left no legitimate issue, his brother, the Duke of York, succeeded him as James II. (1685–88). An invasion by an illegitimate son of Charles, the Duke of Monmouth, who claimed the throne, was suppressed, and the king's arbitrary rule was supported by the wholesale butcheries of such instruments as Kirke and Jeffreys. The king's zealous countenance of Roman Catholicism and his attempts to force the Church and the universities to submission provoked a storm of opposition. Seven prelates were brought to trial for seditious libel, but were acquitted amidst general rejoicings The whole nation was prepared to welcome any deliverance, and in 1688 William of Orange, husband of James's daughter Mary, landed in Torbay. James fled to France, and a convention summoned by William settled the crown upon him, he thus becoming William III. Annexed to this settlement was a Declaration of Rights circumscribing the royal prerogative by depriving him of the right to exercise dispensing power, or to exact money, or maintain an army without the assent of parliament. This placed henceforward the right of the British sovereign to the throne upon a purely statutory basis. A toleration act, passed in 1689, released dissent from many penalties. An armed opposition to William lasted for a short time in Scotland, but ceased with the fall of Viscount Dundee, the leader of James's adherents; and though the struggle was prolonged in Ireland, it was brought to a close before the end of 1691. The following year saw the origination of the national debt, the exchequer having been drained by the heavy military expenditure. A bill for triennial parliaments was passed in 1694, the year in which Queen Mary died. For a moment after her death William's popularity was in danger, but his successes at Namur and elsewhere, and the obvious exhaustion of France, once more confirmed his power. The treaty of Ryswick followed in 1697, and the death of James II. in exile in 1701 removed a not unimportant source of danger. Early in the following year William also died, and by the act of settlement Anne succeeded him.

The closing act of William's reign had been the formation of the grand alliance between England, Holland, and the German Empire, and the new queen's rule opened with the brilliant successes of Marlborough at Blenheim (1704) and Ramillies (1706). Throughout the earlier part of her reign the Marlboroughs practically ruled the kingdom, the duke's wife, Sarah Jennings, being the queen's most intimate friend and adviser. In 1707 the history of England becomes the history of Britain, the Act of Union passed in that year binding the parliaments and realms of England and Scotland into a single and more powerful whole.

The measure which declared the parliaments of England and Scotland united, and the two countries one kingdom, known as the United Kingdom of Great Britain, was passed, after violent opposition, in the reign of Queen Anne, 1st of May, 1707. This union, however, much it was opposed by the prejudices and interest of particular men or classes at the time, has contributed very much to the prosperity of both countries. The Grand Alliance, which it had been the aim of William's later years to form between Holland, Austria, and England against the threatening growth of French power, now held the field against the armies of France, and the victories of Marlborough at Blenheim and Ramillies, and the taking of Gibraltar and Barcelona, ended in the Treaty of Utrecht in 1713, by which the British right of sovereignty over Hudson's Bay, Newfoundland, Nova Scotia, Minorca, and Gibraltar was acknowledged, and the foundation of Britain's imperial and colonial power securely laid. The remainder of Anne's reign was distracted by the never-ending altercations of domestic parties. She died on the 1st of August, 1714; and with her ended the line of the Stuarts, who had held the scepter of England 112, and that of Scotland 343 years.

At her death, George I., elector of Hanover, maternally descended from Elizabeth, daughter of James I., according to the Act of Settlement, ascended the throne of Britain. The Whigs under this prince regained that superiority in the national councils of which they had long been deprived, and this, along with the suspension of the Habeas Corpus Act and some other extreme precautionary measures, increased the irritation of the Tory and Stuart party. In 1715 the Earl of Mar in Scotland and the Earl of Derwentwater in England raised the standard of rebellion and proclaimed the Chevalier St. George (the Old Pretender) king. But the insurrection, feebly supported by the people, was soon suppressed. In 1716 the Septennial Act was passed, making parliament of seven instead of three years duration. In 1720 occurred the extraordinary growth and collapse of the South Sea Company. From this date till 1742 the government was virtually in the hands of Sir Robert Walpole, the first, we might say, of modern premiers, governing the cabinet and chiefly responsible for its doings. Walpole had great sagacity, prudence, and business ability, and could manage dexterously the king, the parliament, and the people alike. It is true that in the case of the parliament he achieved this by undue influence in elections and a scandalous use of bribery. But the power he thus acquired was generally wisely used. The failure of the war with Spain into which he had reluctantly entered drove him from office, and in 1742 his long ministry came to an end. In 1743, George II., frightened at the dangers to Hanover,

dragged Britain into the wars between France, Prussia, and Austria, regarding the succession of the Emperor Charles. George himself fought at the head of his troops at Dettingen (1743), where he obtained a complete victory over the French, which was balanced, however, later on by the defeat at Fontenoy (1745).

A fresh attempt was now made to restore the Stuart family to the throne of Britain. Charles Edward, son of the Old Pretender, having been furnished by France with a small supply of money and arms, landed on the coast of Lochaber, in the Western Highlands, in 1745, and was joined by a considerable number of the people. Marching southwards with 1,500 Highlanders, his forces increasing as he advanced, he entered Edinburgh without opposition; and having defeated Sir John Cope near Prestonpans he marched into England. He now took Carlisle, and advanced through Lancaster, Preston, and Manchester, to Derby, within 100 miles of London; but finding himself disappointed of expected succors from France, and the English Tories, contrary to his expectations, keeping aloof, he commenced his retreat into Scotland, closely pursued by the king's troops, whom he again defeated at Falkirk. With this victory his good fortune terminated. The Duke of Cumberland having arrived from the continent put himself at the head of the forces which were destined to check the rebels; and the armies having met at Culloden, near Inverness, Charles was completely defeated. After lurking for six months amidst the wilds of Invernesshire, he at length, with much difficulty, escaped to France.

The war of the Austrian succession, which still continued and which was the cause of the hostilities between the French and British in India as well as elsewhere, was terminated by the treaty of Aix-la-Chapelle in 1748. During most of this period Pelham and his brother, the Duke of Newcastle, had been the ruling ministers, and in their hands the art of government had reached a low level both as regards morality and ability. In 1752, the *New Style* of reckoning time was introduced, and the *Old Style* being eleven days behind, the 3d of September, 1752, was called the 14th. At the same time the 1st of January was fixed as the opening day of the year, instead of the 25th of March.

Soon after, the French, uneasy at the growing colonial power of Britain, made a determined effort against the British Colonies and possessions in North America and the East Indies, and at first the British met with several disasters in America. In 1756 the Seven Years' War broke out, Austria and France being allied on the one side, and Prussia and England on the other, and ill success attended the British arms in Europe also. Fortunately, a great war minister, William Pitt, now took the helm of the state. In 1758 the British made themselves masters of several French settlements in North America, while the attack made by Wolfe on Quebec in 1759 was completely successful, and gave Britain the whole of Canada. The same year the British and their allies defeated the French at Minden in Prussia. In the East Indies the French were even less successful than in America. Clive's victory at Plassey (1757) and Coote's at Wandewash (1760) secured the British empire in the east, and together with the naval feats of Hawke and Boscawen made England the greatest of maritime and colonial powers.

On the accession of George III. in 1760 hostilities were still carried on, generally to the advantage of the French as far as the theater of war in Germany was concerned, but still more to their loss in the other quarters of the world where they were engaged with the British in a struggle for supremacy, and this notwithstanding that Spain had now joined her forces to those of France. At length the success of the British arms induced France and Spain to accede to terms, and the war ended by the Treaty of Paris in 1763. The French relinquished nearly all their possessions in North America; Minorca was restored to Britain; in the East Indies they got back their factories and settlements, on condition that they should maintain neither forts nor troops in Bengal; Cuba and Manila were resigned to the Spaniards. In Europe everything was restored to the *status quo*.

The expenses of this war, which had been undertaken partly for the defense of the American Colonies, had added upwards of £72,000,000 to the national debt. It seemed to the British people to be just that the Americans should be taxed to assist in the payment of the interest. The Americans did not deny the justice, but replied that if they were to be taxed they had a right to be represented in parliament, in order that, like other British subjects, they might be taxed only in consequence of their own consent. Grenville, then the prime-minister, stood to his purpose, however, and introduced a bill for imposing certain stamp duties on the American Colonies. The Americans protested and resisted, and partly by the influence of the great Pitt, who had steadily opposed the measure, the bill was withdrawn. On the illness of Pitt, now Lord Chatham, in 1767, Townshend became premier, and again revived the project of taxing the Americans by imposing duties on tea; and in 1770, Lord North, as his successor, set himself to carry it out. The result was that in 1775 the Colonies were declared in a state of rebellion and a war began, in which both France and Spain joined the revolted Colonies, and of which the result was the recognition of the independence of the United States. On the American side of this struggle the great name is that of George Washington. On the British side the war was unskillfully conducted, and though they gained some successes these were more than counterbalanced by such blows as the capitulation of Burgoyne with nearly 6,000 men at Saratoga (1777), and of Cornwallis at Yorktown with 7,000 (1781). Against their European foes the British could show such successes as that of Admiral Rodney off Cape St. Vincent (1780); the brilliant defense of Gibraltar by General Eliott (1779–82); and Admiral Rodney's victory over the French fleet in the West Indies (1782). The war closed with the Peace of Versailles in 1783. Britain finally acquired several West Indian Islands; Spain got Florida and Minorca, France Pondicherry and Chandernagore in India. The struggle had added over £100,000,000 to the British national debt.

From 1783 to 1801 the government of Britain was directed by William Pitt, the younger son of Lord Chatham, who when only twenty-four years of age was placed as first lord of the treasury and chancellor of the exchequer. The affairs of Ireland and India, and the impeachment of Warren Hastings, were among the first subjects which occupied the attention of Pitt's ministry. In 1782, the Irish had been able to extort from Britain, then engaged in her struggle with the American Colonies, the right to establish an independent parliament, so that from this year there were two independent governments in the British Isles till 1800, when Pitt, who had in the interval experienced some of the difficulties arising out of two coördinate legislatures, contrived once more to unite them.

In 1789, the French Revolution was begun. For a time there was considerable sympathy in England with this movement; but as the revolutionaries proceeded to extreme measures there was a reaction in English feeling, of which Edmund Burke became the great exponent, and the execution of Louis XVI. gave rise to diplomatic measures, which finally terminated in the National Convention declaring war against Britain, on the 1st of February, 1793. At first Britain coöperated with Prussia, Austria, etc., against France, and successes were gained both by sea and land; but latterly on the Continent the armies of the French Republic were everywhere triumphant, and in 1797 Britain stood alone in the conflict, and indeed soon found a European coalition formed against her. The war was now largely maritime, and the naval successes of Jervis off St. Vincent and Duncan off Camperdown were followed (when Bonaparte led an expedition to Egypt, having India as its ultimate object) by the victories of Nelson in Aboukir Bay, and Abercromby at Alexandria. In 1798, a rebellion in Ireland had to be crushed. Peace was made in 1802 by the Treaty of Amiens, only to be broken by another declaration of war in 1803, as the ambitious projects of Napoleon became evident. In spite of the efforts of Pitt (who died in 1806) in the way of forming and supporting with funds a new coalition against France, the military genius of Napoleon swept away all opposition on land, though the naval victory of Trafalgar (1805) established England's supremacy on the seas. Napoleon, who had assumed the title of Emperor of the French in 1805, and was now virtually the ruler of Europe, put forth his Berlin decrees (1806), prohibiting all commerce with Great Britain wherever his power reached, set his brother Joseph on the throne of Spain, and occupied Portugal. But the spirit of resistance had now taken deep root in the British people, and in 1808 troops were sent into Spain under Sir John Moore, and a year later Wellington, then General Wellesley, landed in Portugal. Then began that famous series of successful operations (the Peninsular War) which drove back the French into their own country, and powerfully contributed to undermine the immense fabric of Napoleon's conquests. The other chief European powers having united, Paris was occupied in 1814, Napoleon was deposed and exiled to Elba, and Louis XVIII. placed on the throne of France. Escaping in 1815, Napoleon appeared once more in the field with a large army. Wellington and Blücher hastened to oppose him, and at Waterloo Napoleon's long career of conquest ended in a crushing defeat. The restoration of Louis followed, and Napoleon was sent to the island of St. Helena. Of her conquests Britain retained Tobago, St. Lucia, Mauritius, the Cape of Good Hope, Demerara, Essequibo, Berbice, Heligoland, and Malta. Ceylon and Trinidad had been gained in 1802, and Britain emerged from this long struggle with a very great increase of territorial possessions and political importance.

After the termination of the wars with Napoleon many things concurred to make a troublous era in the home administration. The new burden of debt which the wars had left on the nation, the bad harvests of 1816 and 1817, a succession of governments which had no idea but that of absolute resistance to all reforms, etc.; all these contributed to increase discontent. The result was a strong Radical agitation, accompanied often by serious riots throughout the country, more especially in the large towns, and loud demands for reform in parliament and the system of representation. The death of George III. and accession of George IV. in 1820 made little change in this respect. From 1822 a succession of able statesmen, Canning, Peel, and Lord Grey, gave the government a more liberal turn, and did much to satisfy the popular demands. The Catholics were admitted to parliament; the severity of the old restrictions on commerce was relaxed; and in the face of a determined opposition Earl Grey carried the Reform Bill of 1832 (two years after the accession of William IV.), which gave large manufacturing towns a voting power in some proportion to their importance, and practically transferred the center of political power from the aristocratic to the middle classes. The next great public measure was the abolition of negro slavery in every British possession in 1834.

William IV. died June 20, 1837, and was succeeded by Victoria. The year following is notable as that in which the Chartists began their movement for reform, which continued more or less active, with popular assemblies, presentations of monster petitions, and occasional tumults, till 1848, when it was without much trouble suppressed. The same years saw the struggle of the Anti-Corn-law League, of which Cobden and Bright were the chiefs, and which were finally successful, Sir Robert Peel, the leader of the Tory party, himself proposing the repeal of the corn duties (1846). The principle of free-trade had further victories in the repeal of the navigation laws, and in the large abolition of duties made during Lord Aberdeen's ministry (1853).

In 1852–53, dissension arose between Russia and Turkey regarding the rights of the Latin and Greek Churches to preferable access to the "holy places" in Palestine. The Emperor of Russia, resenting concessions made to French devotees, sent Prince Menschikoff to Constantinople to demand redress, and not being satisfied, war was declared, June 26, 1853. On the plea that it was impossible to leave Russia a free hand

in dealing with Turkey, France and Great Britain formed an alliance against Russia, March 28, 1854. Invasion of the Crimea followed; peace was signed in 1856 at Paris.

Immediately after the Crimean war came the mutiny of the sepoys in India. In 1858, sovereignty over the British possessions was transferred by parliament from the East India company to the crown. Wars with China (1858 and 1860) opened up five new Chinese ports to trade. The Fenian movement (1861-7) occasioned some excitement.

In 1867 parliament passed a measure establishing the principle of household suffrage. The same year the Dominion of Canada was constituted. In 1867, the Abyssinian expedition set out, and relieved the English captives in 1868. In the same year Lord Derby was succeeded by Disraeli as leader of the Conservative party. The year put the Liberals in power. In 1869, Gladstone's administration passed a bill for the disestablishment of the Irish church. In 1870, an Irish land law bill, for the regulation of relations between landlord and tenant, became law; and a national system of education for England was established. In 1871, the purchase of commissions in the army was abolished. Next followed the ballot act and the Scotch education act. Early in 1874, Gladstone dissolved parliament, and a large Conservative majority being returned, Disraeli again became premier. The Ashantee war, begun the previous year, ended early in 1874. In 1876, the title of Empress of India was added to the titles of the queen. During the Russo-Turkish war of 1877-78 Britain remained neutral, but took an important part in the settlement by the Berlin congress, and acquired from Turkey the right to occupy and administer Cyprus. Then followed war in Afghanistan, war with the Kaffirs of Zululand, and a brief war with the Boers of the Transvaal.

In 1880, Gladstone again became premier. This parliament passed a land-act for Ireland (1881), an act for putting down crime in Ireland (1882), a reform act equalizing the borough and county franchise (1884), and a redistribution of seats act (1885)—all important. The intervention of Britain in Egyptian affairs led to the bombardment of Alexandria by the British fleet (July, 1882) and the sending of an army into Egypt to quell rebellion; the rising in the Sudan caused British troops to be despatched to Suakim and another force to be sent by way of the Nile to relieve General Gordon at Khartoum. For a brief period Lord Salisbury was premier in 1885, but in February, 1886, he made way for Gladstone. In April, Gladstone proposed a bill which would establish a separate Irish legislative body. A determined opposition was organized and the bill was thrown out on its second reading. A general election followed, in which those opposed to the bill had a great majority. The Conservative party assumed office, with the marquis of Salisbury as head. A criminal law amendment act for Ireland (1887) and a local government act for England (1888) were passed. In 1887 the jubilee of the queen was celebrated. The Liberals won in the elections in 1892, Gladstone becoming premier. In 1893, Lord Salisbury was returned to power. October 11, 1899, war was declared by the Boers of the Transvaal and Orange Free State, aiming to destroy British paramountcy in South Africa; those states were annexed by the British, in 1900. In 1900, a new parliament was elected, with a slightly increased Conservative majority. Victoria died January 22, 1901, and was succeeded by Edward VII.

In 1902, a new ministry was formed, with A. J. Balfour as premier. The Balfour ministry was succeeded in 1905 by that of Sir Henry Campbell-Bannerman, which, in turn, was succeeded by the Asquith ministry in 1908. The complete autonomy of Australia was recognized in 1907. In 1908, the old age pensions act was passed. The rejection by the lords of important measures led, however, to demands for the curtailment of the powers of the upper house. Parliament was prorogued in January, 1910, and in the new election the Liberals were returned with one vote over the Unionists. The death of Edward, May 6th, interrupted the political warring of the parties only temporarily, and George V. dissolved parliament in November and summoned a new parliament (elected in December).

The Welsh disestablishment bill, the first bill to become a law without the consent of the house of lords, passed the house of commons the third time in May, 1914. The Irish home rule bill similarly passed; both became law with operation suspended for at least one year. In August, 1914, Germany entered into war with Russia. England, France and Russia were allied by an agreement known as the triple entente. Germany, declaring war upon France, purposed crossing Belgium to reach France. Sir Edward Grey, British foreign minister, asked if France and Germany would respect Belgian neutrality. France replied affirmatively; Germany did not. Upon the invasion of Belgium by the Germans, Aug. 4, 1914, Great Britain declared war upon Germany. British troops were landed in France, Aug. 8. Great Britain declared war upon Austria, Aug. 12, and upon Turkey, Nov. 5.

In 1915 Germany declared the waters around the British Isles a war zone. With the sinking of the Lusitania, May 7, by a German submarine, 1152 lives were lost. On Oct. 15 Great Britain declared war on Bulgaria. In December the army was increased to 4,000,000. The compulsory service bill became a law, Feb. 10, 1916. On May 31, the German fleet was defeated off Jutland. Lloyd George became prime minister, Dec. 7, forming a new cabinet. On Feb. 1, 1917, Germany began unrestricted submarine warfare.

Woman suffrage was adopted Jan. 10, 1918. On Mar. 21-23 the Germans crushed Gough's army in France. During August the British won the great battles of Amiens and Bapaume. Allenby routed the Turks, Sept. 18-22. The British armies broke the Hindenburg line, Sept. 27. On Nov. 21, the German fleet surrendered to Admiral Beatty. Jan. 18, 1919, Lloyd George headed the British delegation at the Peace Conference. During 1920 a nation-wide coal strike was amicably settled. Sinn Fein activities in Ireland, continuing throughout 1920-21, resulted in a treaty creating the Irish Free State, signed by the Dail Eireann, Jan. 7, 1922.

EVENTS OF HUMAN PROGRESS

I. Period of Unrecorded Events — Prehistoric Times.

II. From the Dawn of History to the Birth of Christ — B. C.

III. From the Birth of Christ to the Present Time — A. D.

Our present knowledge of human progress is of two kinds: *First*, that which earlier generations have handed down in the form of written records, and, *Second*, that which is assumed by inference from various relics and tokens of ancient peoples, sometimes found buried in the earth or otherwise preserved. The first of these kinds of knowledge constitutes *history*; the second has to do with unrecorded stages in the life of the human race and is called *prehistoric*. Dates and events at the dawn of history are involved in much doubt. At best the earliest assigned dates are merely approximations and must in every case be so interpreted. All dates earlier than 1000 B. C. are to be regarded as comparative rather than as exact.

PERIOD OF UNRECORDED ACHIEVEMENT — PREHISTORIC TIMES

The Prehistoric Period, the length of which it is impossible to estimate with even approximate correctness, is divided into two parts, the *Paleolithic* or *Old Stone Age* and the *Neolithic* or *New Stone Age*. Before the Paleolithic age, however, there was a period in the life of man during which his progress was so slight that he did not attain even the primitive stage of development which crude flint weapons indicate. In the remote epochs designated by the terms Old Stone Age and New Stone Age, the progenitors of the now dominant peoples struggled upwards toward civilization by successive conquests of nature and of natural forces.

The chief factors in their advance were the acquisition of weapons and tools, the use of fire, the cultivation of plants, and the domestication of animals. Many of their achievements were relatively more important than the harnessing of steam and other great inventions of modern times. Yet when, where, and by whom these progress-shaping things were done seems forever hidden in the voiceless past. The men of those times had not yet invented the alphabet or learned how to preserve the records of their deeds in any form of written language. The mute surviving relics of these periods tell nothing of the story of those who toiled to fashion them, they mention neither persons nor events, they define no periods of time.

I. The Paleolithic Age. This period, called the *Old Stone Age*, is characterized by remains of rough flint and other stone weapons, implements, and utensils found all over the world. These primeval tools and weapons of flint were followed by others made from bone, horn, and ivory, and included daggers, fish hooks, heads of harpoons, needles, and awls, which were ornamented in some cases with crude designs and drawings.

II. The Neolithic Age. Most students of the remains of prehistoric peoples hold to the view that the Neolithic or *New Stone Age* ensued upon the *Old Stone Age* only after a long interval of time. Instead of leaving their chipped flint weapons rough, the men of this period polished their surfaces and ground them to keen cutting edges. They produced fire by striking flint or by rubbing wood. They developed the art of making pottery and of weaving fabrics. They erected various memorials to the dead, including what are known as barrows, cairns, cromlechs, and dolmens. Some primitive peoples, such as the lake dwellers of Switzerland, built rude dwellings. In this period the dog, cat, camel, horse, ox, sheep, pig and goat were widely domesticated. Prehistoric peoples of India tamed the elephant and the humped ox as did the ancient Peruvians the llama, alpaca, and guinea-pig. A large proportion of the cultivated plants still of supreme importance to mankind were in extensive cultivation long before the dawn of history, including wheat, rice, maize, barley, millet, sorghum cane, cabbage, turnip, pea, bean, apple, peach, banana, date, olive, fig, hemp, and flax.

What is defined as *Prehistoric Time* has terminated at widely different periods in different countries. The peoples of the Nile valley and of the Tigris-Euphrates region emerged from the total darkness of the unrecorded past about 5000 B. C. Yet the inhabitants of America remained in the prehistoric period until the discovery of the New World by Columbus in 1492 A. D.

FROM EARLIEST RECORDS TO TIME OF MOSES

B. C.	Arts of Civilization	Babylonia and Assyria	Egypt
5000 (about)	At this date flourishing city-states appear in Mesopotamia, evidencing great antiquity for Babylonian civilization which recent research indicates may be carried back to approximately 8000 or 9000 B. C. Late investigations tend to place the beginning of Egyptian history at about 6000 B. C.	5000 (about). Babylonia peopled by the Sumerians. Well advanced in civilization. Temple of Nippur built.	5000 (about). Predynastic age. Small local Kingdoms in the Nile valley. The Kingdoms of the North and of the South.
			4777. Menes founds first dynasty; builds Memphis. Tombs at Abydos filled with objects inscribed to Menes.
4700	Hieroglyphic writing in Egypt.		
			4650. Uenefes builds pyramid near Kokhome.
		4500. Kingdom of Shirlpurla in full power.	
		4400. E-anna-tum erected the famous stele of the vultures.	4400. Apis, the sacred bull, worshiped at Memphis.
4150	Copper tools introduced into Egypt. Stone architecture begun.	4000. Nippur the religious center of Babylonia.	
		3800. Sargon I. greatly extended the empire; built temple to Bel at Nippur.	3900. Khufu (Cheops) builds the Great Pyramid at Gizeh.
3700	Wheat, barley, and millet grown in Egypt. Ox, goat, cat, greyhound, goose, pictured on early monuments. Figs depicted on pyramid at Gizeh. Mummies wrapped in linen cloth.		
			3500. Pyramids built at Sakkarah.
3300	Canal cut at Asyut. Irrigation established.	3300. Temples erected at Agade and Sippar.	
3000	Pigeon domesticated in Egypt.	3000. Gudea builds palaces at Tel-lo.	3000. Capital removed from Memphis to Herakleapolis.
		2800. Urgur and Dungi, Kings of Ur, enlarge temples.	2800. Vigorous reign of Amenemhat.

FROM EARLIEST RECORDS TO TIME OF MOSES — B. C.

B. C.	Arts of Civilization	Asia		Africa and Europe
				2750. Nubia conquered. Temple at Abydos built.
2700	Wheat, rice, tea, soy bean, millet, and sorghum cane grown in China.			
2600	Silk culture begun in China.	2500. Isin becomes a leading city.		2600. Part of Lake Moeris reclaimed.
		2300. Hammurabi makes Babylon preeminent; constructs canals; enacts famous code of laws.		
		2200. Nimrod or Belus ruler in Babylon. Nineveh built by Asshur.		
2100	Geometry used in Egypt.	2070. Ninus rules in Nineveh; founds Assyrian empire.		2098. Hyksos or Shepherd Kings conquer Egypt, and rule 400 years.
2000	Horses introduced into Egypt. Mastiffs, hounds, lap dogs, and turnspits carved on Egyptian monuments. Olive, grape, date palm, lentil, bean, lupine, and watermelon grown in Nile valley.	2000. Semiramis rules Babylon; invades Libya, Ethiopia, and India.		
		The Hebrews		
		1996. Abraham born.		
1920	Gold and silver first mentioned as money.	1896. Isaac born.	1937. The Arabs seize Nineveh.	
1891	Letters first used in Egypt by Syphoas.	1836. Jacob and Esau born.		1856. Inachus plants a colony in Argos.
		1824. Abraham dies.		
1822	Memnon invents the Egyptian alphabet.	1729. Joseph sold into Egypt.	1766. The Shang dynasty in China begins.	
		1715. Is made governor under Pharaoh.		1710. Colony of Arcadians emigrate into Italy.
		1699. Death of Jacob.		
		1635. Death of Joseph.		1618. Sesostris reigns in Egypt.
1582	The chronology of the Arundelian marbles begins.			1556. Rameses-Miamun reigns in Egypt.
1580	The cymbal used at the feasts of Cybele.	1577. Israelites persecuted in Egypt.	1546. Troy founded by Scamander.	1556. Athens founded by Cecrops.
		1574. Aaron born.	The Chinese Dark Ages.	1520. Corinth founded.
		1571. Moses born.		1516. Sparta founded.
1506	The flute invented by Hyagnis, a Phrygian.			1507. Areopagus established in Athens.
1494	Erichthoneus teaches the Athenians husbandry.		1500. Northern India invaded and conquered by the Aryans between this date and 1000.	
		1491. The Exodus of the Israelites from Egypt.		

FROM TIME OF MOSES TO TIME OF CYRUS — B. C.

	Arts of Civilization	The Hebrews	Asia and Africa	Europe
		1491. Moses gives the law at Mt. Sinai.		
1490	Crockery made by Egyptians and Greeks.			
1486	Erichthoneus introduces first chariot.		1485. Egyptus reigns and gives name to the country.	1457. Kingdom of Mycene founded.
		1453. Death of Aaron.		1453. First Olympic games at Elis.
		1451. Death of Moses. Joshua conquers Canaan.	1449. Erichthoneus reigns in Troy.	
				1400. Minos reigns in Crete.
1370	Bucklers used in single combat. Music and poetry cultivated in Greece.		1374. Troas, King of Troy.	1397. Corinth becomes a kingdom under Sisyphus.
		1343. Eglon, King of Moab, enslaves Israel.		1356. Eleusinian mysteries instituted by Eumolpus.
			1322. Rameses II. (Sesostris) conquers Ethiopia.	
		1305. Israel subdued by King of Canaan.	1314. Ilus, son of Troas, founds Ilium.	1266. Œdipus, King of Thebes.
1263	Temple of Apollo at Delphi built. Jason leads first naval expedition on record.	1285. Deborah and Barak defeat the Canaanites.	1252. Second Assyrian dynasty.	1263. Argonautic Expedition of Jason.
		1249. Gideon conquers the Midianites.		

FROM TIME OF MOSES TO TIME OF CYRUS—B. C.

B. C.	Arts of Civilization	The Hebrews		Asia and Africa	Europe
1240	The axe, wedge, wimble, and lever, also masts and sails for ships, invented by Dædalus of Athens.			1240. Troy taken by the Argonauts.	1239. Latinus reigns in Italy.
				1233. Carthage founded by the Tyrians.	1235. Theseus reigns in Athens for 30 years.
1224	Game of backgammon invented by Palamedes of Greece.			1220. Priam, King of Troy.	1225. First Theban War.
					1216. Second Theban War.
				1194. The Trojan War begins.	1213. Helen of Troy carried off by Theseus, marries Menelaus.
		1161. Israel enslaved by the Philistines. Samson born.		1140. Tiglath-Pileser real founder of the Assyrian Empire.	
		1136. Samson slays 1,000 Philistines.			1152. Alba Longa built by Ascanius.
				1124. Troy taken.	1124. Æolian migration.
		1116 Samuel, last Judge of Israel.		1123. Chow dynasty begins in China.	Thebes, capital of Bœotia, founded.
1115	Mariner's compass known in China.				
1100	Dictionary of Chinese completed by Pa-out-she.				1104. Return of the Heraclidæ. End of Kingdom of Mycene.
		1095. Saul becomes King of Israel.			
		1085. David born.			1070. Heremon, of Gallicia, conquers Ireland.
		1055. Death of Saul; accession of David.			1060. Athens governed by Archons.
		1048. David King of all Israel.			
		1042. The Ark removed to Jerusalem.		1044. Ionian emigrants settle in Asia Minor.	
		1036. Revolt of Absalom.			
		1033. Solomon born.			
		1016. Death of David.			
1015	Minos gives Crete his code of laws.	1015. Solomon anointed King.			
		1012. Solomon begins the Temple.			
		1004. Dedication of Temple.			
1000	Solomon extends his commerce to India, via Red Sea, and to the shores of the Atlantic, via Straits of Gibraltar; builds Palmyra, Baalbec, and other cities.			1000. Solomon and Hiram, King of Tyre, form an alliance; also Solomon and Pharaoh.	
				986. Utica built. Samos built.	976. Capys reigns in Alba Longa.
		975. Death of Solomon. Revolt of the Ten Tribes. Two kingdoms formed.			
		Judah	**Israel**		
		971. Shishak, King of Egypt, takes Jerusalem.	975. Jeroboam establishes idolatry.	971. Shishak (Sesostus of Egypt) plunders Jerusalem. Homer born (?).	935. Bacchus, King of Corinth.
916	The Rhodians begin navigation laws.		918. Ahab and Jezebel.		
			901. The Syrians besiege Samaria.		
			896. Elijah translated to heaven.		895. Tiberinus, King of Alba, drowned in the river Albula, which is thence called the Tiber.
886	Homer's poems brought into Greece.	888. Philistines plunder Jerusalem.			
884	Lycurgus reforms the constitution of Sparta.	884. Usurpation and death of Athaliah.	884. Jehu, King.		
869	Gold and silver coined by Phidon, ruler of Argos.				864. Romulus, King of Alba Longa.
			840. Jehoash defeats King Benhadad of Syria.	825. Dynasty of the Tanites in Egypt.	
				820. Arbaces, King of Assyria.	

B. C.	FROM TIME OF MOSES TO TIME OF CYRUS—B. C.				
	Arts of Civilization	**Judah**	**Israel**	**Asia and Africa**	**Europe**
					814. The Kingdom of Macedon founded by Caramus.
786	Corinthians employ triremes or vessels with three banks of oars.			797. Ardyssus, first King of Lydia.	
772	Sculpture first mentioned among the Egyptian arts.		770. Pul invades Israel, and is bribed to depart.		
				767. Sardanapalus, King of Nineveh. Media subjected to Assyria.	769. Syracuse founded by Archias of Corinth.
					753. Building of Rome.
					750. Sabine War.
				747. Era of Nabonazzar, Assyrian Empire destroyed.	747. Union of Romans and Sabines.
		741. Pekah, King of Israel, besieges Jerusalem, 120,000 of his men slain.			743. First Messenian War.
				737. Sebacon invades Egypt.	
				736. Tiglath-pileser conquers Syria and part of Israel.	
		726. Hezekiah abolishes idolatry.			
721	First eclipse of the moon observed by the Chaldeans at Babylon.		721. Samaria taken by the Assyrians; Tribes carried into captivity.	721. Shalmanezer, King of Nineveh, takes Samaria and carries the Ten Tribes into captivity.	
	Religion of Buddha introduced in India.	717. Hezekiah, King.			716. Romulus reputed murdered.
		Hebrews			
			717. Sennacherib, King of Nineveh.		
		712. Sennacherib invades Judah.			
710	Roman Calendar reformed; year divided into 12 months instead of 10 as before.	711. His army (185,000) destroyed by pestilence.	710. Media becomes a kingdom.		
685	Iambic verse introduced.	696. Manasseh, King.			685. Second Messenian War.
680	Chess invented.		680. Babylon and Nineveh are united under Esarhaddon.		
					678. Argæus, first King of Macedon.
660	Attempt to discover the primitive language of mankind.	677. Manasseh, carried to Babylon, is afterward restored.	**Babylonia**	**Egypt**	672. Tullius Hostilius, King of Rome.
640	Spherical form of the earth and true cause of lunar eclipses taught by Thales, who also discovered the electricity of amber.		648. Saracus, King of Babylon and Nineveh.	660. Psammeticus, King of Egypt. Memphis becomes the capital.	664. First sea-fight on record — between the Corinthians and Corcyreans.
621	Draconian code formulated.		612. Nineveh a second time destroyed.		658. Byzantium founded.
610	Pharaoh-Necho begins a canal between the Mediterranean and Red Sea. Many lives lost in the attempt. He also sent out a Phenician fleet which circumnavigated Africa.	606. Conquest of Jerusalem by Nebuchadnezzar.	606. Nebuchadnezzar defeats Necho of Egypt, invades Judea and takes Jerusalem.	610. Pharaoh-Necho, King of Egypt. 600. Psammis, King of Egypt.	640. Latins conquered by the Romans. Philip I., King of Macedon.
			604. Nebuchadnezzar, King of Babylon.		616. Tarquinius Priscus, King of Rome.
		591. Ezekiel prophesies in Chaldea.	599. Birth of Cyrus.		602. Illyria conquered by Macedon.
594	Solon's code supersedes that of Draco in Athens.	588. Captivity of Judah completed. Jerusalem destroyed and the Temple burnt.	589. Invades Phenicia.	594. Pharaoh-Hophra, King of Egypt. 581. Egypt invaded by Nebuchadnezzar.	594. Solon, Archon of Athens.
578	Money coined at Rome by Servius Tullius.	579. Jews carried to Babylon.			578. Servius Tullius, King of Rome.

FROM TIME OF MOSES TO TIME OF CYRUS—B. C.

B. C.	Arts of Civilization	Persia	Babylonia	Egypt	Europe
			572. Takes Tyre.	569. Amasis, King of Egypt, makes alliance with Greece.	
568	School of sculpture opened at Athens.				567. Conquest of the Etrurians by Rome.
562	First comedy acted at Athens.		562. Crœsus, King of Lydia, subjects Asia Minor.	536. Pythagorus visits Egypt.	565. First census of Rome; 84,700 citizens.
	Dials invented by Anaximander of Miletus.	560. Cyrus, King of Persia.			539. The Phocians emigrate to Gaul and build Massilia (now Marseilles).
540	Corinthian order of architecture invented by Calimachus.	548. Cyrus conquers Lydia.			
535	Thespis performs first tragedy at Athens.	538. Takes Babylon.	538. Babylon taken by Cyrus, the Persian.	535. Made tributary by Cyrus.	
		536. Persian Empire founded by Cyrus, composed of Assyria, Media, and Persia. Captivity of the Jews ended.			
		535. Temple rebuilt at Jerusalem.			
		529. Death of Cyrus; Cambyses, King of Persia.			528. Thrace comes into view.

FROM THE DEATH OF CYRUS TO THE DEATH OF ALEXANDER—B. C.

Arts of Civilization	Persia	Greece	Macedonia	Rome, Etc.
527 First public library founded at Athens.	525. Cambyses conquers Egypt and makes it a Persian province. Psammeticus, last King of Egypt.	527. Pisistratus dies, after seizing Athens.		530. Cadiz built by the Carthaginians.
522 Confucius, the Chinese philosopher.	522. Darius I., King of Persia.	510. Followers of Pisistratus expelled; Democracy established at Athens.		
509 Abolition of regal government at Rome, and establishment of a Republic at Rome.	508. Darius conquers India.			509. The Tarquins expelled from Rome. Brutus and Collatinus first Consuls.
500 Phenician letters carried to Ireland from Spain. The Temple of Minerva built.	500. The Ionians revolt and burn Sardis.		497. Alexander I., King.	507. The Capitol finished. 494. Tribunes of the people chosen.
	490. Darius sends an army of 500,000 into Greece.	490. Battle of Marathon.		491. Coriolanus banished.
483 Etrurians excel in music, drama, and architecture.	487. Egypt revolts — is subdued by Xerxes. 486. Xerxes, King of Persia.	483. Aristides banished.		
	481. Expedition of Xerxes into Greece; destroys Athens.	480. Battle of Thermopylæ. Battle of Salamis and defeat of Persians.		480. Carthaginians defeated. Hamilcar killed in battle.
	479. Returns defeated.	479. Battle of Platea; Persian fleet destroyed at Mycale. 476. Themistocles rebuilds Athens.		
	465. Xerxes assassinated. Artaxerxes I., King.	465. Third Messinian War.		
460 Voyage of the Carthaginians to Britain for tin.	456. Esther.	461. Pericles impresses himself upon Greek affairs.		460. Cincinnatus, Consul.
	449. Persians defeated at Salamis.			

B. C.	FROM THE DEATH OF CYRUS TO THE DEATH OF ALEXANDER—B. C.				
	Arts of Civilization	**Persia**	**Greece**	**Macedonia**	**Rome, Etc.**
			457. Long walls of Athens begun.		456. Cincinnatus, Dictator.
		445. Jerusalem rebuilt by Nehemiah.			451. Laws of the 12 tables.
441	The battering ram invented.	440. Siege of Samos by Pericles.	431. Peloponnesian War.		
			429. Death of Pericles, having governed Athens 40 years.		
			416. War with Sicily.	413. Archelaus "Patron of Learning," seizes the throne.	413. Egypt regains independence.
			411. Athens governed by the "400." Alliance of Sparta with Persia.		411. Roman famine.
		401. Cyrus the Younger defeated. Retreat of the 10,000 under Xenophon.	408. Capture of Byzantium.		407. Carthaginians War on Sicily.
		400. Delhi founded.	400. Return of the 10,000.		
399	Catapults invented by Dionysius.			399. Archelaus murdered.	
				392. The Illyrians invade Macedonia, and possess the throne.	390. Rome destroyed by the Gauls.
380	Treatise on conic sections by Aristæus.	387. Greek cities of Asia made tributary to Persia.			376. War between patricians and plebians. Lucius Sextus first plebian consul.
368	A celestial globe brought into Greece from Egypt.		370. Predominance of Thebes.		371. Curule magistrates appointed.
360	Philippics of Demosthenes delivered.		360. War of the Allies against Athens. Decline of Grecian republics.	360. Philip II., King; he institutes the Macedonian phalanx; defeats the Athenians.	369. Military tribunes abolished.
			356. Second Sacred War.	356. Philip II. conquers Thrace and Illyria. Birth of Alexander the Great.	
343	Aristotle writes his philosophical works.	344. Aristotle visits Mitylene.	344. Philip subdues Sparta.		343. Samnian War, continued 53 years.
				341. War against the Athenians. Siege of Byzantium.	340. War with the Latins.
		338. Royal family destroyed with poison.	339. War with Macedonia.	338. Philip master of Greece.	
				338. Athenians and Thebans defeated at Chæronea.	337. First plebian prætor.
336	Eclipses calculated by Calippus, the Athenian.	336. Darius III., King.	336. Philip slain.	336. Philip assassinated by Pausanius; Alexander III., surnamed the Great, succeeds to the throne.	

FROM THE DEATH OF CYRUS TO THE DEATH OF ALEXANDER—B. C.

B. C.	Arts of Civilization	Persia	Greece	Macedonia	Rome, Etc.
335	Caustic art invented.		335. Greeks conquered by Alexander the Great. Thebes destroyed.	335. Enters Greece, conquers Greeks, and succeeds to head of army against Persians.	
		334. Alexander the Great invades Persia. (See under Macedonia.)		334. Invades Persia. Defeats Darius at Granicus.	332. Caledonian monarchy (Scotland) founded by Fergus I. Roman treaty with Alexander the Great.
		331. Darius III. murdered. Alexander founds the Grecian or Macedonian monarchy. Battle of Arbela.	333. Battle of Issus. 332. Egypt conquered by Alexander, and Alexandria built.		
328	Voyage of Nearchus from the Indies to the Euphrates.	330. Æschines, the orator, banished. 327. Alexander invades India. 325. Demosthenes banished. 323. Ptolemy I. restores the independence of Egypt. Alexander the Great dies in Babylonia. The Grecian cities revolt from Macedonia, and in 321 Antipater becomes Regent of Greece. Persia was reconquered from the Greeks, and remained tributary to Parthia till about A. D. 250.			327. Second Samnite War.

FROM THE DEATH OF ALEXANDER THE GREAT TO THE BIRTH OF CHRIST—B. C.

Arts of Civilization	Rome, Etc.	Macedonia	Greece	Syria, Judea	Egypt, Carthage
	321. Roman army surrenders to the Samnites.		319. Polysperchon succeeds Antipater, and proclaims liberty to the Grecian cities.		
320 First work on mechanics written by Aristotle.	320. Samnites defeated at Luceria.				320. Ptolemy I. carries 100,000 Jews into Egypt.
317 Commerce of Macedon with India, through Egypt.	317. Syracuse and Sicily usurped by Agathocles.	317. Cassander assumes the throne of Macedon.	317. Demetrius Phalerius governs Athens. 315. Cassander rebuilds Thebes.		
312 The Appian Way constructed.	312. War with the Etruscans.		312. Pyrrhus II., greatest hero of his time.	312. Seleucus I. retakes Babylon.	
310 Aqueducts and baths in Rome.			306. Democracy established at Athens by Demetrius.	301. Battle of Ipsus, Alexander's empire divided anew into four parts: Syria, Macedon, Greece, Egypt.	301. Phenicia united to Egypt.
300 Euclid, the celebrated mathematician.		296. Philip IV.			300. Golden Age of the Ptolemies.
293 Sun-dial erected at Rome, and time divided into hours.			294. Demetrius murders Alexander and siezes throne of Macedon.		
290 Fabius introduces painting at Rome. The Colossus of Rhodes built by Chares.	286. Law of Hortensius, by which the decrees of the people had the force of those of the senate.	286. Lysimachus, King of Thrace, subjects Macedonia.		291. Seleucus founds Antioch, Edessa, and Laodicea.	283. Death of Soter.

FROM THE DEATH OF ALEXANDER THE GREAT TO THE BIRTH OF CHRIST—B. C.

B. C.	Arts of Civilization	Rome, Etc.	Macedonia	Greece	Syria, Judea	Egypt, Carthage
285	Dionysius founds the solar year, to consist of 365 days, 5 hours, and 49 minutes.		287. Lysimachus reigns.		285. The Scythians invade Bosporus.	283. Ptolemy Philadelphus, King of Egypt.
284	The Septuagint begun at Alexandria.			284. The Achæan Republic.		
283	The Pharos built at Alexandria first lighthouse on record.	281. The Tarentine War.	279. Irruption of the Gauls. 277. Reign of Antigonus. 274. Pyrolius invades Macedonia, defeats Antigonus, and is proclaimed King. 272. Antigonus restored.		281. Antiochus Soter succeeds Seleucus.	
267	Ptolemy makes a canal from the Nile to the Red Sea.	266. Rome mistress of all Italy.	268. Second incursion of the Gauls.	268. Athens taken by Antigonus.	262. Invasion of the Gauls.	269. Egypt first sends ambassadors to Rome.
266	Silver money first coined.	264. First Punic War. 241. End of first Punic War.	250. Parthia revolts from Macedon.	255. Athens joins the Achæan League.	246. Antiochus II. poisoned by his wife. 226. Seleucus III., King of Syria.	246. Ptolemy Euergetes subdues Syria.
224	Archimedes makes known his discoveries in mechanics.	225. The Gauls repulsed in Italy.				221. Ptolemy Philopater, King.
219	Art of surgery introduced.	219. Hannibal takes Saguntum, and crosses the Alps. 218. Second Punic War. Hannibal defeats the Romans at Ticinus and Trebia. 216. Varro at Cannæ totally defeated by Hannibal.	220. Philip assists the Achæans. 211. Alliance of Philip and Hannibal.	220. The Social War begins.	219. War with Ptolemy. 211. Antiochus the Great, King of Syria.	
206	Gold coined at Rome.	206. Carthaginians driven out of Spain. 204. Scipio carries the war into Africa.		206. Spartans defeated at Mantinea.	203. Judea conquered by Antiochus.	205. Ptolemy Epiphanes, King. 204. Roman general Scipio defeats Hasdrubal and Syphax of Carthage.
202	Art of printing known in China.	202. Hannibal defeated at battle of Zama. End of war.				202. End of Second Punic War.

FROM THE DEATH OF ALEXANDER THE GREAT TO THE BIRTH OF CHRIST—B. C.

B. C.	Arts of Civilization	Rome, Etc.	Macedonia	Greece	Syria, Judea		Egypt, Carthage
					Syria	Judea	
198	Books, with leaves of vellum, introduced by Attalus, King of Pergamus.	200. Second Macedonian War.	199. Second War with Rome.	198. Achæans and Spartans join the Romans against Macedon.	198. Jews assist Antiochus in expelling the Egyptian troops from Jerusalem. 196. Hannibal joins Antiochus. 190. Scipio Asiaticus defeats Antiochus at Magnesia. 187. Antiochus killed. Syria becomes temporarily a Roman province.		198. Egypt loses her Syrian possessions.
		188. Syria is made a temporary Roman province.	179. Reign of Perseus. 171. Third War with Rome.				
		181. Plague at Rome.			185. Seleucus IV., King. 172. Antiochus IV., King. Greatly hated by the Jews.		180. Ptolemy Philomater, King.
170	Paper invented in China.	170. Tiberius and Caius Gracchus.				170. Jerusalem plundered by Antiochus Epiphanes.	174. Cato's embassy to Carthage.
167	First library opened in Rome.	167. Census of Rome, 327,000 citizens.	168. Macedon becomes a Roman province.				
162	Hipparchus fixes the first degree of longitude and latitude; founds trigonometry.			165. Romans enter Achaia.		165. Judas Maccabeus expels the Syrians. 161. Treaty with Romans.	
159	Clepsydra invented by Scipio Nascia.	155. Romans unsuccessful in Spain.					152. Massinissa defeats the Carthaginians.
		149 Third Punic War.					151. Joint reign of Philomater and Physcon in Egypt.
146	Alexandria the center of commerce.	146. Conquest of Carthage and Corinth. Greece annexed to the Roman Empire.		146. Corinth destroyed by the Romans. Greece becomes a Roman province under the name Achaia.			146. Carthage taken and destroyed by the Romans.
140	Clock wheels invented by Ctesibius.				142. Antiochus VI., King.		145. Ptolemy Physcon becomes sole King of Egypt.
133	Equestrian order a distinct class.	133. Spain becomes a Roman province.			134. Invasion of Judea.		
130	Revival of learning in China.				130. Conquered by Parthia. 129. Regained by Demetrius II.	130. John Hyrcanus delivers Judea from Syria.	129. Physcon driven from his throne for cruelty.
120	Theory of eclipses known to Chinese.	123. Caius Gracchus, Tribune.					128. Pestilence in Egypt. 123. Carthage rebuilt.
		113. First great migration of the German nations.					116. Ptolemy Lathyrus, King of Egypt.

FROM THE DEATH OF ALEXANDER THE GREAT TO THE BIRTH OF CHRIST — B. C.

B. C.	Arts of Civilization	Rome, Etc.	Syria	Judea	Egypt, Carthage
110	First sumptuary law at Rome.	104. Teutoni defeat 80,000 Romans on banks of the Rhone.		105. War with Egypt.	107. Alexander I, King of Egypt.
98	Roman schools of oratory on Greek models instituted.	99. Birth of Julius Cæsar 91. Social War in Italy.	97. Mithridates conquers Capidocio.		82. Revolt in Upper Egypt. Thebes destroyed.
86	Libraries of Athens sent to Rome by Sylla.	88. War with Pontus. 82. Sylla defeats Marius and is created perpetual dictator. Plunder of the temple of Delphi.	86. Takes Bythinia.		81. Alexander II., King of Egypt.
79	Posidonius calculates the height of the atmosphere.			79. Alexandra, Queen of Janneus, governs Judea.	
74	The Romans possess gold mines in Asia Minor, Macedonia, Sardinia, and Gaul; and silver mines in Spain.	75. Bythinia a Roman province. 65. Syria becomes a Roman province. Cicero Consul. 63. Catiline's conspiracy detected and suppressed by Cicero.	66. Defeated by Pompey, Syria passes under Rome.	63. Judea a Roman province.	65. Ptolemy Auletes, King. 55. Auletes restored.
62	Magnificent houses for Roman nobles erected. Also marble theater of Scaurus to hold 30,000 spectators.	60. First triumvirate — Pompey, Crassus, and Cæsar.			46. The African War. 45. Cæsar rebuilds Carthage. 43. Cleopatra poisons her brother and rules alone.
55	Iron chain cables used by the Venetians.	55. Cæsar passes the Rhine, defeats the Germans and Gauls, and invades Britain. 53. Crassus defeated and killed in Parthia.			36. Cleopatra obtains from Antony a grant of Phœnicia, Cyrene, and Cyprus.
50	A water mill erected on the Tiber at Rome.	51. Cæsar completes conquest of Gaul, which becomes a Roman province. 49. Civil War between Cæsar and Pompey. Pompey defeated; Cæsar, Dictator. 48. Battle of Pharsalia — Pompey defeated by Cæsar. Death of Pompey in Egypt.			
47	The Alexandrian library burnt— 400,000 volumes.	47. Cæsar takes Alexandria and conquers Egypt.			31. Defeat at Actium. 30. Suicide of Antony and Cleopatra. Egypt passes to Rome.
45	Cæsar reforms the calendar by introducing the solar for the lunar year.	44. Cæsar assassinated in Roman Senate. Antony master of Rome. 43. Second triumvirate — Octavius Cæsar, Marc Antony, and Lepidus. 42. Battle of Philippi; defeat and death of Brutus and Cassius. 32-31. War between Antony and Octavius. By the battle of Actium (31), Octavius acquires the Empire.			
30	Direct trade of Rome with India. Silk and linen factories in the Empire.	30. Republic of Rome becomes a monarchy. Population of Rome, 4,100,000 citizens.			
27	Treasures of Egyptian art brought to Rome. The Pantheon built.	27. Titles of Augustus and Emperor conferred on Octavius for ten years.			
22	Pantomimic dances introduced on the Roman stage.	23. Agrippa subdues all Spain.	21. Athens finally subjected to Rome.		
19	Aqueducts constructed by Agrippa.	19. Death of Virgil.	18. Parthians defeated.		

FROM THE DEATH OF ALEXANDER THE GREAT TO THE BIRTH OF CHRIST—B. C.

B. C.	Arts of Civilization	Rome, Etc.
12	Roman legions distributed over the provinces in fixed camps which soon grew into cities — among them were Bonn and Mayence.	15. Cantabria, Austria, and other territory conquered by Drusus, is added to the Empire. 13. Augustus assumes the title of Pontifex Maximus. 11. Germany subdued by Germanicus. 10. Egyptian religion displaces national religion.
8	Calendar corrected by Augustus.	5. Varus appointed Governor of Syria, and Cyrenius Governor of Judea.
4 B. C.	Birth of Jesus, at Bethlehem, in Judea.	4. Cymbelene, King of Britain. Advent of Christ, four years before the so-called Christian Era. Death of Herod. 2. Cæsar confirms the will of Herod.

FROM THE CHRISTIAN ERA TO THE FALL OF ROME—A. D. 1–476

A. D.	Arts of Civilization	Development of Christianity	The Roman Empire
			1. Caius Cæsar makes peace with the Parthians. Tiberius returns to Rome. 6. Varus, encamped on the Weser, governs lower Germany like a Roman province.
9	Celsus advances the science of medicine.	8. Jesus reasons with the doctors.	14. Augustus dies at Nola; is succeeded by Tiperius as Emperor. 19. The Jews are banished from Rome.
26	The Druids in Germany.	25. Pontius Pilate, Governor of Judea. 26. John the Baptist begins his ministry. 27. Jesus baptized by John. 29. Twelve Apostles sent abroad. 30. Crucifixion of the Savior, Friday, April 3rd. 34. St. Paul converted to Christianity.	26. Thrace becomes a Roman province. 30. Agrippina banished.
37	Appion of Alexandria writes on grammar.	40. Disciples first called Christians at Antioch. 41. Herod's persecutions.	37. Tiberius succeeded by Caligula, noted for his profligacy. 48. Census, 6,900,000.
50	Columella, born in Spain, writes on husbandry.	50. Paul preaches at Athens. 59. Paul appeals to Cæsar. 60. Paul imprisoned in Rome.	54. Nero, Emperor; a profligate and tyrant. 61. Revolt of the Britons under Queen Boadicea.
64	Nero's golden palace built—of great extent.	64. First persecution of Christians by Nero. Paul visits Jerusalem. 66. Jews at war with Romans; Paul beheaded. 70. Destruction of Jerusalem by Titus.	64. Nero sets fire to Rome; accuses Christians.
78	The Capitol at Rome rebuilt. Circumnavigation of Scotland.		77. A great plague at Rome, 10,000 dying in one day. 79. Pompeii and Herculaneum destroyed by Vesuvius.
80	Paintings executed for the baths of Titus; the group of the Laocoon.	95. Second persecution of the Christians by Domitian.	80. Agricola governs Britain, reduces Wales and enters Caledonia.

FROM THE CHRISTIAN ERA TO THE FALL OF ROME — A. D.

A. D.	Arts of Civilization	Development of Christianity	The Roman Empire
98	The Ulpian library. Jurisprudence flourishes. Forum built.		98. Trajan, Emperor; Roman Empire at its greatest extent.
		107. Third persecution by Trajan.	100. The Huns migrate westward.
	Pillar of Trajan, and Baths.	118. Fourth persecution by Hadrian.	117. Hadrian, Emperor; makes a journey through the provinces; visits Britain and builds there a wall from the Tyne to Solway Firth; builds a wall from the Rhine to the Danube.
	Bridge built over the Danube.		
120	Great buildings of Palmyra.		
	The Roman mosaics.		
132	Ptolemy, celebrated Egyptian astronomer and geographer.	134. Heresy of Marcion.	
		150. Canon of Scriptures fixed about this time.	138. Antoninus, Emperor; 145–152, defeats the Moors, Germans, and Dacians; stops the persecution of the Christians.
			161. Marcus Aurelius, Emperor; 169, war with Marcomanni.
180	Equestrian statue of Marcus Aurelius.		189. The Capitol of Rome destroyed by lightning. The Saracens defeat the Romans.
			193. Septimius Severus, Emperor. A vigorous ruler.
		202. Fifth persecution under Severus.	194, besieges Byzantium; 202, persecutes the Christians; builds the wall of Severus in Britain; 211, dies at York, in Britain.
215	Caracalla grants right of Roman citizenship to all the provinces.		223. Artaxerxes begins the new kingdom of Persia.
			232. Persian War.
235	Alexandrian School of Philosophy founded.	235. Sixth persecution under Maximinus.	241. The Franks first mentioned in history.
		250. Seventh persecution of the Christians.	251. Confederacy of the Franks established between the Rhine and Elbe.
			The Persians victorious in Asia Minor.
			256–69. Goths conduct expeditions into Asia Minor and Greece.
			261. Sapor, the Persian, takes Antioch, Tarsus, and Cæsarea.
		262. Paul, bishop of Samosatia, denies the divinity of Jesus Christ.	264. Alliance with Odenatus, King of Palmyra, who is succeeded by his wife Zenobia, who reigns with the titles of "Augusta" and "Queen of the East."
			268. Claudius II. defeats an army of 320,000 Goths.
			270. Aurelian, a great warrior, becomes Emperor; 271, defeats the Goths and Alemanni; 273, reduces Palmyra, and takes Queen Zenobia prisoner; 274, Franks, Spain, and Britain reduced to obedience; 275, Aurelian killed near Byzantium.
274	Rome surrounded with a wall.	272. Persecution of Christians under Aurelian.	
			277. Probus, Emperor; 280, defeats the Persians.
		283. The Jewish Talmud composed.	
284	Diocletian's Oriental form of government. Diocletian's Baths.	Religious ceremonies multiplied.	284. Diocletian, Emperor. Sends ambassadors to China, 296.
290	The Gregorian Code.	Pagan rites imitated by the Christians.	
			291. The Franks master Batavia and Flanders.
		296. Monks in Spain and Egypt.	
		303. Persecution under Diocletian.	
			304. Diocletian and Maximian resign the empire to Constantius and Galerius.
		306. Persecution of Christians stopped by Constantius.	306. Constantine the Great, first Christian Emperor, defeats the Franks.
323	Church of St. Sophia erected at Constantinople.	325. Council of Nice.	
330	Constantinople a seat of art and literature.		331. Constantine orders all the heathen temples to be destroyed.
		337. Eleventh persecution.	337. Death of Constantine, and the accession of his three sons to the empire.
			364. Death of Jovian, and the accession of Valentinian and Valens, under whom the empire is divided.

	Western Empire	Eastern Empire
366	Forts built on the Rhine.	364. Valentinian, Emperor.
		368. The Saxons invade Britain, but are defeated by Theodosius.
	373. Bible translated into Gothic language. Death of Athanasius.	375. Gains victory over the Germans; succeeds to the Eastern Empire on the death of Valens.
		376. Hungary (ancient Pannonia) invaded by the Huns, from whom it is named.

A. D.	FROM THE CHRISTIAN ERA TO THE FALL OF ROME—A. D.			
	Arts of Civilization	**Development of Christianity**	**Western Empire**	**Eastern Empire**
		379. Prerogatives of the Roman See much enlarged.	379. The Lombards first leave Scandinavia, and defeat the Vandals.	379. Theodosius the Great becomes a zealous supporter of Christianity.
		381. Second general Council of Constantinople.		
		384. Symachus pleads in the Roman Senate for Paganism against St. Ambrose.		388. Theodosius defeats Maximus, the Tyrant of the Western Empire.
		392. St. Chrysostom, Patriarch of Constantinople.	392. Theodosius becomes sole Emperor of the East and West. Complete downfall of Paganism.	
392	Impulse given to the development of mathematics at Alexandria.		394. Final division of empire between the sons of Theodosius.	
			401. Europe overrun by the Visigoths.	
			406. Vandals allowed to settle in Spain and Gaul.	408. Theodosius II., a child, Emperor.
			410. The Goths under Alaric sack and burn Rome.	
			412. Rise of the Vandal power in Spain.	
			413. Burgundian Kingdom begun in Alsace.	414. Regency of the Emperor's sister, Pulcheria.
		416. The Pelagian heresy condemned.		
			420. The Franks form a kingdom, under Pharamond, on the lower Rhine.	420. Persian War.
			424. Valentinian III., Emperor.	
425	Theodosius establishes public schools and attempts the restoration of learning.		426. Britain evacuated by the Romans.	
			428. Romans defeated by the Franks and Goths. Franks, under Clodion, extend their conquests.	431. Armenia divided by the Persians and Romans.
		431. Third general Council at Ephesus.		
		432. St. Patrick preaches the gospel in Ireland.	433. Attila forms an immense Empire from China to the Atlantic.	433. A great part of Constantinople destroyed by fire.
435	Theodosian Code published.	435. Nestorianism prevails in the East.		437. Pannonia, Dalmatia, and Noricum gained from the Western Empire.
			439. The Vandals, under Genseric, form Kingdom of Africa, take Carthage and plunder Italy.	
			441. Roman territories invaded by the Huns, Persians, and Saxons.	
		443. The Manichæan books burned in Rome.		
		447. Eutyches asserts the existence of only one nature in Jesus Christ.	445. Famous embassy from Britain soliciting aid against the Picts.	
			448. Merovœus I., first King of the Merovingians.	
		451. Fourth general Council at Chalcedon.	451. Arrival of Saxons in Britain under Hengist and Horsa.	450. Marcian, Emperor, refuses to pay tribute to the Huns.
			452. City of Venice founded.	
			458. Franks, under Childeric I., conquer as far as the Loire and take Paris.	457. War with the Goths.
				461. Peace with the Goths.
468	The principle of law established that the accused shall be tried by his peers, or equals.	465–476. Oligarchy of the bishops of Rome, Constantinople, Alexandria, Antioch, and Jerusalem.	468. The Visigoths under Eric establish their kingdom in Spain.	474. Zeno, Emperor; a turbulent reign marked by debauchery and conspiracies.
		The Church now begins to assume a political aspect.		475. Theodoric becomes chief of the Ostrogoths and invades the empire.
476	Odoacer's sack of Rome changed the course of events in Europe. The form of the old Roman government remained, but Italy, ravaged by a succession of wars, plagues, famines, and every form of public tyranny, was almost a desert.		476. Odoacer, King of the Herulii, takes Rome, and the Western Empire ends 1228 years after the founding of the city. Commencement of the Kingdom of Italy under Odoacer.	

FROM THE FALL OF ROME TO THE DIVISION OF THE WESTERN EMPIRE — A. D. 476-841

A. D.	Arts of Civilization	The Eastern Empire	Great Britain and Ireland	Italy and the Church	France
		480. An earthquake destroys greater part of Constantinople.		484. Christians persecuted by the Vandals.	481. Clovis I., founder of the French monarchy. 485. Battle of Soissons gained by Clovis.
486	Rise of the feudal system in France under Clovis.		487. The Saxons defeated by Prince Arthur.		
		491. The Green and Blue factions.	490. Sussex becomes a kingdom.		491. Clovis subdues Thuringia.
493	Theodoric introduces Greek architecture into Italy.			493. Italy conquered by Theodoric. Odoacer put to death. 494. The Roman Pontiff asserts his supremacy.	
		502. Invasions by the Persians.		496. Christianity introduced into France.	510. Clovis makes Paris his capital.
511	The Salic law in France.	511. Great insurrection in Constantinople.			
514	Use of the burning glass in warfare.	514. Constantinople besieged by Vitalianus, whose fleet is consumed by the burning glass of Proclus.			
516	The Christian Era proposed and introduced by Dionysius, a monk.				
		518. Justinian I. begins a brilliant reign over the Eastern or Byzantine Empire.	519. Prince Arthur defeated by Cerdic, who begins the third Saxon Kingdom of Wessex.		
		527. Celebrated Justinian code of laws.			
529	The schools of Athens suppressed.	529. Belisarius, the famous general, defeats the Persians.	530. Kingdom of Essex.	529. Order of the Benedictine Monks instituted at Monte Cassino, near Naples.	532. Burgundy conquered by Childebert.
		534. Defeats the Vandals in Africa.			
		535. Subdues Sicily.			
		536. Takes Naples.			536. Ostrogoths surrender their possessions in Gaul to the French King.
		537. Takes Rome.		537. Italy conquered by Belisarius, for Justinian.	
				539. War, famine, and pestilence. Milan ravaged by the Goths.	
		540. North Africa, Corsica, and Sardinia annexed to the Eastern Empire.	542. Prince Arthur murdered in Cornwall.		
		548. The Turkish monarchy founded in Asia.			
551	Manufacture of silk introduced from China into Europe by monks.	554. Italy governed by Greek Exarchs.			557. Church of St. Germain de Pres built at Paris.
		558. A plague extends over Europe and Asia and lasts about 50 years.			558. Clotaire I., King.
559	The Saxon laws promulgated. The king's authority limited by the Wittenagemot. Three orders: the noble, the free, and the servile.		559. Saxon Heptarchy begins.		
568	The feudal system established in Italy by the Lombards. Written laws compiled by the Visigoths in Spain.	569. The Turks first recognized as a nation. They send an embassy to Justin II. and form an alliance.		568. Italy conquered by the Lombards.	

FROM THE FALL OF ROME TO THE DIVISION OF THE WESTERN EMPIRE—A. D. 476-841

A. D.	Arts of Civilization	The Eastern Empire	Great Britain and Ireland	Italy and the Church	France
			575. East Anglia formed into a kingdom, whence the origin of the name England.	575. First monastery built in Bavaria.	
580	Latin language ceases to be spoken in Italy, and supersedes the Gothic in Spain.			590. Mass introduced.	583. Clotaire II., King.
597	England relapses into semi-barbarism, after Saxon conquest. The aristocracy acquire great power in France. Rites and superstitions increase all over Europe.	600. Eastern Empire spread over Hungary, Poland, and Prussia, under Tiberius II. 602. Invasion of the Persians.	591. Ethelbert, King of Kent, gains the ascendancy. 604. St. Paul's Church founded by Ethelbert of Kent.	598. St. Augustine, first archbishop of Canterbury, introduces Christianity into Britain.	
		610. Heraclius takes Constantinople, kills Phocas, the Emperor, and makes himself King. 612. Mahomet publishes the Koran. Syria ravaged by the Arabs. 614. Jerusalem taken by the Persians.	607. Supremacy of the Pope acknowledged.	607. The Pantheon of Rome dedicated to Christianity.	
617	Ethelbert publishes the first code of laws in England.	622. The Hegira, or Mahomet's flight from Mecca to Medina.	617. St. Peter's (now Westminster Abbey) founded by Sabert, King of Kent.	625–40. Churches of Jerusalem, Antioch, and Alexandria lost to the Christian world by the sweep of Mohammedanism.	628. Dagobert I. builds the Church of St. Denis, the sepulture of the French kings.
632	Islamism and the power of the Caliphs established in the East. In the Caliphs were united the highest spiritual and regal authority.	632. Death of Mahomet. 633. Omar, Caliph, takes Jerusalem, which is held by the Saracens 463 years.	633. Bretwold V. embraces Christianity.		638. Kingdom divided by Clovis II. and Sigebert, the latter King of Austrasia.
674	Stone buildings and glass come into use in England. The Anglo-Saxons advance in civilization and power by the introduction of Christianity. In France, the Teutonic language supersedes the Latin. National assemblies established but confined to the aristocracy. In Persia the Magian religion gives place to the Mohammedan.	673. Siege of Constantinople by the Saracens, whose fleet is destroyed by the Greek fire of Callinicus. 680. Kingdom of Bulgaria founded.	690. The name England first used.	680. The Sixth general Council called at Constantinople.	690. Pepin d'Heristal, King. 695. Childebert, III., King of Neustria.
698	Christianity greatly extended among the German nations in the North of Europe; but almost exterminated in Africa by the progress of Mohammedanism.	698. Carthage destroyed by the Saracens, and the north coast of Africa subjugated. 709. All Africa subdued by the Saracens.	700. Anglo-Saxon Octarchy. 705. Alfred the Wise in Northumbria.	698. Picts adopt Christianity. 704. The first province given to the Pope, John VI.	700. Aquitaine, Burgundy, and Provence become separate dukedoms. 714. Charles Martel, Duke of Austrasia.
716	The art of making paper introduced by the Arabs.	716. Leo III., Emperor. The Saracens invest Constantinople, by land and sea. City saved by Greek fire.	727. Ina, King of Wessex, begins collection of Peter's pence to support a college at Rome.	726. The Emperor Leo forbids image worship.	725. Charles Martel subdues Bavaria.

A. D.	FROM THE FALL OF ROME TO THE DIVISION OF THE WESTERN EMPIRE — A. D. 476-841				
	Arts of Civilization	**The Eastern Empire**	**Great Britain and Ireland**	**Italy and the Church**	**France**
					732. Defeats the Saracens at Tours.
740	Saracens encourage learning. Ignorance, profligacy, and misery characterized the age preceding Charlemagne.	746. Saracens defeated by Constantine V.	735. Death of the venerable Bede.	752. The Pope dethrones Childeric, King of France, by a papal decree. Pope Stephen III. at war with the Lombards.	752. End of Merovingian line of French kings. Pepin, the Short, first of the Carlovingian line.
		762. Caliph Almanzor builds Bagdad and makes it his capital.		755. Beginning of the Pope's temporal power.	764. Extirpates the Huns.
		766. Asia Minor ravaged by the Turks.			
785	Golden period of learning in Arabia under the Caliph Haroun al Raschid.	785. Empire invaded by Haroun al Raschid, Caliph of Bagdad.	787. First recorded invasion of the Danes — the Sea Kings and Vikings.	787. Seventh general Council of Nice.	
788	Pleadings in courts of justice first practiced.				
793	Foundation of schools in monasteries and cathedrals by Charlemagne.				791–96. Establishes the margravate of Austria.
800	Agriculture and horticulture encouraged by Charlemagne; both flourish in Spain under the Caliphs.			800. The Pope separates from the Eastern Empire and becomes Supreme Bishop of the Western.	800. Charlemagne founds the New Western Empire and is crowned at Rome King of Italy, Germany, and France.
802	Arabian horses introduced into Spain.	803. The Saracens ravage Asia Minor.		Charlemagne reforms the Church. Many bishoprics founded.	802. Receives an embassy from Haroun al Raschid.
813	Transient revival of learning under Charlemagne. The reign of Caliph Mamun the golden epoch of Arabian literature.		813. Egbert, King of Wessex, defeats the Britons.		806. Charlemagne divides the empire among his sons, only one of whom survived him — Louis I.
				817. College of Cardinals founded.	817. Louis I. divides the empire.
		822. Constantinople besieged by the Saracens. The Bulgarians raise the siege.		824. Christianity carried to Denmark and Sweden.	
828	St. Mark's Church at Venice built.	829. Theophilus, Emperor.	827. The seven kingdoms of Heptarchy united by Egbert under the name of England or the land of the Angles. Invasion of the Danes.		
			838. Ethelwolf, King. Kenneth, King of the Scots, defeats and extirpates the Picts, and becomes sole monarch of Scotland.		
840	Feudal system in its power.				841. Another division of the empire. Charles I., King of France; Louis I., King of Germany; Lothaire, King of Italy.

A. D.	FROM THE DISSOLUTION OF THE WESTERN EMPIRE TO THE FALL OF THE EASTERN EMPIRE — A. D. 841-1453			
	Arts of Civilization	**Italy and the Church**	**Eastern Empire**	**The British Isles**
841	Hereditary nobility and the clergy dominant in matters of state.	844. Ignatius, Patriarch of Constantinople. Persecution of the Christians in Spain. 846. The Saracens destroy the Venetian fleet and besiege Rome.	844. Decline of the Caliphate begins. Frequent wars between the Greeks and the Saracens.	849. Alfred the Great born.
850	Roman and Common Law introduced.	850. Christianity propagated in Denmark and Sweden. 858. Nicholas I. first Pope to be crowned. 860. Schism of the Greeks begins.		
		864. Bible translated into Slavonian. 867. Eight Council at Constantinople.	867. Basil inaugurates the Macedonian dynasty.	867. The Danes conquer Northumberland.
872	Clocks exported from Venice.			872. Alfred the Great defeats the Danes.
			886. Leo VI., Emperor.	
890	Oxford University founded by Alfred the Great. Trial by Jury; fairs and markets in England.		890. Southern Italy subject to the Greek Empire.	891. Renewed invasion of the Danes.
900	England divided into counties, hundreds, and tithings. County courts established.		904. Russian expedition under Oleg against Constantinople.	901. Edward the Elder the first to take the title of "Rex Anglorum."
		912. The Normans in France embrace Christianity.		
915	University of Cambridge founded.		917. Constantinople besieged by the Bulgarians.	916. Agriculture at a low ebb.
		921. The Bohemians adopt Christianity. 929. Eudes, monk of Cluni.	919. Romanus, general of the fleet, usurps the empire and places his son Constantine VIII., on the throne.	
				934. Athelstan, King.
939	Cordova, in Spain, becomes famous as a center of science, learning, industry, and commerce.		937. Romanus gains a naval victory over the Russians.	
940	Mints established in England.			
941	The figures of arithmetic brought into Europe by the Saracens.		945. The Empress Helen usurps the throne.	
	Linens and woolens manufactured in Flanders.	955. Baptism of Olga, and conversion of Russia to Christianity.		952. Malcolm I., King of Scotland. 955. Dunstan, Abbot of Glastonbury, rises to great power.

A. D.	FROM THE DISSOLUTION OF THE WESTERN EMPIRE TO THE FALL OF THE EASTERN EMPIRE—A. D. 841-1453				
	France	**Germany**	**Spain**	**Russia**	**Lesser Countries**
841	Charles I. (the Bald), King.	841. Louis I., King.	842. Ramiro I. elected King of Oviedo.		
					846. The Saracens destroy the Venetian fleet and besiege Rome.
		856. Louis II. establishes his court at Pavia, and rules Italy.			
858	Invasion of Louis the German, who is defeated.		857. Garcia Ximines founds the Kingdom of Navarre.		
					860. Gorm united Jutland and the Danish Isles and becomes King of Denmark.
					861. Iceland discovered.
				862. Ruric the Norman, Grand Duke of Novgorod.	
868	Lorraine annexed to France.				
			873. Sancho Inigo, Count of Navarre.		
		879. Louis III. and Carloman reign jointly.			875. Harold, first King of Norway.
885	Paris besieged by the Normans.	887. Arnold, Emperor.			
					889. Arpad lays the foundation of Hungary.
		890. Arnold takes Rome.			
898	Charles III., King.				
		899. Invasion of the Hungarians.			
					901. Republics of Venice and Genoa founded.
				907. Oleg invades the Greek Empire.	
			910. Kingdom of Leon founded by Garcia.		
912	The Normans, under Rolla, establish themselves in Normandy.	912. Conrad I., Emperor.	912. Arabs build the splendid city and palace of Zehra.		
			914. Beginning of the heroic age in Spain.		
923	Civil Wars.				
					930. Harold VI., first Christian King of Denmark.
					933. Eric, King of Norway. His cruelty leads to revolt of people.
936	Louis IV., King.	936. Otho the Great, Emperor.			
			940. Ramiro, King of Leon, defeats the Moors at Simancus.		
		950. Bohemia annexed.		945. Swatoslav, King of Russia.	
954	Lothaire I. confers the dukedoms of Burgundy and Aquitaine on Hugh the Great.		955. Sancho I., King of Leon.		

A. D.	FROM THE DISSOLUTION OF THE WESTERN EMPIRE TO THE FALL OF THE EASTERN EMPIRE—A. D. 841-1453			
	Arts of Civilization	**Italy and the Church**	**Eastern Empire**	**The British Isles**
		959. St. Dunstan, archbishop of Canterbury, attempts to reform the Church.	959. Emperor Romanus II.	
982	Dublin a trade center.			985. Danish invasion under Sweyn.
		989. Greek Christianity propagated in Russia by Waldimir. 993. First canonization of saints.		
997	Venice and Genoa rise to great importance in commerce.	999. Hungary becomes a fief of the Church.	996. War with Bulgaria.	
1000	Firdusi, the Persian Homer, flourished. (940?–1020.)			
1002	Paper made of cotton rags. Churches first built in the Gothic style of architecture. The French language begins to be written.			1002. Massacre of the Danes in England. 1003. Scotland ruled by Malcolm II. 1013. Danes, under Sweyn, become masters of England.
	Faint impulse given to art in Italy.		1018. Bulgaria again reduced to a Grecian province.	1016. Edmund II. fights six battles with Canute, King of the Danes, with whom he divides the kingdom.
1024	Musical scale of six notes invented by Guido Aretius.	1024. John XIX., Pope.		1027. Brian Boru, sole Monarch of Ireland. 1031. Canute subdues Scotland. 1034. Duncan, King of Scotland.
				1039. Macbeth murders Duncan, and usurps the throne.
			1042. First invasion of the Seljuk Turks. 1043. The Russians invade Thrace with 100,000 men and are repulsed by the Greeks.	1042. The Saxon line restored under Edward the Confessor.
		1048. Leo IX., the first Pope to keep an army.		
				1051. William, Duke of Normandy, visits England.
		1054. Excommunication of the Patriarch of Constantinople and the Greeks.	1054. Theodora, last of the Macedonian dynasty.	
1055	First age of scholastic philosophy.			
		1059. Quarrel between the Popes and the German Emperors.		
1062	Surnames first used among the English nobility.			
		1066. Pope Alexander II. deposes Harold, and gives England to William the Conqueror. The papacy at the height of its power.		1066. Harold II., King, killed at the battle of Hastings. William the Conqueror, King. End of the Anglo-Saxon line.
1068	Shoeing horses introduced into England.		1067. Emperor Romanus III. defeated and taken prisoner by the Turks.	

A. D.	FROM THE DISSOLUTION OF THE WESTERN EMPIRE TO THE FALL OF THE EASTERN EMPIRE — A. D. 841-1453				
	France	**Germany**	**Spain**	**Russia**	**Lesser Countries**
960	Hugh Capet, Duke of France.	964. Italy united to the Empire of Germany. Tuscany becomes a Dukedom.			973. St. Stephen, first hereditary King of Hungary. Gives it written laws.
		979. Otho at war with Lothaire.	976. Hixem, Caliph of Cordova.	981. Vladimir the Great, the first Christian ruler.	985. Sweyn I., of Denmark, invades England.
986	Louis V., last of the Carlovingians.				
987	Hugh Capet, King, and founder of the Capetian line of French kings.				
996	Robert II. succeeds his father on the throne.		998. Division of the Mohammedan Kingdom of Cordova.		
		1002. Henry II., Emperor.	1000. Sancho the Great, King of Navarre, takes the title of Emperor.		
1010	Notre Dame, Paris, rebuilt.			1015. Russia divided among the 12 sons of Vladimir.	1016. Canute II., King of Denmark.
					1019. Norway conquered by Canute. Danish ascendancy.
		1024. Conrad II., first of the Franconian line.			
1031	Henry I., King.				
1032	Burgundy annexed.		1035. Ramiro I., King of Aragon.	1036. Russia reunited by Jaroslav.	
		1039. Henry III. defeats the Bohemians and Hungarians.			
1046	Dispute between William the Conqueror and William of Arques for the Duchy of Normandy.	1053. Henry causes his son, Henry, to be proclaimed King of the Romans. This title was applied for several centuries to the Emperor's eldest son.		1054. Russia divided a second time. Civil wars and great distress.	1055. The Turks reduce Bagdad and overturn the Empire of the Caliphs.
					1059. Ingo I., first Christian King of Sweden.
					1060. Robert Guiscard, Duke of Apulia.
			1065. Alfonso, King of Castile and Leon.		1065. Jerusalem taken by the Saracens.
1066	William, Duke of Normandy, claims the crown of England and wars on Harold to obtain it.				1067. Polish conquests in Russia.
			1068. Flight of Alfonso to Toledo.		1068. Olaf III., King of Norway.

FROM THE DISSOLUTION OF THE WESTERN EMPIRE TO THE FALL OF THE EASTERN EMPIRE — A. D. 841-1453

A. D.	Arts of Civilization	Italy and the Church	Eastern Empire	The British Isles
		1070. Lanfranc, Archbishop of Canterbury.		1070. Feudal system introduced.
1073	Booksellers first heard of.	1073. Quarrel of Pope Gregory VII. (Hildebrand) with the Emperor Henry IV. 1075. The Pope sends legates to the various courts of Europe. 1076. Submission of Henry IV. to the Pope.	1074. Syria and Palestine subdued by Melek Shah.	1076. Rebellion in Normandy.
1084	Rigid police system established in England.	1084. Triumph of Henry IV. over Gregory. The order of the Carthusians instituted by Bruno.	1081. Alexius I. (Comnenus), Emperor. Robert Guiscard invades the empire and defeats Alexius.	1087. William invades France and is killed at Nantes.
1090	Fortresses at New Castle and Carlisle built.	1095. Peter the Hermit preaches against the Turks. 1096. The First Crusade.	After the capture of Jerusalem by the Turks, the Christian pilgrims are insulted and oppressed, which gives rise to the Crusades — the great struggle between Christianity and Mohammedanism. Order, learning, and commerce revive in the last quarter of this century, and the empire is feared or respected by the nations of Europe and Asia.	1093. Malcolm III., of Scotland, invades England, and is slain near Alnwick Castle.
1100	William of Poitou, first troubadour of note.	1100. Study of theology receives new impulse.	1099. Invasion by the Crusaders. 1104. Battle of Acre. 1109. Tripolis taken by Crusaders.	1100. Henry I., King of England, unites the Normans and Saxons. 1107. Henry quarrels with Anselm.
1118	Knights Templar instituted.		1118. John I. reforms the manners of his people.	
1120	Scholastic philosophy reaches a high point under Abelard. Aristotle's logic comes into repute.	1123. First Lateran, or ninth General Council. 1127. Pope Honorius II. makes war against Roger, King of Sicily.	Tyre taken by Crusaders.	1124. David I. promotes civilization in Scotland.
1140	Gratian collects the canon law.	1139. Second Lateran, or tenth General Council. 1147. The Second Crusade.	1143. Manuel Comnenus, Emperor.	
1150	Magnetic needle known in Italy.	1154. Pope Adrian IV., an Englishman.		1154. Henry II., King of England.
1158	Bank of Venice established. Colleges of theology, philosophy, and law at Paris. Woolen manufactories established in England.	1160. Waldenses and Albigenses begin to appear.	1156. Manuel forms the design of conquering Italy and the West, but fails.	1158–64. Ascendancy of Thomas à Becket, Archbishop of Canterbury.

A. D.	FROM THE DISSOLUTION OF THE WESTERN EMPIRE TO THE FALL OF THE EASTERN EMPIRE — A. D. 841-1453				
	France	Germany	Spain	Russia	Lesser Countries
1070	Rise of the troubadours in Provence.	1072. Henry IV. summoned before the Pope for selling the investiture of bishops; treats the mandate with contempt.			1070. Bergen, Norway, built.
		1073. Summoned again.			
		1076. Henry sends an ambassador to depose the Pope, and is excommunicated. Undergoes penance and submission.	1076. Time of the Cid.		
1079	Birth of Abelard.	1080. Henry degrades the Pope and triumphs.	1085. Toledo taken from the Moors by the Cid.		1084. Bohemia made a kingdom by Henry IV. of Germany.
1087	War with England. Robert, Duke of Normandy, opposes William Rufus.	1093. The Popes continue their struggle against the empire.	1086. Battle of Zalacca.		1090. Sicily taken from the Saracens by Roger the Norman.
			1094. Pedro I., King of Navarre and Aragon.		
1096	Many French noblemen take part in the First Crusade.				
			1104. Alphonso I., King of Navarre and Aragon.		1105. War between Norway and the Wends.
1108	Abbe Sugar, minister to Louis VI. of France.				
		1109. Henry V. enters Italy, takes the Pope prisoner, and compels him to crown him.			
		1114. Henry V. marries Matilda, of England.	1118. Alphonso captures Saragossa.		1119. War between Pisa and Genoa.
1120	Rivalry between England and France begins.	1125. Lothaire II. opposed by Frederick, and Conrad, Duke of Suabia.		1128. Riga on the Baltic founded.	
		1141. Dissensions of the Guelphs and Ghibellines.	1139. Portugal becomes a Kingdom under Henry of Besancon.	1147. Moscow founded.	
1147	Louis VII. joins the Second Crusade.	1152. Frederick I., Emperor of Germany and Italy.			1150. Eric X., King of Sweden.
		1158. The Emperor Frederick receives the title of King of Bohemia.	1157. Castile and Leon divided.		1158. Venice a great maritime power.
1159	War with the English.				

A. D.	FROM THE DISSOLUTION OF THE WESTERN EMPIRE TO THE FALL OF THE EASTERN EMPIRE — A. D. 841-1453			
	Arts of Civilization	**Italy and the Church**	**Eastern Empire**	**The British Isles**
		1167. Rome taken by Frederick Barbarossa.		
1168	Colleges of law, philosophy, and theology at Paris.			1172. Henry conquers Ireland.
		1178. Renewed activity of the Waldenses, forerunners of Protestantism.		
		1179. Third Lateran, or eleventh General Council.		
				1189. Richard I. engages in the Third Crusade.
1190	The Jews become the principal bankers of the world.	1190. Third Crusade.	1190. Iconium taken by Frederick Barbarossa, but afterwards restored.	1193. John attempts to seize the crown in the absence of Richard.
		1198. Power of the Pope supreme over temporal matters.		
1200	University of Bologna has 10,000 students.	1202. The Fourth Crusade. Constantinople taken.		1200. John, King of England.
1206	University of Paris founded.		1204. The Crusaders plunder Constantinople.	
1209	Period of the troubadours in France; the minstrels in England; minnesingers in Germany.			
		1215. Fourth Lateran Council, against the Albigenses.		1215. Magna Charta signed at Runnymede.
		1217. Fifth Crusade.		1216. Henry III., King.
1222	University of Padua founded.			
			1228. John of Brienne, King of Jerusalem, Emperor.	
		1243. Struggle of Pope Innocent IV. with the Emperor Frederic.		
1247	First war fleet in Spain.			1246. Henry marries Eleanor of Provence.
				1258. Famous parliament at Oxford.
			1260. Emperor Michael Palæologus recovers Constantinople.	
1261	Parliament established in England.	1265. Dominion of Italy passes to the Pope.		1265. First regular parliament. Civil War.
			1268. The Mongols invade Asia Minor and take Antioch.	
1273	First patent of nobility granted in France.	1274. Fourteenth general Council at Lyons.		
	Literature and science flourish in Spain under Alphonso the Learned.		1281. Othman establishes an independent rule in the north of Asia Minor.	1276. War between England and Wales. 1283. England and Wales united.
1285	Institution of the three great courts of law in England.			Robert Bruce and John Balliol contend for the crown of Scotland.
	Cimabue, the first of modern painters at Florence.	1296. Struggle of the Church with France.		1296. Scotland submits to England.
				1297. Scotland rebels. War between England and Scotland follows.
			1299. Othman invades Nicomedia, and establishes the Ottoman Empire.	

A. D.	FROM THE DISSOLUTION OF THE WESTERN EMPIRE TO THE FALL OF THE EASTERN EMPIRE—A. D. 841-1453				
	France	**Germany**	**Spain**	**Russia**	**Lesser Countries**
1170	Rise of the Waldenses.	1167. Rome taken by Frederick. 1174. Frederick's fourth expedition into Italy. 1176. Defeated at the Battle of Legnano.			1167. League of the Italian cities. 1171. Saladin, Sultan of Egypt, extends his dominions. Conquers Syria, Assyria, and Arabia.
1183	The peace of Constance reëstablishes the independence of the Italian republics.	1183. Italy independent by treaty of Constance.	1188. Alphonso IX., King of Leon.	1186. Incursion of Huns and Poles into Russia.	1186. Directs all his efforts against the Crusaders.
1190	Philip Augustus one of the leaders of the Third Crusade.	1190. Henry VI., Emperor and King of Italy.			1193. Battle of Ascalon. Saladin defeated. Death of Saladin.
1204	Normandy reunited to France.				1206. Genghis Khan subdues the North of China
		1212. Frederick II., Emperor.	1212. The Christians gain the Battle of Navas de Tolosa.	1213. Jurje II.	
			1217. Ferdinand, King of Castile.		1216. Tartary overrun by Genghis Khan.
1223	Louis VIII. conducts crusade against the Albigenses.			1224. Mongolian invasion, known as the "Golden Horde."	1222. Hungarian liberty assured by Charter of Andrew II.
1226	Louis IX., King.		1230. Castile and Leon united by Ferdinand III., who takes large territory from the Moors.	1236. Second Mongolian invasion. Moscow burned. 1238. Russian independence overthrown by the Tartars.	1236. Mongolian invasion of Europe under Batu Khan.
		1241. The Hanseatic League.			
1248	Louis IX. leads the Seventh Crusade.	1250. Conrad IV., Emperor.	1253. The Alhambra founded.	Khan of Kiptchak, Grand Duke.	1259. Kublai Khan builds Pekin and makes it his capital.
			1266. Henry of Castile a Roman senator.		
1267	Burgundy falls to the crown.				
1270	Louis IX. sets out on the last Crusade.	1273. Rudolph Emperor, founds House of Habsburg.	1274. Crown of Navarre passes to France.		
1276	France at war with Castile.				
			1291. James II., King of Aragon.	1290. Khan of Kiptchak wields strong rule in Russia.	1290. Wenceslas, King of Bohemia, takes Cracow.
1297	Invasion of Flanders.	1298. Adolphus, Emperor, deposed, and Albert I. enthroned.			1299. Foundation of the Ottoman Empire.

FROM THE DISSOLUTION OF THE WESTERN EMPIRE TO THE FALL OF THE EASTERN EMPIRE—A. D. 841-1453

A. D.	Arts of Civilization	Italy and the Church	Eastern Empire	The British Isles
1300	Rapid advances in civilization — revival of ancient learning — improvements in the arts and sciences — and general expansion of liberty.			1300. Silverplate used in England.
1302	Mariner's compass invented at Naples.			
1303	University Avignon.	1303. Papal power declines.	1303. Genoese control trade of Black Sea.	
1305	University Orleans.	1309. Seat of the Popes transferred to Avignon.		
1307	University Perugia.			1306. Robert Bruce proclaimed King of Scotland. War with England continued.
1308	University Coimbra.			
1311	Governmental reforms extorted from Edward II. in England.	1311. General Council at Vienna.	1320. Civil War in the Eastern Empire between the Emperor and his son.	
1326	Clocks constructed on mathematical principles.		1326. Orkhan, Sultan of the Turks, makes Prusa his capital.	1327. Peace. Independence of Scotland.
		1339. Struggle in Rome between the Colonna and the Ursini.		1338. Struggle for the French crown begins; lasts 120 years.
1340	Gunpowder used at battle of Cressy.			1346. Battle of Cressy.
1347	Manufactures and commerce improve in England.	1347. Democracy in Rome under Rienzi, last of the Tribunes.		
		1354. Rienzi killed; papal dominion restored.	1355. John Palæologus. Emperor.	1356. Edward, the Black Prince, wins the battle of Poitiers.
1361	Parliament in England receives added powers.		1373. Treaty with Murad, the Ottoman Emperor.	1376. Death of the Black Prince.
		1378. Schism of the West; Pope Urban VI. acknowledged in England; Clement VII. in France, Spain, and Scotland.		
				1384. The Scots, assisted by France, invade England.
1386	Jan Van Eyck invented oil painting.		1389. Bajazet, Sultan of the Turks.	
				1399. Henry IV., King. House of Lancaster begins.
			1402. Bajazet defeated and made prisoner by Tamerlane, at the battle of Angora.	
			1403. Solvman I., Sultan of the Turks.	1406. James I. King of Scotland.
1409	University of Leipsic founded.	1409. The Council of Pisa.		
		1414. Council of Constance.		1414. Henry V. claims the French crown.
		1416. Huss and Jerome burnt for heresy.		1415. Gains the battle of Agincourt.
				1422. Death of Henry V. Accession of Henry VI. War with France.
1425	Arts promoted in Italy.		1425. Emperor John VII. visits Italy to obtain help against the Turks.	

A. D.	FROM THE DISSOLUTION OF THE WESTERN EMPIRE TO THE FALL OF THE EASTERN EMPIRE—A. D. 841-1453				
	France	**Germany**	**Spain**	**Russia**	**Lesser Countries**
			1300. Dissensions in the Moorish state.	1300. Moscow made the capital.	
1302	First convocation of the States-general in France.				
1304	War with Flanders.	1304. Rise of the Swiss towns.			
		1306. Rudolf of Austria, Emperor.			1307. Swiss Republic founded.
		1308. Henry of Luxemburg, Emperor General insurrection in Switzerland.	1312. Alphonso XI., King of Castile and Leon.		
1315	Edict for the enfranchisement of slaves.	1314. Louis of Bavaria and Frederick of			
1316	Philip V. succeeds by virtue of the Salic law, now first established.	Austria contend for the crown.		1318. Finland invaded by Russians.	1319. The Oligarchy of Venice established.
		1322. Frederick of Austria defeated.	1327. Arrival of 200,000 Moors to assist Granada.		1326. Tamerlane born at Kesh, Tartary.
1332	Revolt of the Flemings.				
1338	War with England.				
1346	Normandy overrun by Edward of England.	1355. Promulgation of the Golden Bull.	1340. Moors defeated at Tarifa.		1353. Establishment of the Ottomans in Europe.
1356	King John defeated and taken prisoner at Poitiers. Charles, the Dauphin, Regent.				1359. Hungarian conquests on the Danube.
1360	John regains his liberty. Cedes much territory to England.	1378. Wenceslas (King of Bohemia), Emperor.	1365. War between Navarre and France.		1369. Tamerlane makes Samarcand the capital of his new Empire.
1380	Charles VI., King. Defeat of the Flemings at Rosbecq.			1380. Tartar War. Dimitri Ivanovitch checks them at the Don.	
				1382. Moscow burned.	1385. War between Austria and Switzerland.
1386	Fruitless attempt to invade England.	1394. The Emperor imprisoned at Prague.		1395. Tamerlane invades Russia. Russia under the Mongol Tartars until 1462.	1399. Invasion of India by Tamerlane.
		1400. Robert, Count of Palatine, Emperor.			
			1407. John II., King of Castile.		
1410	Civil War between Orleans and Burgundy.	1411. Sigismund (King of Hungary), Emperor.			
1415	Defeat by the English at Agincourt.				
			1416. Alphonso V., King of Aragon and Sicily.		1419. The Hussite War in Bohemia.
1422	Henry VI. proclaimed at Paris King of France and England.				
1427	Orleans besieged by the English.				

FROM THE DISSOLUTION OF THE WESTERN EMPIRE TO THE FALL OF THE EASTERN EMPIRE — A. D. 841-1453

A. D.	Arts of Civilization	Italy and the Church	Eastern Empire	The British Isles
		1429. Schism of the West ended.		
1434	Invention of printing at Mayence.			
			1444. Vladislas, King of Poland, defeated and killed by the Turks.	1444. Truce with France. Marriage of Henry to Margaret of Anjou.
1447	Library of the Vatican founded.			
1450	Flourishing period of trade in Western Europe — particularly in Flanders, or modern Belgium.	1448. Concordat of Aschaffenberg, by which the liberties of the German Church are compromised.	1448. Constantine XII., last of the Greek Emperors. 1453. Siege and capture of Constantinople by the Turks, ending the Eastern Empire.	1450. Insurrection of Jack Cade. Richard, Duke of York, claims the throne.

FROM THE FALL OF THE EASTERN EMPIRE TO THE FALL OF NAPOLEON — 1453-1815

	Arts of Civilization	Italy and the Church	Great Britain	Germany	Spain and Portugal
		1454. Struggle between Cosmo de Medici and the aristocracy.	1455. Wars of the Roses begin.	1462. The Emperor besieged in court at Vienna.	1454. Henry IV. of Castile, King of Spain.
		1458. The French rule in Genoa.			
1460	Wood engraving invented.		1460. James III., King of Scotland.		
		1463. War of Venice with the Turks.	1461. Edward IV., King. House of York.		
1464	Post-offices in France and England.				
		1469. Lorenzo de Medici succeeds Pietro at Florence.		1469. Invasion of the Turks.	1469. Marriage of Ferdinand of Aragon with Isabella of Castile.
1470	Beerhard invents the pedal to the organ.		1470. Henry VI. restored by Warwick.		
		1471. Increase of the power of the Medici. Rise of learning.	1471. Return of Edward IV. Deaths of Warwick and Henry VI.		
1473	Printed musical notes. Large library founded at Ofen.		1475. Edward IV. invades France.		
1477	Watches made at Nuremburg.	Sixtus IV., Pope.		1477. Marriage of Maximilian and Maria of Burgundy.	1479. Union of Castile and Aragon.
			1480. War between England and Scotland.		
		1492. Alexander VI., Pope.	1492. Henry VII. invades France.		1492. Conquest of Granada. Discovery of America by Columbus.
1493	Printing press at Copenhagen. Era of discovery in the New World begins.			1493. Maximilian I., Emperor.	
		1500. Partition of Naples between France and Spain.			1498. Vasco de Gama reaches India via Cape of Good Hope.
1502	St. Peter's and other great churches built.				
		1503. Naples annexed to the Spanish crown. Julius II., Pope.	1509. Henry VIII., King.		1506. Columbus dies at Valladolid.
		1511. Council of Pisa.	1512. War with France.	1512. Maximilian divides the empire into 10 circles.	
		1513. Pope Leo X. patron of literature and the arts.	1513. Battle of Flodden; James IV. killed.		
			1515. Wolsey, chancellor and cardinal.		
1517	Luther and the Protestant Reformation. Hans Sachs founds the German drama.			1517. Beginning of the Reformation.	1516. Charles, King of all Spain and the Netherlands.

FROM THE DISSOLUTION OF THE WESTERN EMPIRE TO THE FALL OF THE EASTERN EMPIRE — A. D. 841-1453

A. D.	France	Germany	Spain	Russia	Lesser Countries
1429	Saved by Joan of Arc.				
	Charles VII. crowned at Rheims.		1430. War between Castile and Granada.		
1431	Joan of Arc burned.				
		1438. House of Austria established. Albert II. (King of Bohemia and Hungary), Emperor.		1441. Kiptchak Mongols divide Russia.	1437-38. Rise of Portugal.
		1446. War with Hungary.			
					1450. Kingdom of Delhi enlarged.
			1452. Civil War in Navarre, in which Castile and Aragon join.		
1453	End of the French and English wars.	1453. Austria made an hereditary Duchy by Emperor Frederick III.			1453. Poland's independence confirmed by Diet of Petrekin.

FROM THE FALL OF THE EASTERN EMPIRE TO THE FALL OF NAPOLEON — 1453-1815

	France	Russia	Scandinavia	Ottoman Empire	Lesser Countries
					1454. Poland at war with the Teutonic Order.
				1458. Greece subjected to the Turks.	1458. Hungary vigorous under Matthias Corvinus.
1461	Louis XI., King.				
		1462. Ivan the Great takes the title of Czar.		1464. War with Hungary.	1466. Prussia a fief of Poland.
					1468. Uzun Hassan, master of Persia.
			1470. Sten Sture, Regent of Sweden.		
		1472. Ivan marries Sophia, niece of the Greek Emperor.			
1475	War between France and Burgundy.				
1477	Artois and Burgundy united to France.	1479. Great invasion of the Tartars.		1480. Otranto taken.	
		1481. Power of the Tartars annihilated.	1481. John, King of Denmark, partially acknowledged in Sweden.	1481. Bajazet II., Sultan.	
1491	Bretagne united to the crown.				1485. Matthias of Hungary takes Vienna.
				1493. War with Egypt, Hungary, and Venice.	1492. America discovered by Columbus.
1499	Conquest of Milan.				1499. Voyage of Amerigo Vespucci.
					1502. Soufi sole Sovereign of Persia.
				1505. War with Persia.	
1510	Council of Tours.	1510. Renewed Tartar invasions.			1506. Poland under Sigismund the Great.
				1512. Selim I. dethrones and puts to death his father.	1511. Cuba conquered.
			1513. Christian II., King of Norway and Denmark.	1514. Persians defeated, Kurdistan added to the empire.	1512. Florida discovered.
1515	Francis I. invades Italy.			1516. Cairo taken.	1513. Discoveries of Balboa.
					1517. First patent granted by Spain for the importation of negroes into America.

FROM THE FALL OF THE EASTERN EMPIRE TO THE FALL OF NAPOLEON — 1453-1815

A. D.	Arts of Civilization	Italy and the Church	Great Britain	Germany	Spain and Portugal
				1519. Charles V., King of Spain.	1519. Conquest of Mexico by Cortez.
				1521. Diet of Worms.	
1521	Circumnavigation of the globe by Magellan.			1529. Turks invade Germany.	
		1525. Spanish ascendancy by the victory of Pavia.			
1530	Jorgens invents the spinning wheel for flax.		1532. The King marries Anne Boleyn.		
1542	Xavier plants Christianity in India.	1540. Order of Jesuits founded by Loyola.	1535. Henry excommunicated by the Pope.		1540. Lisbon, the market of the world.
			1543. Invasion of France.	1543. Alliance with England against France.	
1545	Vasalius makes important contributions to study of anatomy.	1545. Council of Trent.	1547. Formal establishment of Protestantism. Edward VI., King.		
1548	Orange trees introduced into Europe.			1552. Treaty of Passau secures religious liberty to the Protestants.	
		1550. Julius III., Pope.	1553. Mary, Queen of England.		
			1554. Lady Jane Grey executed.		
			1555. Persecution of the Protestants.		
			1558. Elizabeth, Queen. Rise of the Puritans.	1556. Charles V. abdicates.	
1559	Carriages introduced into Paris.	1559. Termination of French wars in Italy.			
1560	Knives first made in England.			1564. Maximilian II., Emperor.	1564. Acquisition of the Philippines.
		1569. Florence a grand duchy.	1568. Mary, Queen of Scots, takes refuge in England.		1567. Duke of Alva Governor of the Netherlands.
					1570. War with Turkey. Battle of Lepanto.
1573	Titian, colorist painter, at height of fame.			1576. Rudolph II., King of Bohemia and Hungary, Emperor.	1580. Portugal passes under Spanish dominion.
			1584. Raleigh's colony in Virginia.		
		1585. Pope Sixtus V. restores the Vatican library.	1585. War with Spain.		
1586	Tobacco introduced into Europe.				
1588	First newspaper in England.		1588. Spanish Armada destroyed.		1588. Defeat of the Spanish Armada.
1590	Telescopes invented by Jansen, a German.	1592. The Rialto and Piazza di San Marco built at Venice.			
	Napier invents logarithms.		1599. Troubles with Ireland.	1594. Union of Protestants at Heilbronn.	
			1600. English East India Company chartered.		
1602	English East India Company founded.		1603. Union of England and Scotland.		
1606	Gilbert's electrical discoveries.		1607. English settlement at Jamestown.		
				1608. Protestant union under Frederick the Elector.	
		1609. Leghorn becomes the emporium of the Levant trade.			1609. Expulsion of the Moors.
1615	Coffee in Venice.				
			1617. Sir Francis Bacon, lord chancellor.		
1618	Harvey discovers the circulation of the blood.	1618. Conspiracy of Bedmar to subject Venice to Spain.		1618. Thirty Years' War begins.	
1620	Thermometers invented by Drebel.		1620. Pilgrims sail in Mayflower.	1620. Massacre of Prague.	
	Negro slavery begins in Virginia.				1621. Dutch War.
			1625. Charles I., King.		1625. Naval War with England.
1626	Kepler's laws discovered.	1626. St. Peter's dedicated.	1627. War with France.		
		1628. War following death of the Duke Mantua.		1628. Victories of Wallenstein.	

FROM THE FALL OF THE EASTERN EMPIRE TO THE FALL OF NAPOLEON — 1453-1815

A. D.	France	Russia	Scandinavia	Ottoman Empire	Lesser Countries
					1519. Spaniards, under Cortez, conquer Mexico.
			1520. Christian, King of Sweden.	1520. Soliman the Magnificent, Sultan.	
1521	First War with Charles V.		1521. Gustavus Vasa throws off the Danish yoke.	1521. Belgrade taken.	
1525	Francis defeated and taken prisoner at Pavia.				
1527	Second War with Charles V.		1523. Gustavus Vasa, King of Sweden. Union of Calmar dissolved.	1526. Invasion of Hungary.	
1532-44	Struggle for possession of Italy.	1533. Ivan the Terrible, Czar.	1532. Union of Norway and Denmark.	1529. Invasion of Germany. Siege of Vienna. 1535. Barbarossa seizes Tunis.	1533. Pizarro conquers Peru.
					1545. Mines at Potosi discovered.
1547	Henry II., King; Catherine de Medici, Queen.		1543. First standing army in Sweden.	1547. Turks invade Persia. 1551. Tripoli taken.	
1552	Fifth War with Charles V.			1552. Invasion of Hungary.	
		1554. Siberia discovered.			1556. Akbar raises the Indian Empire to its greatest splendor.
				1559. Military power of the Turks at its greatest height under Soliman.	1564. Coligny sends a colony of Huguenots to Florida.
			1560. Eric XIV., King of Sweden. War between Sweden and Denmark.		
1562	Religious liberty granted to the Huguenots. Huguenot Wars.				
			1570. Peace of Stettin.	1570. War with Venice.	
		1571. Russia devastated by the Tartars and Moscow burned.		1571. Battle of Lepanto.	
1572	Massacre of St. Bartholomew.				
1576	The Catholic League.				
1577	Sixth Religious War.				
		1578. Alliance of Sweden and Poland against Russia.	1578. Alliance with Poland.		1579. Beginning of the Republic of Holland.
					1585. Persia acquires great power under Abbas the Great.
1588	Revolt of Paris.				
1589	House of Bourbon begins with Henry IV.		1588. Christian IV., King of Denmark.	1589. Revolt of the Janizaries.	
1590	Siege of Paris raised by the Spaniards.			1595. Power in Hungary declines; revolt of Wallachia.	
1598	Edict of Nantes—toleration granted to the Protestants.	1598. Borus Godunov begins a new dynasty.			
			1604. Charles IX., King of Sweden.	1605. Revolt in Syria.	1605. Jehangir, Mogul Emperor of India.
			1611. Gustavus Adolphus, King of Sweden. War between Sweden and Denmark.	1606. Commercial treaty with France and Holland.	1609. First English envoy of the East India Company sent to India.
1610	Assassination of Henry IV.				
1614	Last assembly of the States-general.	1613. Michael Fedorovitz, Czar, founds the house of Romanoff.			
		1617. Finland ceded to Sweden.	1616. Sweden dominates the North.	1618. Great Persian victory at Shibli.	
1624	Ministry of Cardinal Richelieu.			1620. War with Poland.	
1627	War with England over the Huguenots.				

A. D.	FROM THE FALL OF THE EASTERN EMPIRE TO THE FALL OF NAPOLEON—1453-1815				
	Arts of Civilization	**Italy and the Church**	**Great Britain**	**Germany**	**Spain and Portugal**
1630	Gazettes first published in Venice.	1631. Influence of France increases.		1629. Gustavus Adolphus lands in Germany. 1632. Battle of Lützen.	
1639	Printing in America.				1639. Loss of the Japanese trade.
1640	Manufacturing in Sweden.		1642. Civil War and revolution.	1640. Frederick William of Prussia.	1640. Portugal regains independence.
1643	Conde and Turenne the greatest generals of the time.	1646. Revolt of Naples under Massaniello.	1649. Commonwealth under Cromwell. 1652. War with Holland.	1648. Treaty of Westphalia.	
1654	Air pumps invented.		1653. Cromwell, Lord Protector.		1654. Brazil recovered from the Dutch. 1655. War with England.
			1660. Charles II., King. Stuarts restored.	1657. Leopold I., Emperor.	1661. Invasion of Portugal.
1666	Canal of Languedoc built.		1666. Great fire in London.	1665. Tyrol united to Austria.	
1667	Gobelin tapestry manufactured in Paris.	1669. Candia taken from Venice. 1670. War between Genoa and Savoy.	1668. Triple alliance of England, Sweden, and Holland against France.		
1671	Foundation of the Academy of Architecture at Paris.	1676. Messina blockaded by the Dutch and Spanish fleets.	1679. Habeas Corpus act passed.	1673. War of Austria and France. 1676. General revolt of the Hungarians. 1680. Greater part of Alsace seized by France.	1673. War with France to protect Holland.
1681	Museum of Natural History founded in London.			1683. Siege of Vienna by the Turks.	
1681	Jardin des Plantes founded at Paris.		1685. James II., King. Rise of the Whigs and Tories.	1686. Buda taken after being held by the Turks 145 years.	
1687	The earliest telegraph instruments invented.	1689. Alexander VIII., Pope.	1688. Revolution. 1689. William III., King, and Mary II., Queen. War with France.	1687. Joseph I., King of Hungary.	1689. Revolt in Catalonia in favor of France.
1690	White paper first made in England.		1690. Battle of the Boyne. James defeated, returns to France.	1690. Joseph I., elected King of the Romans.	
1692	First opera in London.				1691. Incursion of the French into Aragon.
1693	Bank of England founded.	1693. Battle of Marsaglia.	1697. General peace.	1697. Victories of Prince Eugene over the Sultan Mustapha at Zenta.	
			1701. War of the Spanish succession.	1701. Hague alliance.	1701. Philip V., King.
1703	Russian newspaper established at St. Petersburg. Flourishing period of French literature.	1702. French victory of Luzzace over the imperialists. 1706. French driven from Italy by Prince Eugene.	1702. Queen Anne. War against France and Spain. 1704. Gibraltar taken by English.		1705. Barcelona taken by the Allies.

A. D.	FROM THE FALL OF THE EASTERN EMPIRE TO THE FALL OF NAPOLEON — 1453-1815				
	France	**Russia**	**Scandinavia**	**Ottoman Empire**	**Lesser Countries**
1638	Invasion of Spain.	1632. War with Poland. Poles advance to Moscow.	1632. Christina, Queen of Sweden; Oxenstiern, Regent.	1634. Murad invades Persia.	
1640	Turin taken by the French.			1637. Troubles on the Tartar frontier.	1639. Great naval victory of Van Tromp, of Holland, over the Spanish fleet at the Downs.
1643	Louis XIV., King.			Bagdad taken by the Turks.	
1648	Wars of the Fronde.		1645. Peace between Sweden and Denmark.	1645. War with Venice.	1640. Madras, India, founded.
1649	Siege of Paris.				
1653	Mazarin enters Paris in triumph.	1654. Russian victories in Poland.	1657. War between Denmark and Sweden.	1657. Alliance with Sweden against Poland.	1653. John de Witt, Grand Pensionary of Holland.
1659	Peace of the Pyrenees.		1660. Arts and sciences flourish.	1661. War with Austria.	1660. Sobieski, Polish general, wins great victory over the Tartars.
1667	War with Spain.			1662. Invasion of Hungary.	
1672	War with Holland.	1671. The Cossacks subjugated.		1672. Invasion of Poland.	1674. Sobieski, King of Poland.
1678	Peace with Holland and Spain restores tranquillity to Europe.			1678. First War with Russia.	
1680	France the most formidable power in Europe.	1682. Ivan and Peter, Czars.	1680. Diet of Stockholm.	1682. War with Austria.	
1685	Revocation of the Edict of Nantes.			1683. Defeat at Vienna.	
				1686. Russia declares war.	1686. Dekkan, India, conquered.
				1687. Revolution in Constantinople, Solyman II., Sultan.	
1688	War of the Allies against France.	1689. Peter the Great, Czar.	1693. The King of Sweden declared absolute.	1690. Recovery of Belgrade from the Austrians.	1692. Mogul power at its height in India.
1697	General peace of Ryswick between France and the Allies.	1692. First trade with China.	1697. Charles XII. begins to reign. Denmark, Poland, and Russia form an alliance against Sweden.	1699. Peace of Carlowitz. The Ottoman power broken.	Jesuits gain large influence in China.
					1695. Brussels bombarded by the French.
		1700. Peter the Great wars with the Northern Powers.	1700. Defeat of the Allies at Narva.		
1702	Invasion of Holland.		1702–6. Charles XII. sweeps Poland and Russia.	1703. Mustapha II. deposed by the Janizaries.	
	Revolt of the Huguenots.	1703. St. Petersburg founded.			
1704	Defeat at Blenheim.				1704. Stanislaus I., King of Poland.

FROM THE FALL OF THE EASTERN EMPIRE TO THE FALL OF NAPOLEON — 1453-1815

A. D.	Arts of Civilization	Italy and the Church	Great Britain	Germany	Spain and Portugal
		1707. All Spanish possessions in Italy abandoned.	1707. Act of union of England and Scotland. First united parliament of Great Britain meets.		
1709	Prussic acid discovered.		1713. Peace of Utrecht. England acquires large American possessions.	1711. Charles VI., Emperor.	
1714	Rise of commerce in Austria.	1715. Siege of Corfu raised.	1718. War with Spain.	1718. Quadruple alliance against Spain.	
		1719. Sicily invaded by the Spanish.			
1721	Inoculation for small pox introduced.		1727. George II., King of England.	1725. Alliance of Vienna, Spain, and Austria.	1725. Alliance with Austria.
			1739. War with Spain.		
1728	Behring Strait discovered.	1730. Clement XII., Pope.		1733. War of the Polish succession.	1734. Conquest of Sicily and Naples by Don Carlos.
1740	Irish linen manufactories and English steel and cutlery factories flourish.	1744. Italy invaded by the French and Spaniards.		1740. War of the Austrian succession. Maria Theresa succeeds to the hereditary States.	
		1746. French and Spaniards driven from Lombardy.	1745. Troubles in Scotland.	1745. Francis I., husband of Maria Theresa, Emperor.	1746. Ferdinand VI., King.
1750	Franklin's discoveries in electricity.		1756. Alliance with Prussia.	1756. Seven years' war — Austria and Prussia.	
1761	Potatoes first planted in France.		1762. War with Spain.	1772. Dismemberment of Poland.	
			1763. Peace of Paris.		
1767	First spinning machine in England.		1775. War with the American Colonies.		1767. Jesuits expelled from Spain.
		1773. Jesuits expelled from Rome.	1776. British army takes possession of New York. Hessians hired for service in America.	1778. War of the Bavarian succession. Bavaria seized by Germany.	
1774	Spinning-jenny invented by Arkwright. Steam engines improved by Watt and Bolton.		1781. Surrender of Cornwallis at Yorktown.		
1784	First American vessel in China. Institution for the deaf and dumb at Paris.	1782. Pontine Marshes drained.	1783. Treaty of Versailles. Independence of the United States acknowledged.		
1786	Taylor's system of stenography invented.		1786. Impeachment of Warren Hastings.	1788. The Emperor tries to control the universities.	1788. Charles IV., King.
			1793. First coalition against France directed by England.	1792. War with France. 1793. First coalition against France.	
		1796-7. Napoleon's Italian campaign.	1797. Nelson destroys French fleet near Alexandria.	1797. Napoleon's Austrian campaign.	
		1798. Roman Republic proclaimed by the French.	1798. Second coalition against France.		
			1800. Union of England and Ireland.		

A. D.	FROM THE FALL OF THE EASTERN EMPIRE TO THE FALL OF NAPOLEON — 1453-1815				
	France	**Russia**	**Scandinavia**	**Ottoman Empire**	**Lesser Countries**
		1707. Revolt of the Cossack Mazeppa.			
		1708. Charles XII. of Sweden invades Russia.			
		1709. Is defeated at Pultowa.			
1713	Peace of Utrecht — perpetual separation of the crown of France and Spain.	1714. Finland conquered.			
1715	Louis XV., King.		1715. Charles returns to Sweden.		1715. Treaty of Antwerp with Austria.
1717				1717. Turks lose Belgrade.	
1718	The Quadruple Alliance against Spain.		1718. Invades Norway and is killed at the siege of Frederikshald.		
			1720. Peace of Stockholm.		
1721		1721. Peter assumes the title "Emperor of all the Russias."			
1723				1723. Turks and Russians attempt to dismember Persia.	1723. Christians expelled from China.
1724	Congress of Cambray.				
		1725. Catharine I., Queen.			
		1726. Alliance with Austria.			
		1727. Treaty with China.			
1730		1730. Peter II., last of the male line of Romanoffs.	1730. Christian VI., King of Denmark.		
1733	The Polish succession involves France in war.			1734. Turks driven from Persia by Nadir Shah.	1733. Frederick Augustus II., King of Poland
1739					1739. India invaded by Nadir Shah, who takes Delhi.
1740	The Austrian succession.			1740. Renewed invasion of Turkey.	
			1741. Swedes driven out of Finland.		
1744	War with England and Austria.			1745. Defeat of Turks at Kars.	1744. Hostilities between the French and English in India.
1747	War with Holland.				
1756					1756. Calcutta taken by the Nabob of Bengal.
1760	Loss of all Canada.				
1762		1762. Catharine II. reigns.			
1765					1765. Establishment of the English in India.
1768		1768. War with the Ottoman Empire.			
1770	Marriage of the dauphin to Marie Antoinette.				
			1772. Despotism re-established in Sweden by Gustavus III.		
1766					1766. Power of the Mamelukes revived in Egypt under Rodvan and Ali Bey.
1774	Louis XVI., King.	1774. Revolts of the Cossacks.			
1776	Franklin in Paris.				
1778	Alliance with America.			1784. The Crimea ceded to Russia.	1774. Warren Hastings first governor-general of India.
1780	Rochambeau sent to aid the Americans.	1787. War with the Turks.		1787. Disastrous war with Austria and Russia.	1776. Lord Pigot governor-general of the East Indies.
1789	French Revolution begins. Lafayette commander of the national guard.				
1792	War with Germany. France declared a republic.		1792. Gustavus III. assassinated. Gustavus IV., King.		1794. Polish revolt at Cracow.
1793	King and Queen beheaded. Reign of Terror.				
1795	Napoleon Bonaparte commands the army.				
1796	War in Italy.	1796. Unsuccessful war with Persia.			
1797	Napoleon in Austria.				1797. Swiss revolution. Helvetian Republic declared.
1798	Expedition to Egypt.			1798. War with the French in Egypt.	
1799	Swiss campaign.				
1800	Battle of Marengo.				

FROM THE FALL OF THE EASTERN EMPIRE TO THE FALL OF NAPOLEON —1453-1815

A. D.	Arts of Civilization	Italy and the Church	Great Britain	Germany	Spain and Portugal
1801	Iron railways in England.	1802. Napoleon President of the Italian Republic.	1803. Successful war in India.	1804. The Emperor of Germany assumes the title of Emperor of Austria.	
		1805. Napoleon crowned King of Italy.	1805. Napoleon defeated at Trafalgar.		1805. Battle of Trafalgar.
1807	Fulton invents the steamboat.		1806. Fourth coalition against France.	Battle of Austerlitz.	
1808	Lithography invented.	1808. Rome annexed by Napoleon to the Kingdom of Italy.		Confederation of the Rhine.	1808. Madrid taken by the French. Joseph Bonaparte, King.
1810	First successful steamboat built in Europe.		1810. War with Sweden.	1809. Peace of Vienna.	
			1812. War with the United States.	1812. Austria in alliance with France against Russia.	1812. Battle of Salamanca.
1814	Steam carriages in England. Gas used for lighting the streets in London.	1814. Fall of Napoleon. Kingdom ceases.		1813. War of German independence.	1814. Ferdinand VII. restored.
1815	Safety lamp invented by Davy.		1815. British defeated at New Orleans. Wellington victorious at Waterloo. The Allies enter Paris, and Napoleon is banished to St. Helena.	1815. German League. Congress of Vienna.	

FROM THE FALL OF NAPOLEON TO THE PRESENT TIME

	Arts of Civilization	United States	Great Britain	Prussia	Austria
1815	The abolition of the slave trade by the Congress of Vienna.	1816. U. S. Bank incorporated.	1816. Bombardment of Algiers. The Dey compelled to abolish slavery.		
1817	Public schools established in Russia.	1817. James Monroe, President.			1817. Population, 28,000,000.
				1818. The Zollverein formed.	1818. Napoleon's son made Duke of Reichstadt.
1819	The steamship "Savannah" makes the first trip across the Atlantic.		1823. The Canning ministry. The Ashantees in Africa defeated.	1819. Death of Marshal Blücher.	
1822	Hieroglyphics deciphered by Champollion.	1821. Monroe reëlected. Missouri compromise bill passed.		1821. Congress of monarchs at Laybach. Insurrection in Moldavia and Wallachia.	
1824	Inland navigation stimulated in the United States.	1824. Visit of Lafayette.			
		1825. Erie Canal opened. Protective tariff enacted.			
1825	Steam navigation on the Rhine.	1825. J. Q. Adams, President.			
	Vast increase in periodical literature in England, France, Germany, United States, etc.	1829. Andrew Jackson, President.	1828. Wellington ministry. Irish disturbances.		
			1830. William IV., King.		
1832	Trades unions in Europe.	1831. Northeastern boundary between the U. S. and British provinces established.	Difficulties with China.		1831. Austria interferes in Italian affairs.
		1833. President Jackson reëlected.			
1835	Slavery abolished in British Colonies.	Bank deposits removed from the U. S. Bank.	1834. Robert Peel, Premier. Difficulties in Canada.	1834. Zollverein includes most of the German States.	
1836	Founding of the Smithsonian Institution.				1836. Visit of the Emperor of Russia. Ferdinand I., Emperor.
	Luxor obelisk erected in Paris.				

FROM THE FALL OF THE EASTERN EMPIRE TO THE FALL OF NAPOLEON — 1453-1815

A. D.	France	Russia	Scandinavia	Ottoman Empire	Lesser Countries
1802	Napoleon President of the Italian Republic. War with England.	1801. Alexander, Czar.	1801. Denmark and Sweden accede to the alliance between England and Russia.	1803. Insurrection of Mamelukes at Cairo.	
1804	Napoleon I., Emperor of the French.	1804. War with Persia.			
1805	Battle of Austerlitz.	1805. Russia joins the coalition against France.			1806. Louis Napoleon, King of Holland.
1807	War with Russia. Invasion of Portugal.	1807. Treaty of Tilsit.	1808. Finland invaded by the Russians.	1807. War against Russia and England.	
1809	Battle of Wagram.		1809. Charles XIII., King of Sweden.	1809. Russians defeated at Silistria.	
1810	Continental peace except with Spain.				
1812	Russian campaign.	1812. Invasion of Napoleon. Moscow burned.		1813. Servia invaded by Turkish army.	1812. The Poles declared a nation by Napoleon. Diet of Warsaw.
1814	Allies enter Paris. House of Bourbon restored.		1814. Union of Sweden and Norway as two kingdoms under one monarch.	1814. Malta falls to England.	American war with England.
1815	Napoleon returns from Elba. Hundred days' war. Battle of Waterloo and defeat of Napoleon. Abdication of Napoleon.	1815. The Holy Alliance formed.			1815. William I., King of the Netherlands.

FROM THE FALL OF NAPOLEON TO THE PRESENT TIME

	France	Spain and Portugal	Italy and Greece	Russia	Lesser Countries
		1815. Union of Portugal and Brazil under John VI.	1815. Kingdom of Two Sicilies restored.	1815. Poland united to Russia.	1816. Lord Amherst's unsuccessful mission to China.
		1817. Slave trade abolished.			1817. The Mahratta power completely overthrown in India by the British.
1818	France joins in Holy Alliance.				
				1819. Establishment of military colonies. Liberty of the press in Poland nullified.	1819. Bolivar, President of Colombia, South America. Peru and Guatemala independent. Brazil independent.
1821	Death of Napoleon at St. Helena.		1821. Austrian invasion of Italy.		
			1822. Greek revolution. Declaration of Independence.		1822. Iturbide, Emperor of Mexico.
1824	Charles X., King.				
1830	Algiers taken by the French. Revolution and abdication of Charles X. Louis Philippe, King.		1825. Death of Ferdinand, after reign of sixty-six years.	1826. Nicholas I. crowned at Moscow. War against Persia.	1826. Missolonghi taken by the Turks.
			1827. Treaty between Russia and Turkey respecting Greece.		1829. Venezuela independent.
		1830. Salic law abolished.		1830. War against Poland.	1830. Polish struggles for nationality.
1831	Abolition of hereditary peerage in France.	1833. Isabella II., Queen of Spain. Don Carlos claims the throne.	1832. Kingdom of Greece founded.	1832. Poland made part of empire.	1831. Leopold I., King of the Belgians.
1834	Death of Lafayette.	Portugal a constitutional monarchy.			1833. Santa Ana, President of Mexico.
1836	Insurrection attempted by Louis Napoleon at Strasburg.	1834. The Carlist War.			1836. Decree to expel all British and other foreigners from China.

A. D.	FROM THE FALL OF NAPOLEON TO THE PRESENT TIME				
	Arts of Civilization	**United States**	**Great Britain**	**Prussia**	**Austria**
1837	Morse patents the telegraph invented by him in 1832.	1837. Independence of Texas acknowledged. Martin Van Buren, President.	1837. Victoria, Queen.		1838. Commercial treaty with England.
1840	Wheatstone's telegraph patented in England.		1840. War with China over the opium trade. War in Syria; Great Britain an ally of Austria and Turkey.	1840. Frederick William, King.	
		1841. W. H. Harrison, President. Death of Harrison and succession of John Tyler.	1841. Chinese War ended.		
		1844. Treaty with China.	1844. Daniel O'Connell's trial. Sentence reversed by the House of Lords.		
1845	Lord Rosse's telescope completed. Gutta-percha used.	1845. Texas annexed to the U. S. James K. Polk, President.			
1846	Sewing machine patented.	1846. War with Mexico. The Oregon Treaty with Great Britain, settling the Northwestern boundary of the United States.	1846. Repeal of the English corn laws.		
1847	Great canal from Durance to Marseilles completed. Railroad building in Germany.		1847. Severe famine in Ireland.		1847. Austria takes possession of Cracow.
1848	Girard College opened.	1848. Treaty of Guadalupe Hidalgo ends Mexican war. Gold discovered in California. 300,000 immigrants arrive this year.	1848. Civil War in Ireland. Habeas Corpus Act suspended.	1848. Insurrection in Berlin.	1848. Revolution in Hungary. Francis Joseph, Emperor. Kossuth withdraws his army from Vienna.
1849	Tubular bridge in Anglesea, England. Magnetic clock invented by Dr. Locke of Cincinnati.	1849. Zachary Taylor, President. Railroad from Boston to New York.	1849. Multan in India taken.	1849. The King declines the imperial crown. Armistice between Prussia and Denmark.	1849. New constitution promulgated.
1850	Great agitation on slavery in United States. The Pekin "Monitor," a new paper, printed in China. Woman's Rights convention at Worcester, Mass.	1850. Attempted invasion of Cuba by filibusters. Death of President Taylor; Millard Fillmore, President. Texas boundary settled. Fugitive Slave Law passed.	1850. The war in Lahore ended. The Punjab annexed to the British Crown. Death of Sir Robert Peel. English forces defeated in South Africa by the Kafirs.	1850. Hanover withdraws from the Prussian alliance. Hesse-Darmstadt withdraws. Treaty of peace with Denmark. New Constitution for Prussia.	
1851	Daguerre makes important contributions to photography. Railway between Moscow and St. Petersburg opened.	1851. Erie Railway opened. Charleston Convention. Vigilance committee organized in California.	1851. Continuance of the Kafir War. Kossuth visits England.		1851. Louis Kossuth sentenced to death at Pest.
1852	Telegraphs across the English Channel.	Kossuth arrives in New York.			1852. Emperor of Austria visits Emperor of Prussia at Berlin.
1853	First Norwegian railway opened. Perry's expedition to Japan.	1853. Franklin Pierce, President. Gadsden Purchase.	1853. Kafir War ended. Queen Victoria visits Ireland.	1853. Plot to overthrow the government.	

A. D.	FROM THE FALL OF NAPOLEON TO THE PRESENT TIME				
	France	**Spain and Portugal**	**Italy and Greece**	**Russia**	**Lesser Countries**
1838	Death of Talleyrand.	1837. The monasteries in Spain dissolved.		1838. Smuggling carried on extensively.	1839. Turkey at war with Egypt. 1840. William I. abdicates as King of Holland.
		1842. Insurrection in Barcelona.	1843. King Otho of Greece compelled to accept a constitution.		1842. Insurrection in India.
1844	War with Morocco.			1845. Emperor visits England.	
		1846. Marriage of Isabella to the Duke of Cadiz. Civil War in Portugal.			1847. Soulouque, President of Hayti
1848	Abdication of Louis Philippe, and a republic proclaimed. Louis Napoleon, President. Bloody insurrection in Paris.		1848. Rising of the great Italian cities in revolution. Italian revolution. Roman republic overthrown.		1848. Holland receives a constitution. Insurrection in Ceylon. Hungary declared independent.
			1849. Catania, Syracuse, and Palermo taken by assault. Mazzini's proclamation of provisional government.	1849. Aids Austria in subduing Hungary.	
1850	Jerome Bonaparte, Field-Marshal.		Victor Emmanuel, King. Rome surrenders to the French; Garibaldi leaves city. Bourbon rule begins.	1850. Harbor of Sebastopol completed.	1850. Death of Emperor Tau-Kwang of China Battle of Idstedt, Denmark.
		1851. Death of Godoy, "Prince of Peace."			1851. Discovery of gold in Australia. 1851. Disturbances in south of China.
1852	Louis Napoleon declared Emperor.				1852. Buenos Ayres taken by the liberating army. War between the Turks and Montenegro.
				1853. War declared against Turkey.	1853. Turkish-Russian War.

A. D.	FROM THE FALL OF NAPOLEON TO THE PRESENT TIME				
	Arts of Civilization	**United States**	**Great Britain**	**Prussia**	**Austria**
1854	Commercial treaty between United States and Japan. First railway in Brazil.	1854. Treaty with Japan. Kansas-Nebraska bill passed. Ostend Manifesto issued.	1854. Crimean War. Treaty of alliance with France.	1854. Treaty with Austria, offensive and defensive.	1854. Alliance with England and France.
1855	Panama railway completed. Bessemer's steel process patented.	1855. Panama railroad completed. Troubles in Kansas.	1855. British fleet bombards and partially destroys Canton, China.		
1856	Submarine telegraph laid from Cape Breton to Newfoundland. Dudley Observatory inaugurated at Albany, N. Y.				1856. Hungarians granted amnesty.
1857	Peabody Institute founded at Baltimore.	1857. Dred Scott decision. James Buchanan, President. Great financial panic.	1857. Rebellion in India begins. King of Delhi proclaimed Sovereign of India.		
1858	Great Eastern launched at London. Laying of the Atlantic telegraph. Boston Public Library opened.		1858. Completion of the Atlantic telegraph cable.		
1859	Telegraph communication between India and England.	1859. John Brown captures Harpers Ferry.			1859. War with France and Sardinia. Austrians defeated at Montebella. Peace after Battle of Solferino. Death of Prince Metternich.
		1860. South Carolina passes ordinance of secession.	1860. Rebellion in India subdued. Neutrality proclaimed during the American Civil War.		
1861	International exhibition at London.	1861. Secession of Southern States, and establishment of the Confederate States under Jefferson Davis. Opening of the Civil War, 1861–65. Abraham Lincoln, President.		1861. William I., King.	1861. New Constitution for the Austrian monarchy. Civil and political rights granted Protestants.
				1862. Bismarck, Premier.	1862. Amnesty to political offenders in Hungary.
1863	Abolition of slavery in the United States.			1863. King resolves to govern without parliament.	
1864	Convention between France, Brazil, Italy, Portugal, and Spain for telegraph to America.	1865. Assassination of President Lincoln; Andrew Johnson, President.	1865. Fenian outbreaks in Ireland. British and French governments rescind their recognition of the Confederate States of America.	1864. War with Denmark.	1864. Alliance with Prussia against Denmark.
1866	Atlantic telegraph successfully completed.	1866. Civil Rights bill passed. Atlantic telegraph completed.		1866. Prussia prepares for war with Austria. Battle of Sadowa. Hanover annexed. First parliament of the German Confederation.	1866. War with Prussia and Italy.
1867	Great Exposition at Paris.	1867. General amnesty proclamation.		1867. North German constitution accepted.	1867. Autonomy for Hungary announced. Emperor crowned King of Hungary.
1868	Suez Canal formally opened.	1868. Burlingame Treaty with China.			

A. D.	FROM THE FALL OF NAPOLEON TO THE PRESENT TIME				
	France	**Spain and Portugal**	**Italy and Greece**	**Russia**	**Lesser Countries**
1854	War declared against Russia.	1854. Military insurrection under O'Donnell.		1854. War with France and England. Siege of Sebastopol. Battle of Balaklava.	
			1855. Important concordat between Italy and Austria.	1855. Death of Nicholas I. Alexander II., Emperor.	1855. Santa Ana abdicates the presidency of Mexico.
1856	Peace with Russia.			1856. Destruction of Sebastopol docks. Evacuation of Crimea	
					1857. Mexican constitution promulgated.
				1858. Partial emancipation of the serfs.	1858. Massacre of Christians in Turkey. Suez Railroad completed.
1859	War with Austria.	1859. War with Morocco.	1859. War with Austria.		
1860	Commercial treaty with England.	1860. Defeat of the Moors.	1860. Garibaldi lands in Sicily, and assumes dictatorship. Sicily and Naples annexed to Sardinia.		
		1861. Annexation of St. Domingo. Intervention in Mexico.	1861. Victor Emmanuel, King of Italy.		1861. Canton restored to the Chinese by the French and English.
1862	Great distress caused by American Civil War.		1862. Garibaldi establishes a provisional government. Insurrection in Greece.	1862. Nesselrode, Chancellor.	
1863	The French occupy Mexico.			1863. Termination of Serfdom.	
1864	Maximilian accepts Mexican crown.	1864. Rupture with Peru.	1864. Florence made the capital of Italy. Ionian Isles made over to Greece.	1864. Emigration of Caucasian tribes into Turkey.	1864. Nankin, China, taken for the Imperialists. Valparaiso bombarded by Spanish fleet.
1865	Death of Proudhon.	1865. Dispute with Chile.			
		1866. Military insurrection headed by General Prim.	1866. Austrian War. Venetia proclaimed a part of Italy.	1866. Inauguration of trial by jury. War with Bokhara.	
1867	Great Exposition in Paris.	1867. Death of Marshal O'Donnell.	1867. Garibaldi and the Papal States.	1867. Russian America sold to the United States.	1867. City of Mexico evacuated by French troops. Egypt declared by the Sultan to be a separate sovereignty. Execution of Maximilian in Mexico.
		1868. Queen deposed.			

A. D.	FROM THE FALL OF NAPOLEON TO THE PRESENT TIME				
	Arts of Civilization	**United States**	**Great Britain**	**Prussia**	**Austria**
1869	French Atlantic telegraph completed.	1869. U. S. Grant, President.			
1870	Railway from Calcutta to Bombay. Mount Cenis tunnel completed.	Union Pacific Railway opened for traffic.	1870. Irish Land Act passed.	1870. War with France.	1870. Concordat with Rome suspended.
				Germany	
				1871. William I., of Prussia, Emperor.	1871. New German Empire recognized.
1873	Japan adopts European calendar.		1873. Alabama claims paid.		
1876	Centennial Exposition at Philadelphia. Telephone invented by Bell.	1877. R. B. Hayes, President.	1876. Queen Victoria proclaimed Empress of India.	1877. Attempted assassination of Emperor.	1878. Occupation of Bosnia.
		1881. J. A. Garfield, President; assassinated, July 2d; C. A. Arthur, President.	1882. Attempt on life of Queen Victoria.		1882. 600th anniversary of the House of Habsburg.
1884	First electric street cars, Cleveland, O.				
1885	Revised version of the Old Testament published.	1885. Grover Cleveland, President. Apache Indian War.	1887. Queen's Jubilee.		1886. Army put on war footing of 1,500,000 men.
1888	Typesetting machines perfected. Pasteur discovers cure for hydrophobia.	1889. Benjamin Harrison, President.	1889. Great labor strikes.	1888. William II., Emperor.	
1890	Polygamy abolished in Utah.	1890. McKinley Tariff bill passed.	1890. Stanley returns from Africa.	1890. Bismarck resigns.	
1893	World's parliament of religions at Chicago. Electrical measurements established.	1893. Grover Cleveland, President. World's Columbian Exposition at Chicago.	1893. Bering Sea arbitration. 1894. Manchester ship canal opened.	1893. Anti-Jesuit law repealed. 1894. Commercial treaty with Russia.	1894. Commercial treaty with Russia.
1895	Lick refracting telescope made by Clark. Discovery of X-Rays.			1895. Kiel Canal opened.	1895. Anti-Semitic agitation.
1897	Universal Postal Congress at Washington.	1897. William McKinley, President.	1897. Queen's Diamond Jubilee celebrated.	1896. New civil code completed.	1896. Archduke Karl Ludwig, heir to the throne, dies.
1898	Reform edict issued in China.	1898. Destruction of the "Maine." War with Spain.	1898. Irish local government bill passed.	1898. Emperor visits Jerusalem.	1898. Assassination of the Empress.
1899	"Open-door" policy for China.	1899. Cuba, Porto Rico, Philippines, acquired.	1899. The Boer War in South Africa.		
1900	Opening of the Elbe and Trave Canal, Germany.	1900. Civil government in Philippines.	1900. Roberts commands in South Africa.	1900. Abolition of Roman Law.	1900. Marriage of Francis Ferdinand.
		1901. Assassination of McKinley. Roosevelt, President.	1901. Death of Victoria; accession of Edward VII.	1901. Prussian royalty celebrates bicentenary.	
1902	Marconi wireless system established.	1902. Cuban independence.	1902. Japanese Alliance.	1902. Prince Henry visits U. S.	1902. TripleAlliance renewed.
1903	Completion of the Pacific Cable.	1903. Canal treaty with Panama.	1903. King visits Italy.		
1904	New York subway opened.	1904. St. Louis Exposition.	1904. Younghusband enters Tibet.	1904. Defeats in Africa.	1904. Ultimatum to the Sultan.
1905	Power plants erected at Niagara Falls.	1905. Protocol with Santo Domingo.	1905. Minto, viceroy of India.	1905. Moroccan intervention.	1905. Treaty with Germany.
1906	Simplon Tunnel. Pan-American conference meets.	1906. Earthquake at San Francisco.	1906. Edward VII. visits Paris.	1906. Propaganda against Socialism.	
1907	Lusitania's first voyage.	1907. Philippine Assembly opened.	1907. Edward VII. at Ischl.	1907. William II. in London.	1907. Universal Suffrage Bill.
1908	Transmutation of metals by radium.	1908. Pacific fleet in Asiatic waters.			1908. Bosnia and Herzegovina acquired.
1909	Discovery of North Pole announced.	1909. Wm. H. Taft, President.	1909. Czar visits England.		
1910	Woman's suffrage movement grows.	1910. Fisheries dispute settled.	1910. George V., king.	1910. Roosevelt reviews army.	
1911	Amundsen discovers South Pole.	1911. Canadian reciprocity fails.	1911. Coronation of George V.	1911. Moroccan disagreement.	1911. Austria increases army.
1912	Titanic disaster. Scott at South Pole.	1912. Progressive party organized.	1912. Minimum wage bill.	1912 Moroccan adjustment.	
1913	Wireless messages across Atlantic.	1913. Woodrow Wilson, President. Currency law.	1913. Objects to Panama Canal tolls.	1913. Imperator launched.	1913. New Hungarian cabinet.

A. D.	FROM THE FALL OF NAPOLEON TO THE PRESENT TIME				
	France	**Spain and Portugal**	**Italy and Greece**	**Russia**	**Lesser Countries**
1869	New Constitution.		1869. Vatican Council.		
1870	War declared against Prussia.	1870. Amadeus, King.			1870. Fenian raid in Canada.
1871	Capitulation of Paris. Peace ratified.	1871. Sagasta, Premier.	1871. Rome made Capital of Italy.	1871. Telegraph between Russia and Japan.	1871. Military revolt in Mexico suppressed.
1873	Marshal MacMahon, President.			1873. Khiva captured.	1872. Attempt to assassinate the Mikado of Japan.
1874	Death of Guizot.	1874. Alfonso XII., King. 1875. Civil War.			1874. Insurrection at Nagasaki, Japan.
				1877. War against Turkey.	
1879	Jules Grevy, President.		1878. Humbert, King. Leo XIII., Pope.	1878. Spread of Nihilism.	1878. Montenegro, Servia, and Rumania independent.
1881	Protectorate over Tunis.	1881. Sagasta again minister.	1882. Triple Alliance formed.	1881. Alexander III., Czar.	1882. Opening of the St. Gotthard Railway.
1883	Madagascar occupied.				
1884	War with China.				
			1885. War with Abyssinia.	1885. Cronstadt canal opened.	
1887	Sadi Carnot, President.		1887. Crispi, Premier.	1886. Russia interferes in Bulgaria. 1888. Central Asian railway opened.	1886. Upper Burmah annexed to British India.
1890	War with Dahomey.	1890. Castillo, Premier.		1890-92. Famine throughout the country.	1890. First Japanese parliament opened.
1892	Panama scandals.		1891. Triple Alliance renewed.		
		1893. War with Morocco.	1893. Pope's Jubilee.		1893. Kruger, President of the Transvaal.
1894	Casimir-Perier, President. Dreyfus tried; imprisoned.			1894. Nicholas II., Czar.	1894. War between China and Japan.
1895	Felix Faure, President. Death of Pasteur.			1895. Persecution of the Jews.	1895. Cecil Rhodes prominent in South Africa. Federation of Australia approved.
			1896. Peace with Abyssinia.		1896. Jameson raid in South Africa.
1897	Ten-hour law for railway employees passed.	1897. Assassination of Castillo.		1897. First official census.	1897. Turko-Grecian War.
1898	Review of Dreyfus case.	1898. Spanish-American War.	1898. Pope offers mediation in Cuba.	1898. Port Arthur leased from China.	1898. Hawaii annexed to the United States. Wilhelmina, Queen of Holland.
				1899. Czar proposes universal peace.	1899. Venezuela-Guiana boundary fixed.
			1900. Victor Emmanuel III., king.		1900. Outbreak of the Boxers in China.
1901	Diplomatic relations with Turkey suspended.			1901. Tolstoi excommunicated.	1901. Submission of China to the allied powers.
1902	M. Combes forms a new French ministry.	1902. Alfonso XIII., King.			1902. Venezuelan claims pressed by England and Germany.
1903	Dreyfus declared innocent.		1903. Pope Pius X.		1903. Peter I., King of Servia.
1904	Important foreign treaties.	1904. Death of Ex-Queen Isabella at Paris.	1904. General strike in Italy.	1904. War with Japan.	1904. Death of Paul Kruger, in Switzerland.
1905	Moroccan situation complex.		1905. Railway bills in Italy.	1905. Constitution granted.	1905. Separation of Norway and Sweden.
1906	Fallières, President.	1906. Marriage of Alfonso XIII.	1906. Exhibition at Milan.	1906. First Russian Duma opens.	1906. Christian IX. of Denmark dies.
1907	French occupation of Morocco.	1908. Manuel II., king of Portugal.	1907. Italo-Argentine treaty.	1907. Third Duma convenes.	1907. Gustaf V., king of Sweden.
					1909. Abdication of Abdul Hamid II.
1910	Railway strike suppressed.	1910. Portugal a republic.	1910. New Greek constitution.	1910. Cholera epidemic.	1910. Japan annexes Korea.
1911	Madame Curie receives Nobel prize.	1911. Arriaga, president of Portugal.	1911. Italo-Turkish war.	1911. Treaty of 1832 abrogated by U.S.	1911. Diaz overthrown in Mexico.
1912	Morocco made a protectorate.	1912. Franco-Spanish treaty.	1912. Greco-Turkish War.	1912. Russia increases navy.	1912. China a republic. War in the Balkans.
1913	M. Poincaré, President.	1913. Attempts on life of Alfonso XIII.	1913. Constantine, king of Greece.	1913. Council abolishes serf class.	1913. Madero of Mexico assassinated. Balkan war closes.

A. D.	FROM THE FALL OF NAPOLEON TO THE PRESENT TIME				
	Arts of Civilization	**United States**	**Great Britain**	**Germany**	**Austria**
1914	Financial panic—stock exchanges in principal cities closed. First use of aeroplanes in warfare. Records in aviation.	1914. Panama canal opened. Repeal of Panama canal tolls. U. S. proclaims neutrality in European war. Inauguration of federal reserve banks.	1914. Welsh disestablishment bill passed. Irish home rule bill, law. War with Germany, Austria, Turkey. Egypt, protectorate.	1914. War with Russia, France, Belgium, England, Servia, Montenegro, Japan.	1914. Assassination of Franz Ferdinand and wife. War with Servia, Russia, Montenegro, France, Great Britain, Japan, Belgium.
1915	Trans - continental telephone in U. S. Sinking of Falaba, Lusitania, Arabic, Ancona, Persia, by submarines. Voice transmitted by wireless telephone from Arlington, Va., to Honolulu, 4900 miles.	1915. Panama-California exposition, San Diego. Panama-Pacific exposition, San Francisco. Sinking of the Frye; sinking of the Gulflight.	1915. War continues. New coalition ministry. Battles of Ypres and Loos. Dardanelles campaign. War with Bulgaria.	1915. Germany declares waters around British Isles war zone. War with Italy. Iron currency issued.	1915. Przemysl taken by Russians. Italy declares war on Austria-Hungary. Przemysl recaptured by Austrians.
1916	Marseilles-Rhone canal completed. Alaskan railway building. Polyvalent antiseptic discovered.	1916. National preparedness. Wilson reëlected President. U. S. sends peace note to warring nations.	1916. Compulsory military service bill. Lloyd George, Prime Minister. War Council formed.	1916. Siege of Verdun fails. Rumania conquered. Proposes peace conference.	1916. Death of Emperor Francis Joseph. Charles I, Emperor.
1917	American Red Cross secures $100,000,000 for relief work. Greatly extends service. National war work council of American Y. M. C. A. organized. Fund of $50,000,000 raised for extension work. Lake Washington ship canal, Seattle, opened.	1917. Declares war on Germany. Congress votes seven billions for war. Allied missions visit United States. Navy joins Allied warfare against submarines. Expeditionary army sent to France.	1917. Important gains on the French front. Woman suffrage for Great Britain. Victories in Mesopotamia. Allenby captures Jerusalem.	1917. Bethmann-Hollweg resigns. Michaelis chancellor. Von Hertling chancellor. Strikes in Krupp works. Eight countries declare war on Germany.	1917. Great unrest in Bohemia and Hungary. Italians driven back to Piave river, Austrian losses heavy. Cabinet changes.
1918	Concrete ocean - going ships built. American Red Cross raises $165,000,000 by subscription for overseas and home service funds. Wireless telephony adapted to directing of airplanes. $200,000,000 secured in America for United War Work Fund.	1918. Pershing tenders entire American army to Foch. Americans capture Cantigny. Marines block German advance on Paris at Chateau Thierry. Pershing's forces capture St. Mihiel. Americans win great battle of the Argonne-Meuse.	1918. Germans crush Gough's army. Naval raids block Zeebrugge. Haig defeats Germans on the Somme. Haig breaks Hindenburg line. German fleet surrenders to Adm. Beatty.	1918. Ludendorff's army breaks British line in Picardy. Ludendorff's armies decisively defeated. Armistice signed. William II. abdicates. Allied armies occupy Rhine.	1918. Italian counter - offensive destroys Austrian armies. Truce with Italy signed. Charles I. abdicates. Separation of empire into racial groups. Czecho-Slovaks form a republic.
1919	$100,000,000 voted by United States Congress for famine relief in Europe. Hoover made director-general of international relief. Airplane flights across the Atlantic.	1919. President Wilson advocates League of Nations before the Peace Conference at Versailles. Versailles Peace Treaty defeated in senate.	1919. Lloyd George leads British delegates at Peace Conference. Lady Astor elected to parliament.	1919. New constitution adopted. Ebert president. Peacetreaty signed.	1919. Monarchial demonstrations in Budapest. Rumanians invade Hungary.
1920	First assembly of the League of Nations at Geneva, Switzerland.	1920. Peace Treaty again fails of ratification. Mandate for Armenia declined. Troops withdrawn from Siberia.	1920. Sinn Fein activities in Ireland. Mandate for Palestine accepted.	1920. Attempted militarist revolution fails. Restoration of Louvain begun.	1920. Acute food shortage. Renner cabinet resigns. China ratifies peace treaty.
1921	Rebuilding of Louvain library. New high altitude record by airplane 40,800 feet. Hoover commission for famine relief in Russia.	1921. International Arms Conference at Washington. Peace treaty with Germany ratified.	1921. Uprisings in India. Empire party wins in South Africa. Irish Free State Treaty approved.	1921. Payment of reparations deferred. Treaty with United States ratified.	1921. Critical financial conditions. Territory dispute with Hungary.

A. D.	FROM THE FALL OF NAPOLEON TO THE PRESENT TIME				
	France	**Spain and Portugal**	**Italy and Greece**	**Russia**	**Lesser Countries**
1914	War with Germany, Austria, Turkey. Paris prepares for siege. Battle of the Marne. Battle of the Aisne.	1914. Spain and Portugal neutral in European war.	1914. Italy proclaims her neutrality. Death of Pope Pius X. Pope Benedict XV. Italian cabinet resigns. Greece remains neutral.	1914. War with Germany, Austria, Turkey. St. Petersburg changed to Petrograd.	1914. Chinese parliament dissolved. New constitution for China. Servia, Belgium, Montenegro, Japan, at war with Germany, Austria, Turkey. Turkey closes Dardanelles. Japan seizes Kiaochow.
1915	War continues. War with Bulgaria.	1915. Revolution in Portugal. Spanish cabinet resigns.	1915. Earthquake in Italy. Italy at war with Austria, Germany, Turkey, Bulgaria.	1915. War continues. Evacuation of Warsaw. War with Bulgaria.	1915. Allies attack Dardanelles. Massacre of 800,000 Armenians. Bulgaria makes war on Servia. China becomes empire.
1916	$15,000,000 loan from New York financiers. Siege of Verdun successfully resisted. Battle of the Somme. Nivelle field-commander.	1916. Portugal seizes Austrian and German vessels. War on Portugal declared by Germany.	1916. Italian troops in the Balkans. Italians capture Gorizia. Provisional government in Greece.	1916. Russians capture Erzerum, Turkey. Brusiloff regains territory in Galicia.	1916. Allies withdraw from Dardanelles. Rumania at war with Teutonic powers. China again republic. Denmark ratifies sale of Danish West Indies to U. S.
1917	Germans in retreat destroy rich territory. Clemenceau premier. Joffre heads mission to United States. Great battle at Chemin des Dames. Allied war council held in Paris.	1917. Reform agitation in Spain. Martial law in all Spain. Changes in Spanish Cabinet. Portugal pushes war in Africa; sends army to Belgian front.	1917. Italy loses all gains in the Trentino. Pope's peace offer fails. Constantine abdicates the Greek throne. Alexander king. Venizelos premier.	1917. Nicholas II. abdicates. Kerensky premier. Bolsheviki gain power. Finland declares independence. Peace conference at Brest-Litovsk.	1917. Cuba, Panama, Siam, Liberia, Brazil, and China declare war against Germany. Bolivia, Costa Rica, Guatemala, Hayti, Honduras, Nicaragua, Peru, and Uruguay sever diplomatic relations with Germany. Kingdom of Hedjaz proclaimed.
1918	Terrific German attacks to separate French and British armies. Foch commander-in-chief of all allied forces. Germans again reach the Marne. Great American army arrives. Allied offensive maintained on all fronts until Teutonic powers are overthrown.	1918. Portuguese divisions on Franco-Belgian front overwhelmed by German attack. Paez, president of Portugal, assassinated. Monarchists endeavor to assume power in Portugal.	1918. Austrian drive successfully blocked. Greece cooperates in overthrow of Bulgaria. Italian armies under Diaz completely destroy military power of Austria.	1918. Bolsheviki sign separate peace granting Germany immense territory and indemnity. Polish, Czecho-Slovak and other governments opposed to Bolsheviki formed.	1918. Guatemala, Costa Rica, Nicaragua, Honduras, and Hayti declare war against Germany. Japan cooperates with Allies in sending troops into Siberia. Bulgaria, defeated at Cerna-Vardar, surrenders to the Allies. Turkey, overthrown in Palestine, surrenders to the British.
1919	Premier Clemenceau chosen to preside over International Peace Conference at Versailles. Immense efforts toward reconstruction.	1919. Monarchial uprisings in Portugal fail to restore Manuel II to the throne. Spain seeks South American trade.	1919. Orlando leads Italians at Peace Conference. D'Annunzio seizes Fiume.	1919. Lenine-Trotzky régime contested by Poles, Czecho-Slovaks and other anti-Bolshevik groups.	1919. Paderewski forms provisional government in Poland. Jugo-Slavs oppose Italian claims to Dalmatia. Rumanian armies overrun Hungary.
1920	Retirement of Clemenceau. Deschanel president, Millerand president. Mandate for Syria accepted.	1920. New cabinet under Dato in Spain. Premier Preto of Portugal resigns.	1920. New Italian cabinet under Giolitti. Constantine recalled to throne of Greece.	1920. Bolshevik power grows. Armies win in Siberia and Ukrainia.	1920. Turks resist Allies' peace terms. Armenian republic recognized. Adrianople taken by the Greeks.
1921	Briand, premier. Growth of communist party. Treaty with Kemal Pasha. Foch, Briand, and Viviani visit the United States.	1921. Uprising in Spanish Morocco. Political disturbances in Portugal.	1921. Fascisti movement in Italy against communists and socialists. Greece at war with Turks.	1921. Extensive industrial demoralization. Severe famine prevails.	1921. Alliance between Jugoslavia and Czecho-Slovakia (*Little Entente*). Aland islands awarded to Finland by the League of Nations.

HISTORICAL OUTLINE OF THE NEW WORLD

I. SEMI-HISTORICAL PERIOD—500 TO 1400 A. D.
II. PERIOD OF AUTHENTIC HISTORY—1400 A. D. TO THE PRESENT TIME

A. D.	
500	Pre-Toltec period.
503	Mexican history begins.
600	Toltecs established throughout Mexico.
861	The Norseman, Nadodd, discovers Iceland.
982	Eric the Red discovers and names Greenland.
985	Bjarni sights land at Cape Cod or Nantucket.
1000	Leif Ericson sails for Western lands.
1002	Thorwald, Leif's brother, visits Vinland.
1004	Thorwald killed in a skirmish with the natives.
1005	Thornfinn Karlsefne lands in Rhode Island.
1050	End of Toltec power in Mexico.
1090	Aztecs begin their journey toward Mexico.
1325	Aztecs found the City of Mexico.
1349	Esquimaux appear in Greenland.
1400	Communication with Greenland ceases.

DISCOVERY, EXPLORATION, AND CONQUEST FROM 1492 TO 1600 A. D.

1492	Columbus sails from Palos, Spain, and discovers Cuba.	1521. Cortez captures the City of Mexico; Mexico constituted a Kingdom.
1493	Columbus sails on his second expedition.	1524. Verrazzano enters the Bay of New York.
	Cattle first brought to America.	1528. Spaniards land in Florida.
1494	Columbus discovers Jamaica.	1534. Jacques Cartier enters Gulf of St. Lawrence.
1497	John Cabot discovers the North American continent.	1535. Grijalva's expedition discovers California.
		1540. De Soto conquers Louisiana.
1498	Columbus sails on his third voyage.	1562. Jean Ribault explores coast of Florida.
1499	First voyage of Amerigo Vespuccius.	1565. St. Augustine, Florida, founded by Menendez.
1500	Gaspar Cortereal discovers Labrador.	1583. Sir Humphrey Gilbert takes possession of Newfoundland.
1502	Columbus sails on his fourth voyage.	
1504	Cape Breton discovered by French fishermen.	1584. Raleigh's first expedition lands in Virginia.
1511	Velasquez subjugates Cuba; Havana founded.	1585. John Davis discovers Davis Straits.
1512	Florida discovered by Juan Ponce de Leon.	1586. Sir Francis Drake visits Roanoke Inlet.
1513	The Pacific Ocean discovered by Vasco de Balboa.	1587. Virginia Dare, first English child born in America.
1517	Fernando de Cordova discovers Mexico.	
1519	Hernando Cortez lands in Mexico; Panama settled.	1602. Bartholomew Gosnold discovers Cape Cod.
		1605. De Monts takes possession of Maine.

FROM THE SETTLEMENT OF JAMESTOWN TO THE DECLARATION OF INDEPENDENCE—1607-1776

	British America	French America	Spanish America
1607	English settlement at Jamestown.		
	Captain John Smith rescued by Pocahontas.	1608. Champlain settles Quebec.	
			1610. Leon, Central America founded.
1614	New Amsterdam settled by the Dutch.		
		1611. French Jesuits settle at Port Royal.	1611. Talamanca Indians, of Central America, massacred by the Spanish.
		1615. Indian missions established.	
1618	Death of Powhatan, Indian chief.		
1619	First slaves brought to Virginia by the Dutch.		
1620	Mayflower lands at Plymouth, Mass.	1620. Champlain Governor of Canada.	1620. Buenos Ayres separated from Asuncion.
	Peregrine White, first white child born in New England.		
1621	Death of John Carver, first Governor of Plymouth Colony; succeeded by William Bradford.		
	Miles Standish, Captain.		
	Treaty between Plymouth Colony and Massasoit.		
	Cotton-seed planted in Virginia.		
1623	New Hampshire settled.		
	Lord Baltimore founds a colony at Ferryland, Newfoundland.		
1627	Swedes and Finns settle at Cape Henlopen.		
1628	John Endicott Governor of Massachusetts.	1628. Port Royal taken by the English.	
1629	John Winthrop Governor of Massachusetts.	1629. Sir David Kirke captures Quebec.	
1632	Lord Baltimore receives the grant of Maryland.	1632. Richelieu obtains restoration of territory.	1630. Spaniards expel the Dutch from Brazil.
1633	Connecticut settled by the English.		Alvarado subdues Central American Indians.
	Wouter Van Twiller Governor of New Amsterdam.		Hayti seized by French buccaneers.
1634	English Catholics settle at St. Mary's, Maryland.		
			1635–8. French, English, and Dutch make numerous settlements in the West Indies.
1636	Roger Williams settles Rhode Island.		
	Pequot War begins in Massachusetts.		
	Swedes settle Delaware.		
1638	John Harvard bequeaths his library to found a college.		
	New Haven settled.		
1639	Printing press established by Stephen Daye at Cambridge, Mass.	1639. Ursuline Convent established at Quebec.	
	First constitution of Connecticut.	1640. The French attempt a settlement at Green Bay, Wisconsin.	1640. Spanish fleet of 90 vessels arrives off coast of Brazil.

A. D.	FROM THE SETTLEMENT OF JAMESTOWN TO THE DECLARATION OF INDEPENDENCE — 1607-1776		
	British America	**French America**	**Spanish America**
1642	Sir William Berkeley Governor of Virginia.	1642. Montreal founded.	
1643	Swedes settle in Pennsylvania.		
1645	Free schools established at Roxbury, Mass.		
1647	Peter Stuyvesant, Governor of New Amsterdam.		
1652	Mint established in Boston, John Hull mintmaster.		
1653	North Carolina settled.		
1655	Delaware brought under Dutch rule.		
1656	Quakers arrive in Boston.		
		1659. Laval, first Bishop of Quebec.	1661. Dutch give up Brazil.
1664	Fort Amsterdam surrendered to the English.	French fur traders explore Lake Superior.	1663. Spain denies the right of England to the Province of Carolina.
1665	Provincial government established in Maine.		1665. St. Augustine pillaged by English buccaneers.
		1668. Marquette establishes mission at Sault Ste. Marie.	
		1669. La Salle sails down the Ohio to the Mississippi.	
1670	South Carolina settled.	1670. Maine, east of the Penobscot, occupied by the French.	
1671	French settle in Michigan.	1672. Count de Frontenac Governor of Canada.	1671. Danes occupy St. Thomas.
1673	New York and New Jersey surrendered to the Dutch.	1673. Marquette and Joliet in Iowa.	
1675	King Philip's War in Massachusetts.	Fort Frontenac (Kingston, Ont.) built.	
1676	Nathaniel Bacon's rebellion in Virginia.	1679. French at Niagara Falls.	
1681	William Penn receives charter for Pennsylvania.	1682. La Salle descends the Mississippi to the Arkansas, and names the valley Louisiana.	
1683	First assembly in New York under English rule.	1685. French in Texas under La Salle.	1685. Dampier, English buccaneer, sacks Leon.
		1689. French occupy Hudson Bay territory.	
1690	Colonial Congress called in New York.	Iroquois capture Montreal and Lachine.	
		1691. Acadia retaken by the French.	
1700	Williamstown made capital of Virginia.		1693. Gold mining begins in Brazil.
1701	Philadelphia incorporated as a city.	1702. Settlement in Alabama on Mobile River.	
		1710. Port Royal captured by English fleet.	1710. French capture Rio de Janeiro.
		1718. New Orleans founded.	
1719	Scotch-Irish settle in New Hampshire.		1719. French capture Pensacola.
			1722. Pensacola restored to Spain.
			Treaty between Chileans and Spanish.
1729	British Government formally recognizes colony of Newfoundland.	1729. Massacre of French at Natchez by Indians.	1729. Spaniards establish themselves at Montevideo.
1732	First stage between Boston and New York.		
1739	Richmond, Va., founded by William Byrd.		1740. Governor Oglethorpe attacks Florida.
1744	Hostilities with the Six Indian Nations.		
1745	Louisburg captured by New England troops.	1745. Louisburg captured by the British.	
		1749. Fort Rouille (Toronto) built.	
1752	Franklin experiments with electricity.	1752. Marquis Duquesne, Governor of Canada.	
1753	First theater opened in New York.		
1754	Convention at New York to consider a Colonial Confederacy.		
	French and Indian War.		
1755	Braddock defeated at Ft. Duquesne. Battle of Lake George.	1755. French defeat Braddock.	
1758	Fort Frontenac surrendered to the English.		1758. Jesuits expelled from Brazil.
1759	Battle of Quebec — Wolfe and Montcalm killed.	1759. Quebec surrenders to the English.	
1760	Montreal surrendered to the British.	1760. Marquis de Vaudreuil, last French Governor of Canada.	
1762	English settle in New Brunswick.	1762. Louisiana ceded to Spain.	1762. Spain acquires Louisiana from France.
			1763. Florida ceded to Great Britain.
1763	Pontiac's War.	1763. Acadia permanently ceded to the British.	
	Massacre of Wyoming.		French Guiana colonized.
	France cedes Canada to the English.		

FROM THE SETTLEMENT OF JAMESTOWN TO THE DECLARATION OF INDEPENDENCE — 1607-1776

A. D.	British America	Canada	Spanish America
1765	Delegates of the Colonies assemble in New York to resist the Stamp Act.	1764. Population of Canada, about 60,000.	1766. Large colony of Acadians arrive in Louisiana. 1768. Revolt of the French against Spanish rule in Louisiana.
1770	Boston Massacre.		
1773	Tea thrown overboard in Boston Harbor.		1773. Santiago, Guatemala, destroyed by an earthquake.
1774	The Colonial Congress adopts a Declaration of Rights.		
1775	Beginning of the Revolutionary War with the Battle of Lexington. Articles of Union and Confederation adopted. Washington appointed commander-in-chief of the American forces.	1775. Gen. Montgomery captures Montreal and St. John. Death of Montgomery at Quebec and failure of American campaign.	1776. Paraguay placed under the jurisdiction of Buenos Ayres. Buenos Ayres made capital of the viceroyalty.
1776	First Union flag unfurled at Cambridge, Mass. British evacuate Boston. Declaration of Independence at Philadelphia.		

FROM THE DECLARATION OF INDEPENDENCE TO THE ADOPTION OF THE CONSTITUTION — 1776-1789, A. D.

	United States	Canada	Spanish North America	Spanish South America
1777	Landing of Lafayette at Charleston. Battle of Princeton. Battle of Brandywine. British Army occupies Philadelphia. Surrender of Burgoyne. Articles of Confederation adopted by the Thirteen Colonies.			
1778	Treaty of Alliance with France. Evacuation of Philadelphia by the British. Seventh Continental Congress meets at Philadelphia. Battle of Monmouth.	1778. Frederick Haldinand, Governor of Canada.		
1779	British driven from South Carolina. Stony Point captured by Wayne. Paul Jones gains naval victory over the British off the coast of Scotland.	1779. Library founded at Quebec.	1779. Baton Rouge captured from the British.	
1780	Major André hanged as a spy. Battle of Kings Mountain, S. C. Benedict Arnold turns traitor.	1780. Coteau du Sack Canal built.		1780. Insurrection of Peruvians under Amaru.
1781	Americans victorious at Cowpens. Cornwallis surrenders at Yorktown. Bank of North America established at Philadelphia.			1781. The English Admiral Rodney takes possession of Guiana.
1782	Holland recognizes the independence of the United States. British evacuate Charleston. French army embarks from Boston. Preliminary articles of peace signed at Paris.			
1783	Denmark, Sweden, Spain, and Russia recognize the independence of the United States. Treaty of peace signed with Great Britain. Eighth Continental Congress meets at Princeton, N. J.	1783. St. John, N. B., founded. Kingston founded.	1783. Limits of Belize defined.	1783. Dutch colonies restored to Holland.
1784	Congress adopts decimal currency system. Tenth Continental Congress meets at Trenton, N. J.	1784. N. E. Loyalists settle in Upper Canada. Liberty of conscience proclaimed in Newfoundland.	1784. Island of St. Bartholomew transferred to Sweden.	
1785	Thomas Jefferson appointed Minister to France; John Adams to Great Britain.			
1786	Daniel Shay's rebellion in Massachusetts. United States Mint authorized.			1786. Pacifications of the negroes and tribes in Dutch Guiana.
1787	Constitutional convention assembles at Philadelphia.			
1788	Last Continental Congress adjourns.	1788. King's College, Windsor, Nova Scotia, founded.		

A. D.	FROM THE ADOPTION OF THE CONSTITUTION OF UNITED STATES, 1789 A. D., TO THE PRESENT TIME			
	United States of America	**Canada**	**Spanish North America**	**Spanish South America**
1789	**George Washington,** President; John Adams, Vice-President. First Congress meets in New York. First Tariff bill passed. Cabinet departments and United States Supreme Court organized.		1789. Settlers from North Carolina arrive in Louisiana.	1789. Malaspina explores the coast of South America.
1790	Indian War in Northwest Territory. Death of Benjamin Franklin. First mechanical patent issued. Census enumeration ordered.			
1791	Anthracite coal discovered in Pennsylvania.	1791. Canada divided into Upper and Lower.	1791. Negroes of Hayti revolt against France.	
1792	Vermont admitted as a State. Corner stone of White House laid. Kentucky admitted.			
1793	Whitney invents the cotton-gin. Washington receives all the electoral votes for reëlection. Corner stone of United States Capitol laid by Washington. Political parties assume names of Republican and Federalist.	1793. Slavery abolished in Upper Canada.		
1794	Third Congress opens at Philadelphia. Foundations of United States Navy authorized. Whisky insurrection in Pennsylvania.	1794. Jay's Treaty relative to commerce, navigation, and boundary.		
1795	Anti-rent troubles in New York.	Toronto founded.	1795. Maroon War in Jamaica.	
1796	Tennessee admitted. Washington issues his "Farewell Address."		Sugar first produced from cane in Louisiana.	1796. Guiana again in British possession.
1797	**John Adams,** President; Thomas Jefferson Vice-President. Special session of Congress to consider relations with France.	1797. Sault Ste. Marie Canal begun.		
1798	Alien and sedition laws passed. Commercial intercourse with France suspended.			
1799	General post-office established. Death of George Washington.			
1800	French spoliation claims adjusted. Capital removed from Philadelphia to Washington.	1800. The Sault Ste. Marie Canal in Canada completed.	1800. Louisiana transferred to France by Spain.	
1801	**Thomas Jefferson,** President; Aaron Burr, Vice-President. Congress establishes the District of Columbia. Tripoli declares war against the United States.		1801. Toussaint l'Ouverture founds republic in San Domingo.	1802. The Dutch resume possession of British Guiana.
1803	Louisiana purchased for $15,000,000. Ohio admitted.	1803. Slavery illegal in Lower Canada.	1803. French quit Hayti.	1803. British Guiana finally acquired.
1804	Vice-President Burr kills Hamilton in a duel.			
1805	**Jefferson re-elected;** George Clinton, Vice-President.			
1807	Embargo Act passed. Fulton's steamboat, "Clermont," steams from New York to Albany.			1807. Slave trade abolished in Dutch Guiana. 1808. Royal family of Portugal arrived in Brazil.
1809	**James Madison,** President; George Clinton, Vice-President. Embargo Act repealed.	1809. Steamer "Accommodation" arrived at Quebec from Montreal.		1809. Ecuador attempts to throw off the Spanish yoke.
1811	Trading posts first established among the Indians. Battle of Tippecanoe with Indians. First steamboat on the Ohio.			1810. Independence of Argentine Republic begins. Independence of Chile.
1812	Louisiana admitted. War declared against Great Britain. American vessel "Constitution" captures the British "Guerriere." American vessel "Wasp" captures the British "Frolic." American vessel "United States" captures the British "Macedonian." American vessel "Constitution" captures the British "Java." Canada invaded.	1812. Sir George Prevost, Governor.	1812. Spanish constitution promulgated in Costa Rica.	1811. Paraguay declares its independence of Spain. Venezuela proclaims its independence; war ensues for ten years.

A. D.	FROM THE ADOPTION OF THE CONSTITUTION OF UNITED STATES, 1789 A. D., TO THE PRESENT TIME			
	United States of America	**Canada**	**Spanish North America**	**Spanish South America**
1813	Commodore Perry captures the English fleet on Lake Erie. **Madison re-elected;** Elbridge Gerry, Vice-President. Toronto, Canada, captured. Battle of the Thames.			1813. Chile reconquered by Spain.
1814	Battle of Lundy's Lane. British capture and burn Washington. Hartford Convention meets to oppose war. Stonington, Conn., bombarded by British fleet.			1814. Montevideo captured by the revolutionary army of Buenos Ayres.
1815	Jackson defeats the British at New Orleans. Treaty of Peace with Great Britain ratified. Algerian War.			1815. Brazil becomes a kingdom.
1816	U. S. Bank chartered by Congress. The "Ontario" first steamboat on Great Lakes. Indiana admitted. American Colonization Society formed; founds Liberia.			1816. Argentina declares its separation from Spain.
1817	**James Monroe,** President; Daniel D. Tompkins, Vice-President. Mississippi admitted. First instruction of deaf mutes in America by T. H. Gallaudet, at Hartford, Conn. Seminole War.	1817. First bank note issued at Montreal.	1817. Unsuccessful insurrection in Mexico.	1817. Chileans defeat Spanish and gain their independence.
1818	Illinois admitted. Pensions granted Revolutionary soldiers.			
1819	The "Savannah," the first transatlantic steamship. Alabama admitted. Florida purchased by the United States. Maine separated from Massachusetts.			
1820	Maine admitted.	1820. Earl of Dalhousie, Governor.		
1821	Missouri Compromise Bill passed. Missouri admitted. Liberia purchased. Andrew Jackson appointed Governor of Florida.		1821. Mexico becomes independent of Spain. Costa Rica independent.	
1822	Independence of Spanish South American States recognized. Gaslight introduced into Boston.		1822. Mexico an empire under Iturbide. Costa Rica united to Mexico.	1822. Brazil declares its independence. Pedro I., Emperor. Ecuador independent.
1823	President Monroe proclaims the "Monroe Doctrine."		1823. Federal Republic proclaimed for Mexico.	
1824	Gen. Lafayette arrives in New York.			1824. Bolivar, Dictator of Peru.
1825	**John Quincy Adams,** President; John C. Calhoun, Vice-President. Treaty with Russia ratified. Erie Canal finished.		Federation of Central American States.	1825. Argentina constitution decreed. Upper Peru independent, takes the name of Bolivia. Republic of Central America.
1826			1826. First survey for Nicaraguan ship canal.	1826. Gen. Sucre, President of Bolivia; succeeded by Bolivar. War between Buenos Ayres and Brazil.
1827	First railroad in United States built in Massachusetts.	1827. Ottawa founded.		
1828	Protective Tariff bill passed.			1828. Ecuador invaded by Peru. Uruguay independent.
1829	**Andrew Jackson,** President; John C. Calhoun, Vice-President.	1829. Welland Canal from Port Dalhousie to Port Robinson completed.	1829. Expulsion of Spaniards from Mexico decreed.	1829. Venezuela separates from New Granada.
1830	Great speeches of Webster and Hayne delivered in the U. S. Senate.			1830. Death of Bolivar. Gen. Flores first President of Ecuador.

A. D.	FROM THE ADOPTION OF THE CONSTITUTION OF UNITED STATES, 1789 A. D., TO THE PRESENT TIME			
	United States of America	**Canada**	**Spanish North America**	**Spanish South America**
1831	First locomotive built in United States. Chloroform discovered by Samuel Guthrie.			1831. Revolution in Brazil. Abdication of Dom Pedro.
1832	First Democratic National Convention. Black Hawk War. Nullification in South Carolina. United States Bank bill vetoed by the President.	1832. Newfoundland obtains a colonial legislature.		1832. Patagonia visited by Charles Darwin, the scientist.
1833	**Jackson re-elected;** Martin Van Buren, Vice-President. Bank deposits removed from the National Bank.	1833. Constitutional government in Newfoundland.	1833. Santa Ana, President of Mexico.	1833. Chilean constitution formed.
1834	National debt extinguished. Whig party first takes its name.			
1835	Attempted assassination of President Jackson. Seminole War begins.		1835. Texas declares her independence.	
1836	Massacre at Alamo, Texas. Arkansas admitted. Sam Houston, first president of Texas.	1836. First railway in Canada opened.	1836. First Congress meets in Costa Rica.	
1837	**Martin Van Buren,** President; Richard M. Johnson, Vice-President. Great commercial panic. Morse system of telegraphy patented.	1837. Papineau and Mackenzie rebellion.		
1838	"Great Western" and "Sirius" cross the Atlantic.	1838. Canadian rebellion suppressed.	1838. Mexico declares war against France. Slavery abolished in British West Indies.	1838. Buenos Ayres blockaded by French fleet.
1839	Vulcanized rubber patented by Goodyear.		1839. Termination of the Mexican-French War.	
1840	Lieut. Wilkes discovers Antarctic continent.	1840. Upper and Lower Canada reunited.		
1841	**William H. Harrison,** President; John Tyler, Vice-President. Harrison dies April 4th; **John Tyler,** President. Failure of the United States Bank.			
1842	Dorr's Rebellion in Rhode Island. Ashburton Treaty with England signed. Application of ether as an anæsthetic.			
1843	Bunker Hill Monument dedicated.	1843. McGill University, Montreal, opened.		
1844	Morse telegraph completed from Baltimore to Washington.		1844. Dominican Republic proclaimed in Hayti.	
1845	**James K. Polk,** President; George M. Dallas, Vice-President. Florida admitted. United States Naval Academy established at Annapolis. Texas admitted. Petroleum discovered near Pittsburg.			1845. England and France blockade Buenos Ayres, pending Civil War. Venezuela's independence recognized by Spain.
1846	Mexican War begins. Wilmot Proviso. Smithsonian Institution established in Washington. Iowa admitted. Elias Howe patents the sewing machine.	1846. Earl of Cathcart, Governor.	1846. Gen. Mejia of Mexico issues proclamation of hostility to the United States. War with United States.	
1847	Salt Lake City founded by the Mormons.		1847. Mexico sequesters church property to raise war funds. Gen. Quitman, military Governor of City of Mexico.	
1848	Gold discovered near Colonia, Cal. Peace signed with Mexico. Acquisition of New Mexico and California. Wisconsin admitted. Corner stone of Washington Monument laid.		1848. Peace between United States and Mexico.	

FROM THE ADOPTION OF THE CONSTITUTION OF UNITED STATES, 1789 A. D., TO THE PRESENT TIME

A. D.	United States of America	Canada	Spanish North America	Spanish South America
1849	**Zachary Taylor,** President; Millard Fillmore, Vice-President. Rush of gold hunters to California begins.			
1850	Death of President Taylor, July 9th; **Millard Fillmore,** President. California admitted. Bulwer Clayton Treaty with Great Britain signed. Fugitive Slave Bill passed. Clay Compromise Bill passed.	1850. Riots in Montreal; Parliament House burned. Canadian clergy reserves abolished.	1850. Cuba invaded by American filibusters under Lopez.	1850. Steamship line from Brazil to Europe inaugurated.
1851	Great fire in library of Congress.		1851. Second invasion of Cuba; Lopez shot. Hayti an Empire under Solouque.	
1852	United States Mint established at San Francisco. Deaths of Henry Clay and Daniel Webster.			1852. Slave trade suppressed in Brazil.
1853	**Franklin Pierce,** President; Rufus King, Vice-President. Walker's filibustering expedition. Gadsden purchase.	1853. The "Genova," first transatlantic steamer, arrives at Quebec.		1853. Civil War in Argentine.
1854	Treaty between United States and Japan. Kansas-Nebraska Bill approved. Ostend Manifesto issued.	1854. First petroleum wells bored.	1854-60. Central America invaded by American filibusters under Walker.	
1855	Completion of Panama Railroad. Troubles in Kansas. First agricultural college in United States established at Cleveland.	1855. Suspension Bridge at Niagara Falls opened.		
1856	Civil strife in Kansas. First Republican National Convention.	1856. Grand Trunk Railroad opened. Allan Steamship Line established.		1856. Ecuador adopts French system of coinage, weights, and measures.
1857	**James Buchanan,** President; J. C. Breckenridge, Vice-President. Dred Scott decision. Great financial panic in United States. First attempt to lay transatlantic cable.		1857. New Mexican constitution established.	
1858	Minnesota admitted. Second treaty with China signed. First message over Atlantic cable.	1858. Ottawa made the capital. Decimal system of coinage adopted.	1858. Mexican constitution annulled by Church party. Civil War in Mexico. Hayti a Republic.	
1859	Oregon admitted. John Brown's raid.		1859. Juarez of Mexico confiscates Church property.	
1860	Morrill high tariff bill approved. South Carolina passes ordinance of secession from the Union.	1860. Prince of Wales visits Canada.	1860. Civil War in Mexico between Zuloaga and Miramon.	1860. Revolutions and insurrections prevail in Uruguay for next thirty years.
1861	**Abraham Lincoln,** President; Hannibal Hamlin, Vice-President. Secession of Mississippi, Florida, Alabama, Georgia, Louisiana, Texas, Virginia, North Carolina, Arkansas, and Tennessee. Attack on Fort Sumter. Kansas admitted. Southern States form a confederacy. McClellan appointed commander-in-chief. Mason and Slidell taken from British vessel.	1861. Gold found in Nova Scotia.	1861. Juarez, Dictator of Mexico. Mexican troubles with England, France, and Spain. Reunion of Santo Domingo with Spain.	
	Confederate States of America 1861. Jefferson Davis, President; A. H. Stephens, Vice-President. Battles of Bull Run. 1862. Capture of Ft. Henry. Grant takes Ft. Donelson.			
1862	Fight between the "Merrimac" and "Monitor." Slavery abolished in District of Columbia.	1862. Macdonald, Premier.	1862. England and Spain disapprove Mexican Monarchy for Maximilian.	

A. D.	FROM THE ADOPTION OF THE CONSTITUTION OF UNITED STATES, 1789 A. D., TO THE PRESENT TIME				
	United States of America		**Canada**	**Spanish North America**	**Spanish South America**
		Confederate States of America			
1862	Treaty with Great Britain for suppression of slave trade. Congress passes act to prevent polygamy in the Territories. Gen. Jackson captures Harpers Ferry. Battle of South Mountain. Battle of Antietam. Greenbacks first issued.	1862. Battle of Shiloh. Capture of New Orleans by Farragut and Butler. Battle of Fair Oaks. Robert E. Lee in command of Confederate armies. Battles before Richmond. Battle of Murfreesboro.			
1863	Emancipation proclamation. West Virginia admitted. Gen. Meade commander of the Army of the Potomac. Battle of Gettysburg.	1863. Battle of Chancellorsville. Siege of Vicksburg. Battle of Chickamauga. Battle of Lookout Mountain.		1863. Mexico occupied by the French under Bazaine.	
1864	U. S. Grant, Lieutenant General. Fight between "Kearsarge" and "Alabama." Fugitive Slave Law repealed. Battle of Monocacy. Premium on gold, 285 per cent. Nevada admitted. President calls for 500,000 volunteers. Grade of Vice-Admiral established. Additional call for 300,000 volunteers.	1864. Grant's Virginia campaign. Battle of Wilderness. Battle of Spottsylvania C. H. Battle of Cold Harbor. Atlanta campaign. Capture of Mobile. Battle of Winchester. Sherman's march to the sea. Thomas defeats Hood at Nashville.	1864. Confederates in Canada plan raids.	1864. Maximilian, Emperor of Mexico.	1864. Hostilities between Paraguay and Brazil. American Congress at Lima, Peru. 1865. Argentine invaded by Paraguans under Lopez.
1865	**Lincoln re-elected;** Andrew Johnson, Vice-President. Peace conference at Hampton Roads. President Lincoln shot at Ford's Theater, Washington, April 14th. **Andrew Johnson,** President; April 15th. General amnesty proclamation. Habeas Corpus restored in Northern States.	1865. Confederate Congress adjourns *sine die.* Richmond evacuated by Confederates. Lee surrenders at Appomattox, April 9th. Johnston, Morgan, Taylor, and Kirby-Smith surrender. Jefferson Davis captured.	1865. Confederation rejected by New Brunswick.	1865. Maximilian proclaims Mexican-French War ended. United States protests against French occupation of Mexico. Insurrection in Jamaica.	War between Brazil and Uruguay. Treaty between Brazil, Uruguay, and Argentine against Paraguay. Four years' war results. Religious toleration enacted in Chile.
1866	Civil Rights Bill passed over President's veto. Fenian raid into Canada. Atlantic telegraph completed.		1866. Invasion of Canada threatened by Fenians. Canadian Parliament first meets at Ottawa.	1866. Napoleon III. agrees with United States to withdraw French troops from Mexico.	
1867	Nebraska admitted. Alaska transferred by Russia to the United States.		1867. Dominion of Canada formed by union of Upper and Lower Canada, Nova Scotia, and New Brunswick. Lord Monck, Viceroy of Canada. New Parliament at Ottawa.	1867. Maximilian, Miramon, and Mejia tried in Mexico and shot. Republic re-established in Mexico.	Chile declares war against Spain. 1866. Spaniards bombard Valparaiso, Chile. Peru joins Chile in war against Spain.

FROM THE ADOPTION OF THE CONSTITUTION OF UNITED STATES, 1789 A. D., TO THE PRESENT TIME

A. D.	United States of America	Canada	Spanish North America	Spanish South America
1868	President Johnson impeached, tried, and acquitted. Southern States readmitted to representation in Congress. Burlingame treaty with China signed. XIV. Amendment adopted.	1868. Agitation against confederation in Nova Scotia. Fenian raid repelled. Sir John Young, Governor-General.	1868. Insurrection of creoles in Cuba under Cespedes.	
1869	**U. S. Grant,** President; Schuyler Colfax, Vice-President. Union Pacific Railroad opened for traffic. Financial panic in New York. Soldiers' monument at Gettysburg dedicated.	1869. Newfoundland refuses to join the Dominion. Hudson Bay territory purchased by the Dominion.	1869. Filibusters again attack Cuba.	1869. Revolution in Ecuador.
1870	Northern Pacific Railroad begun. XV. Amendment ratified.	1870. Rupert's Land made the Province of Manitoba.	1870. Continual insurrections in Cuba.	
1871	Legal Tender Act decided constitutional. "Tweed Ring" in New York exposed. Great fire in Chicago. District of Columbia a territorial government.	1871. British Columbia united to the Dominion. Departure of last battalion of Royal troops. Uniformity of currency established.	1871. Civil War and insurrections in Mexico.	
1872	Geneva award of $15,500,000 made to the United States. Great fire in Boston; loss $80,000,000.	1872. Lord Dufferin, Governor-General.		
1872	Modoc War in California. **Grant re-elected;** Henry Wilson, Vice-President.			
1873	Credit Mobilier investigation by Congress. One-cent postal cards issued. Financial panic in New York. Territorial government in District of Columbia abolished.	1873. Prince Edward Island joins the Dominion.	1873. Slavery abolished in Porto Rico. 1874. Religious orders suppressed in Mexico.	1873. Treaty between Argentina and Brazil.
1875	Act authorizing the resumption of specie payments.	1875. Icelanders settle in Northwest Territories.		
1876	Massacre of Custer's troops by Sitting Bull. Centennial Exposition at Philadelphia. Colorado admitted.	1876. Intercolonial railroad opened from Quebec to Halifax.		1876. Venezuela renounces papal authority.
1877	Electoral Commission appointed. **Rutherford B. Hayes,** President; William A. Wheeler, Vice-President. Great railroad strike. "Molly Maguires" hanged in Pennsylvania. War with the Nez Perces Indians. Edison announces his phonograph.	1877. Great fire at St. John, New Brunswick.	1877. Porfirio Diaz, President of Mexico.	
1878	Bland Silver Bill passed over President's veto. Electric lighting introduced by Edison.	1878. Marquis of Lorne, Governor-General.	1878. Surrender of insurgent government in Cuba.	
1879	United States Government resumes specie payment. Women permitted to practice before United States Courts. French Atlantic cable laid.	1879. Industrial Exhibition at Ottawa.		1879. War between Chile and Peru and Bolivia.
1880	The Kearney agitation in California.	1880. Royal Canadian Academy of Arts founded.	1880. Manuel Gonzales, President of Mexico.	1880. Buenos Ayres made the capital of Argentina.
1881	**James A. Garfield,** President; Chester A. Arthur, Vice-President. President Garfield shot, July 2d; **Chester A. Arthur,** President, September 20th. International Cotton Exposition at Atlanta, Ga.	1881. Contract for new Pacific railway ratified.		1881. Lima occupied by the Chileans. Patagonia divided by Chile and Argentina.

A. D.	FROM THE ADOPTION OF THE CONSTITUTION OF UNITED STATES, 1789 A. D., TO THE PRESENT TIME			
	United States of America	**Canada**	**Spanish North America**	**Spanish South America**
1882	Star Route trials begin. War with the Apache Indians.	1882. Northwest Territory beyond Manitoba divided into Assiniboia, Saskatchewan, Alberta, and Athabaska. First colony of Russians settle in Northwest Territory.		
1883	Northern Pacific Railroad completed. Opening of the Brooklyn Bridge.	1883. Conflicts between Catholics and Orangemen in Newfoundland. Standard time adopted.	1883. Ancient city discovered in Sonora, Mexico.	1883. Peruvians defeated with great loss by Chile.
1884	Great floods in the Ohio Valley. Financial crises in New York.	1884. Marquis of Lansdowne, Governor-General.	1884. Porfirio Diaz, President of Mexico.	
1885	**Grover Cleveland,** President; Thomas A. Hendricks, Vice-President. Apache War in New Mexico. World's Industrial Exposition at New Orleans.	1885. The Riel insurrection in Northwest.	1885. Concessions to the Nicaragua Canal Company granted by Nicaragua.	
1886	Railroad strikes and anarchistic riots. Silver certificates authorized. Bartholdi's Statue of Liberty unveiled.	1886. Fisheries dispute with United States. Vancouver City founded. 1887. Great railway bridge at Lachine completed. Anthracite coal first mined in Canada.	1886. Slavery abolished in Cuba.	
1888	Chinese immigration prohibited.	1888. Lord Stanley, Governor-General.		1888. Slavery totally abolished in Brazil.
1889	**Benjamin Harrison,** President; Levi P. Morton, Vice-President. Johnstown flood. Pan-American Congress meets in Washington. North and South Dakotas, Washington, and Montana admitted. Oklahoma opened for settlement.			1889. Revolution at Rio de Janeiro; emperor banished, republic declared. First Brazilian Congress meets.
1890	Idaho and Wyoming admitted. People's Party convenes at Topeka, Kan. McKinley Tariff goes into effect. Sioux War; Sitting Bull killed.	1890. Dominion Commons passed a resolution of loyalty to Great Britain.	1890. Union of Central American States formed.	1890. Great financial crisis in Argentine.
1891	Massacre of Italians in New Orleans.	1891. Canadian Pacific Railway completed. First Pacific mail steamer arrives at Vancouver from Yokohama. St. Clair tunnel connecting Canadian and United States railways opened.		1891. Civil War in Chile. Mob at Valparaiso assaults United States sailors
1892	Behring Sea dispute referred to arbitration.	1892. Dominion discriminates against United States in use of Welland Canal.		1892. Revolutions and insurrections in Brazil.
1893	**Grover Cleveland,** President; Adlai E. Stevenson, Vice-President. Columbian Exposition opened at Chicago. World's Parliament of Religions meets at Chicago. Chinese Exclusion bill approved. Great financial depression. Silver bill approved.	1893. Canal tolls arranged with United States. Commercial treaty between France and Canada. Earl of Aberdeen, Governor-General.		1893. Insurrections in Argentine. Naval revolt in Brazil, led by Admiral de Mello.

A. D.	FROM THE ADOPTION OF THE CONSTITUTION OF UNITED STATES, 1789 A. D., TO THE PRESENT TIME			
	United States of America	**Canada**	**Spanish North America**	**Spanish South America**
1894	Wilson Tariff bill passed. Great railroad strike from Ohio to Pacific coast. Coal strike. Republic of Hawaii recognized. New treaty with Japan.	1894. Intercolonial Congress opened at Ottawa.		1894. Naval scrimmage between Admiral da Gama, Brazilian insurgent, and Admiral Benham, United States Navy.
1895	Free silver movement an important issue. Special message of the President on the Venezuelan question.	1895. First Exhibition in Northwest opened at Regina.	1895. Cuba demands autonomy from Spain.	1895. Chile adopts the gold standard.
1896	Treaty with the Choctaw Indians.	1896. Sir Charles Tupper, Premier. Newfoundland Government purchases railway system.	1896. Weyler issues his famous reconcentrado order in Cuba. Uniform education system in Mexico.	1896. Revolt of "Fanatics" in Brazil. Chile signs treaty of amity with Bolivia. Gold mines of great value discovered in Peru.
1897	**William McKinley,** President; Garret A. Hobart, Vice-President. Universal Postal Congress meets in Washington. Extensive strikes among coal and iron miners. Dingley Tariff bill goes into effect.	1897. School question settled in Manitoba. Commission for Yukon gold region appointed. Joint commission appointed to settle difficulties with United States.	1897. Weyler recalled from Cuba and Blanco appointed captain-general. United States of Central America formed.	1897. Venezuela ratifies boundary treaty with Great Britain.
1898	City government of Greater New York inaugurated. Destruction of the "Maine" in Havana Harbor. War with Spain. Admiral Dewey destroys the Spanish fleet at Manila. Naval battle at Santiago; destruction of Cervera's fleet. Treaty of Paris: United States acquires sovereignty over Cuba, Porto Rico, and the Philippines. Treaty for annexation of Hawaii.	1898. Great influx of miners to Yukon gold region. Earl of Minto, Governor-General.	1898. Hostile demonstrations in Havana against Americans. Invasion of Cuba and Porto Rico by United States. Completion of great Mexican drainage canal.	1898. Argentina provides for a complete network of railways.
1899	Aguinaldo foments the Philippine War. Appointment of the First Philippine Commission. General Wood, Governor of Cuba.	1899. Adjournment of the Joint High Commission.	1899. Cuba and Porto Rico pass to United States by Treaty of Paris.	1899. Venezuelan boundary tribunal meets in Paris.
1900	Civil government established in the Philippines under act of Congress. Galveston flood and hurricane. Civil government in Alaska. American forces sent to China under General Chaffee.	1900. Great fire in Ottawa. Parliamentary elections sustain the Liberal ministry in power.	1900. Cuba constitutional convention meets.	
1901	**McKinley re-elected;** Theodore Roosevelt, Vice-President. Pan-American Exposition. Platt Amendment relating to Cuban independence passed. President McKinley shot at Buffalo, N. Y., September 6th; **Theodore Roosevelt,** President, September 14th.	1901. Population of Canada, 5,338,883. Toronto Exhibition opened.		1901. War declared between Venezuela and Colombia.
1902	President recommends Panama canal purchase. Civil government established in the Philippines. Decision of United States Supreme Court in Northern Securities case.	1902. Canadian-Australian cable laid. Treaty between Newfoundland and U. S.	1902. Revolution in Santo Domingo. Eruption of Mt. Pelée, St. Pierre.	1902. Gen. Uribe, Colombian insurgent leader, surrenders. End of revolution in Venezuela.
1903	Department of Commerce and Labor. Pacific cable completed. Canal treaty with Panama. Cuban Reciprocity Treaty ratified. Alaskan boundary dispute decided.	1903. University of Ottawa founded.	1903. West Indian hurricane destroyed many lives.	1903. The republic of Panama proclaimed. Canal treaty with U. S.
1904	Commercial treaty with China. Arbitration treaty with France. Great fire in Baltimore.	1904. Earl Grey, Governor-General.		1904. Venezuelan diplomatic difficulties with United States.

A. D.	FROM THE ADOPTION OF THE CONSTITUTION OF UNITED STATES, 1789 A. D., TO THE PRESENT TIME			
	United States of America	**Canada**	**Spanish North America**	**Spanish South America**
1905	**Theodore Roosevelt,** President; C. W. Fairbanks, Vice-President.	1905. Decennial census act.		
1906	Destruction of San Francisco by earthquake and fire. Riot at Brownsville, Texas.	1906. British preferential tariff debated.	1906. Revolutions in Central America.	1906. Pan-American conference at Rio de Janeiro.
1907	Pure Food Law became effective. Jamestown Exposition opened. Oklahoma admitted as a State.	1907. Riots against Japanese.	1907. Tehuantepec National Railway opened.	1907. Notable impulse given to trade.
1908	The Aldrich Currency bill introduced in the U. S. Senate.	1908. Tercentenary held at Quebec.	1908. Alexis flees from Hayti.	1908. Labor riot at Chilean mines.
1909	**William H. Taft,** President; James S. Sherman, Vice-President. Payne-Aldrich tariff. Alaska-Yukon-Pacific Exposition. Peary discovers North Pole.	1909. Unusual immigration from United States. Railway development.	1909. Earthquakes in Mexico. Meeting of Taft and Diaz at El Chamizal.	1909. Anarchist uprisings in Argentina suppressed.
1910	Commerce Court created. Postal Savings Banks established.	1910. Death of Goldwin Smith.	1910. President Diaz reëlected.	1910. Mutiny of Brazilian navy.
1911	Postal deficit wiped out. Trust trials before United States Supreme Court; dissolution of Standard Oil Company ordered. Arbitration treaties with Great Britain and France.	1911. Duke of Connaught, Governor-General. Reciprocity with United States defeated.	1911. Diaz forced to resign. Francisco I. Madero, president.	1911. The Rivadavia, largest battle-ship in the world, launched for Argentine navy.
1912	Nation-wide investigation of dynamite conspiracy. Arizona and New Mexico admitted.	1912. Duke of Connaught visits United States.	1912. Insurrection in Mexico.	1912. Railroad across Andes completed.
1913	Parcel Post established. XVI amendment adopted. **Woodrow Wilson,** President; Thomas R. Marshall, Vice-President. XVII amendment adopted. California anti-alien land law. Underwood-Simmons tariff law. Glass-Owen currency law.	1913. Unusual prosperity throughout the dominion. Notable extension of Rural Free Delivery system.	1913. Madero, president of Mexico, forced to resign. Madero is assassinated. Huerta, leader of insurrection in Mexico.	1913. Development of Amazon valley. Roosevelt visits South America.
1914	Neutrality of United States in European war proclaimed. Nicaragua canal treaty. Federal reserve banks established.	1914. Death of Lord Strathcona. Empress of Ireland sinks.	1914. Revolution in Hayti. U. S. troops at Vera Cruz.	1914. Argentina, Brazil, Chile delegates at Niagara Falls conference.
1915	Federal trade commission. Pan-American financial conference at Washington. Naval advisory board established. Government railroad in Alaska begun.	1915. Canada sends troops and supplies to Europe.	1915. Carranza recognized president of Mexico.	1915. South American delegates at scientific congress, Washington.
1916	Military expedition in Mexico. Purchase of Danish islands approved. Workman's compensation act.	1916. Duke of Devonshire, Governor-General.	1916. Villa's raid on Columbus, N. M.	1916. Irigoyen elected President of Argentina.
1917	Diplomatic relations with Germany severed. **Woodrow Wilson, reelected.** T. R. Marshall, Vice-President. Senate adopts cloture rule. Congress declares war on Germany. Selective Conscription Bill. Navy greatly increased. Government takes over railways.	1917. Woman suffrage granted. Conservatives win Parliamentary election. Terrific explosion wrecks Halifax.	1917. Cuba declares war on Germany. Guatemala, Honduras, Hayti and Nicaragua end relations with Germany.	1917. Brazil declares war on Germany. Argentina, Bolivia, Ecuador, Peru, and Uruguay sever relations with Germany.
1918	Federal fuel administration. War Finance Corporation bill. Daylight saving bill. Man-power registration exceeds 23,000,000. Two million American troops overseas. Republicans win elections.	1918. Prohibition adopted in all provinces. Dominion troops win distinction in France.	1918. Guatemala, Nicaragua, Costa Rica, Honduras, and Hayti declare war on Germany.	1918. Brazil gives Allies interned German ships. General strike in Argentina. Territorial dispute between Peru and Chile.
1919	Death of Theodore Roosevelt. President Wilson heads American delegation to Peace Conference. League of Nations formulated. Prohibition amendment ratified.	1919. Premier Borden delegate at Peace Conference. Death of Laurier.	1919. Tension over foreign concession in Mexico.	1919. Great marine workers strike in Argentina. Brazil excludes German banks.
1920	Railways returned to private management. Army reorganization bill. Supreme Court upholds prohibition amendment. Woman suffrage amendment ratified.	1920. Premier Borden retires, Arthur Meighen premier.	1920. Carranza overthrown in Mexico by Obregon and de la Huerta.	1920. Tension between Peru and Chile. Argentine-American bank formed.
1921	**Warren G. Harding,** President; Calvin Coolidge, Vice-President. Temporary restriction of immigration act. Disturbances in West Virginia coal fields. Reduction in regular army. Revision of income tax.	1921. Liberals, led by W. L. M. King, win parliamentary elections. Queenston hydro-electric power plant opened.	1921. Central American federation. Revolution in Guatemala. Mexico agrees to protect foreign oil and mining rights.	1921. Chile and Peru bring Tacna-Arica controversy before League of Nations.

Feudal System. The name generally given to the system of land tenure and social arrangements which prevailed in Europe during the period commonly known as the Middle Ages. Its essence lay in the close connection which existed under it between social status and the ownership of land. The man who held land from another was looked upon as the dependent and subordinate of the latter. Under the Feudal System both spear and plough helped to pay the rent. *Knight Service* and *Socage* were required from every tenant — the former obliging him to serve, at the call of his landlord, for so many days each year in the field of battle; the latter to give occasional days of labor on the castle grounds, or to send fixed supplies of such things as beef or poultry, meal or honey, to the castle larder. Numbers of serfs, called *Villeins*, tilled little patches of ground under certain conditions, and these were held nominally to be freemen; but the lowest class of serfs took rank with the oxen and the swine which they tended, being, like them, the property of the master. The Feudal System still survives as the basis of many laws relating to land.

Flags, Historic American. According to the historian Lossing the battle-flag of Bunker Hill was the time-honored flag of New England. It had a blue field with the upper inner quarter containing the red cross of St. George, in one section of which was the emblematic pine tree.

The Pine Tree Flag, under which the first naval vessels of the colonists sailed in October, 1775, contained a green pine tree in the center of a white field surmounted by the words "An Appeal to Heaven."

The Rattlesnake Flag, one of the earliest emblems of the colonies, was hoisted by Paul Jones on the ship of war *Alfred* in December, 1775. It was a yellow flag with a rattlesnake in the center coiled over the motto "Don't Tread on Me."

The Continental Flag, raised on Prospect Hill, Cambridge, Mass., January 2, 1776, by General Washington contained the thirteen stripes, one for each colony as in the present flag, but in place of the stars it displayed the crosses of St. George and St. Andrew. This was the first occasion when thirteen alternating stripes of white and red were made the foundation of a national standard.

The Betsy Ross Flag, the first combining the stars and stripes, contained thirteen five-pointed stars arranged in a circle on a blue field. This was made the official flag by the Continental Congress. (*See* United States Flag)

Commodore Perry's Flag at the battle of Lake Erie contained the words of the dying Lawrence, "Don't give up the ship," which have become the watchword of the American navy.

The Flag of Fort McHenry which inspired Francis Scott Key to write "The Star-Spangled Banner," September 14, 1814, contained fifteen stripes and fifteen stars.

The inspiring name *Old Glory* was given to the American flag by Captain William Driver of Salem, Mass., in 1831. It was his salute to a beautiful new flag presented to his ship when starting on a voyage around the world.

Flanders. An ancient country of Europe which comprised the present provinces of East and West Flanders in Belgium, the southern part of the province of Zealand in Holland, and the department of Nord with portions of Pas-de-Calais in France. During the Middle Ages the Flemish cities became very important and the counts of Flanders, though nominally subject to France, were more wealthy and powerful than many European kings. In 1384 Flanders was united to Burgundy. A part of Flanders was transferred to Holland, 1648, and various portions were acquired by France, 1659-1713. The remainder then fell under the rule of Austria. In 1795 Flanders became a part of the French republic. At the Congress of Vienna, 1815, Belgium was joined to Holland to form the Netherlands, but in 1832 Belgium became an independent state. Flanders has been styled the "cockpit of Europe." From the period of the medieval struggles between the French and English to the titanic battles following the German invasion of Belgium and France in 1914, this region has been the scene of sanguinary conflicts.

Florida. The name Florida, derived from a Spanish word meaning "flowery," or perhaps because it was first visited on "Pascua Florida," or Easter Sunday, was originally applied to a much larger region than the present State, its boundaries extending to the Mississippi, and on the north indefinitely. It was first discovered by Ponce de Leon in 1512, who landed near St. Augustine. Spain had no permanent footing till 1565, when the fort was built at St. Augustine. Pensacola was settled in 1696. In 1763, Florida was ceded to the English in exchange for Cuba, but by the treaty of 1783 it was retroceded to Spain. A portion of Florida was seized by the United States in 1803, and in 1819 was purchased from Spain for $5,000,000. Florida was admitted as a State in 1845.

Forum (*fō'rŭm*). In Roman cities, a public place where causes were judicially tried, and orations made to the people. It was a large, open parallelogram, surrounded by porticos. There were six of these forums, viz: the *Romanum*, *Julianum*, *Augustum*, *Palladium*, *Trajanum*, and *Sallustii forums*. The chief was the *Romanum*, called *the* forum.

France. Gallia was the name under which France was designated by the Romans, who knew little of the country till the time of Cæsar. In the Fifth Century it fell completely under the power of the Visigoths, Burgundians, and Franks. In 486 A. D., Clovis, a chief of the Salian Franks, raised himself to supreme power in the North. His dynasty, known as the Merovingian, ended in 752. The accession of Pepin gave new vigor to the monarchy, which, under his son and successor, Charlemagne (768-814), rose to the rank of the most powerful empire of the West. On the death of Louis V. the Carlovingian Dynasty was replaced by that of Hugues, Count of Paris, whose son, Hugh Capet, was elected king by the army, and consecrated at Rheims, 987.

Louis le Gros (1108-37) waged war against Henry I. of England; and when the latter allied himself with the Emperor Henry V. of Germany against France he brought into the field an army of 200,000 men. The *oriflamme* is said to have

been borne aloft for the first time on this occasion as the national standard. Louis VII. (1137-80) was almost incessantly engaged in war with Henry II. of England. His son and successor, Philippe Auguste (1180-1223), recovered Normandy, Maine, Touraine, and Poitou from John of England. He took an active personal share in the Crusades. Philippe was the first to levy a tax for the maintenance of the standing army. Many noble institutions date their origin from this reign, as the University of Paris, the Louvre, etc. St. Louis IX. effected many modifications in the fiscal department, and, before his departure for the Crusades, secured the rights of the Gallican Church by special statute, in order to counteract the constantly increasing assumptions of the papal power. Philippe IV. (1285–1314), surnamed *Le Bel*, acquired Navarre, Champagne, and Brie by marriage. Charles IV. (*Le Bel*) (1321–28) was the last direct descendant of the Capetian line. Philippe VI., the first of the House of Valois (1328–50), succeeded in right of the Salic law. His reign, and those of his successors, Jean (1350–64) and Charles V. (*Le Sage*) (1364–80), were disturbed by constant wars with Edward III. of England. Hostilities began in 1339; in 1346 the battle of Crécy was fought; at the battle of Poitiers (1356) Jean was made captive; and before the final close, after the death of Edward (1377), the state was reduced to bankruptcy. During the regency for the minor, Charles VI. (*Le Bien Aimé*) (1380–1422), the war was renewed with increased vigor on the part of the English nation. The signal victory won by the English at Agincourt in 1415 aided Henry in his attempts upon the throne. But the extraordinary influence exercised over her countrymen by the Maid of Orleans aided in bringing about a thorough reaction, and, after a period of murder, rapine, and anarchy, Charles VII. (*Le Victorieux*) (1422–61) was crowned at Rheims. His successor, Louis XI. (1461–83), succeeded in recovering for the crown the territories of Maine, Anjou, and Provence, while he made himself master of some portions of the territories of Charles the Bold, Duke of Burgundy. Charles VIII. (1483–98), by his marriage with Anne of Brittany, secured that powerful state. With him ended the direct male succession of the House of Valois. Louis XII. (1498–1515) (*Le Père du Peuple*) was the only representative of the *Valois-Orleans* family; his successor, Francis I. (1547), was of the *Valois-Angoulême* branch. The defeat of Francis at the battle of Pavia, in 1525, and his subsequent imprisonment at Madrid, threw the affairs of the nation into the greatest disorder. In the reign of Henri II. began the persecutions of the Protestants. Henri III. (1574–89) was the last of this branch of the Valois. The massacre of St. Bartholomew (1572) was perpetrated under the direction of the queen-mother, Catharine de' Medici, and the confederation of the League, at the head of which were the Guises. The wars of the League, which were carried on by the latter against the Bourbon branches of the princes of the blood-royal, involved the whole nation in their vortex. The succession of Henri IV. of Navarre (1589–1610), a Bourbon prince, descended from a younger son of St. Louis, allayed the fury of these religious wars, but his recantation of Protestantism in favor of Catholicism disappointed his own party. During the minority of his son, Louis XIII. (1610–43), Cardinal Richelieu, under the nominal regency of Marie de' Medici, the queen-mother, ruled with a firm hand. Cardinal Mazarin, under the regency of the queen-mother, Anne of Austria, exerted nearly equal power for some time during the minority of Louis XIV. (1643–1715). The wars of the Fronde, the misconduct of the parliament, and the humbling of the nobility gave rise to another civil war, but with the assumption of power by young Louis a new era commenced, and till near the close of his long reign the military successes of the French were most brilliant. Louis XV. (1715–75) succeeded to a heritage whose glory was tarnished, and whose stability was shaken to its very foundations during his reign. The Peace of Paris, 1763, by which the greater portion of the colonial possessions of France were given up to England, terminated an inglorious war, in which the French had expended 1,350 millions of francs. In 1774 Louis XVI., a well-meaning, weak prince, succeeded to the throne. The American war of freedom had disseminated republican ideas among the lower orders, while the Assembly of the Notables had discussed and made known to all classes the incapacity of the government and the wanton prodigality of the court. The nobles and the *tiers état* were alike clamorous for a meeting of the states, the former wishing to impose new taxes on the nation, and the latter determined to inaugurate a thorough and systematic reform. After much opposition on the part of the king and court the *États Généraux*, which had not met since 1614, assembled at Versailles on May 25, 1789. The resistance made by Louis and his advisers to the reasonable demands of the deputies on the 17th of June, 1789, led to the constitution of the National Assembly. The consequence was the outbreak of insurrectionary movements at Paris, where blood was shed on the 12th of July. On the following day the national guard was convoked, and on the 14th the people took possession of the Bastile. The royal princes and all the nobles who could escape sought safety in flight. The royal family, having attempted in vain to follow their example, tried to conciliate the people by the feigned assumption of republican sentiment; but on the 5th of October the rabble, followed by numbers of the national guard, attacked Versailles, and compelled the king and his family to remove to Paris, whither the Assembly also moved. A war with Austria was begun in April, 1792; and the defeat of the French was visited on Louis, who was confined in August with his family in the Temple. In December the king was brought to trial. On January 20, 1793, sentence of death was passed upon him, and on the following day he was beheaded. Marie Antoinette, the widowed queen, was guillotined; the dauphin and his surviving relatives suffered every indignity that malignity could devise. A reign of blood and terror succeeded. The brilliant exploits of the young general, Napoleon Bonaparte, in Italy,

turned men's thoughts to other channels. In 1795, a general amnesty was declared, peace concluded with Prussia and Spain, and the war carried on vigorously against Austria. The Revolution had reached a turning-point. A directory was formed to administer the government. In 1797, Bonaparte and his brother-commanders were omnipotent in Italy. Austria was compelled to give up Belgium, accede to peace on any terms, and recognize the Cisalpine republic. Under the pretext of attacking England a fleet of 400 ships and an army of 36,000 picked men were equipped. The directory sent Bonaparte with them to Egypt; but he resigned the command to Kléber, landed in France in 1799, supplanted the directory, and secured his own nomination as consul. In 1800, a new constitution was promulgated, vesting executive power in Bonaparte. Rejoining his army, he crossed the Alps, and defeated the Austrians at Marengo. In 1804, Bonaparte was proclaimed emperor. The disastrous Russian campaign was soon followed by the falling away of his allies. The defeat of Leipzig compelled the French to retreat beyond the Rhine. The Swedes reinforced his enemies on the east, while the English pressed on from the west; Paris, in the absence of the emperor, capitulated after a short resistance, March 30, 1814. Napoleon retired to the island of Elba. On the 3d of May, Louis XVIII. (the brother of Louis XVI.) made his entry into Paris. On March 1, 1815, Napoleon left Elba, and landed in France. Crowds followed him; the soldiers flocked around his standard; the Bourbons fled, and he took possession of their lately deserted palaces. The news spread terror through Europe; on the 25th of March a treaty of alliance was signed at Vienna between Austria, Russia, Prussia, and England, and preparations made to restore the Bourbon dynasty. At first success seemed to attend Napoleon; but on the 18th of June he was defeated at Waterloo. Placing himself under the safeguard of the English, he was sent to the island of St. Helena, where, on May 5, 1821, he died.

In 1824, Louis XVIII. died and his brother succeeded to the throne as Charles X. reigning until the revolution of 1830, and the election to the throne of Louis Philippe as king, by the will of the people. Louis Philippe abdicated (February 24, 1848) and a republic was proclaimed. Louis Napoleon was elected president in December, 1848; but by the famous *coup d'état* of December 2, 1851, he violently set aside the constitution, and assumed dictatorial powers. A year later he was raised to the dignity of emperor as Napoleon III. The course of events in the short but terrible Franco-German war of 1870-71 electrified Europe by its unexpected character. On September 2, 1870, Napoleon, with 90,000 men, surrendered at Sedan. A republic was proclaimed, and the first national assembly met at Bordeaux in February, 1871. The assembly organized a republican government, and nominated Thiers president of the French republic, but with the condition of responsibility to the national assembly. In 1873, Thiers resigned, and was succeeded by Marshal MacMahon, who resigned in 1879, and was succeeded by Jules Grévy. In 1887, Sadi-Carnot was chosen president. He was assassinated June 24, 1894. His successor was Casimir-Perier, who resigned January 15, 1895, and was succeeded by François Félix Faure. President Faure was assassinated in 1899, and his successor was Emile Loubet, during whose administration the famous Dreyfus case was reopened. During the term of Armand Fallières, who was chosen president in 1906, occurred the enforced separation of church and state. On Jan. 17, 1913, Raymond Poincaré was elected president.

On Aug. 3, 1914, Germany declared war on France, and by Aug. 12 troops were engaged along a battlefront extending from Holland to Switzerland. After advancing to within 20 miles of Paris, the Germans turned eastward, Sept. 4, to attack the main French army commanded by Gen. Joffre. In the ensuing battle of the Marne, Sept. 6-10, the Germans were defeated, and retreated to the Aisne.

Following the battle of the Aisne, September 12-28, the Germans established defensive lines from Belfort to the sea, from which they launched powerful thrusts toward Paris and the English Channel. While there was continuous fighting along the whole front, and many tremendous battles, such as Ypres, Artois, and Loos, 1915, Verdun and the Somme, 1916, and Arras and Cambrai, 1917, with some local gains for each opponent, the whole situation remained practically at a deadlock until March, 1918. Then, by a series of powerful attacks, the Germans beat back both the British and the French lines, gravely menacing Paris and Calais. In this crisis Gen. Foch was placed in supreme command of the allied armies. Organizing his forces for the counter-offensive, he brought the fifth great German offensive to a complete halt near the Marne, July 18, and instantly began a campaign of unremitting attacks which, after four months of uninterrupted success, ended in the collapse of the Teutonic powers and the abject submission of Germany to the Allies under the terms of the armistice of November 11, 1918.

By the Treaty of Versailles, 1919, Germany restored Alsace-Lorraine to France, and agreed to make financial reparations. In January, 1920, Deschanel was chosen president. Following the resignation of Deschanel in September, Premier Millerand was made president with Leygues as premier. Upon the fall of the Leygues cabinet in January, 1921, Briand became premier. Resenting criticism of his foreign policy, Briand resigned in January, 1922. Raymond Poincaré, former president of France, was then made premier.

French Revolution, The First. From May 5, 1789, to July 27, 1794. *Chief Leaders of the First French Revolution:* Comte de Mirabeau, 1789-1791; Danton, from the death of Mirabeau to 1793; Robespierre, from June, 1793, to July 27, 1794. Next to these three were St. Just, Couthon, Marat, Carrier, Hébert, Santerre, Camille Desmoulins, Roland and his wife, Brissot, Barnave, Sieyès, Barras, and Tallien.

Great Days of the First French Revolution: June 17, 1789, the *Tiers État* constituted itself into the "National Assembly"; June 20th, the day of the *Jeu de Paume*, when the Assembly took an oath not to separate until it had given

France a constitution; July 14th, Storming of the Bastille; October 5th and 6th, the king and National Assembly transferred from Versailles to Paris. This closed the ancient *régime* of the court. June 20, 21, 1791, flight and capture of the king, queen, and royal family. June 20, 1792, attack on the Tuileries by Santerre; August 10th, attack on the Tuileries and downfall of the monarchy; September 2d, 3d, and 4th, massacre of the state prisoners. January 21, 1793, Louis XVI. guillotined; May 31st, commencement of the Reign of Terror; June 2d, the Girondists proscribed; October 16th, Marie Antoinette guillotined; October 31st, the Girondists guillotined. April 5th, 1794, downfall of Danton; July 27th, downfall of Robespierre.

Frisians or Frisii (later called Frisones). An ancient Germanic people, who inhabited the extreme northwest of Germany, between the mouths of the Rhine and Ems, and were subjected to the Roman power under Drusus. They were subdued by the Franks, and, on the division of the Carlovingian Empire, their country was divided into West Frisian (West Friesland) and East Frisian (East Friesland). The language of the Frisians is intermediate between the Anglo-Saxon and the Old Norse. Our knowledge of the old Frisian is derived from certain collections of laws; as the "Asegabuch," composed about 1200; the "Brockmerbrief," in the Thirteenth Century; the "Œpnsiger Domen," about 1300, and some others.

Fronde, a name given to a revolt in France opposed to the Court of Anne of Austria and Mazarin during the minority of Louis XIV. The war which arose, and which was due to the despotism of Mazarin, passed through two phases; it was first a war on the part of the people and the parliament, called the Old Fronde, which lasted from 1648 till 1649, and then a war on the part of the nobles, called the New Fronde, which lasted till 1652, when the revolt was crushed by Turenne to the triumph of the royal power. The name is derived from the mimic fights with slings in which the boys of Paris frequently indulged, and which even went so far as to beat back at times the civic guard sent to suppress them.

Garde Nationale, a guard of armed citizens instituted in Paris, July 13, 1789. At first it numbered 48,000 men, but was increased to 300,000 when it was organized throughout the whole country. Marquis de Lafayette was its first commander. It was reorganized by the Directory and by Napoleon, and again under the Bourbons and was dissolved in 1827. Under Louis Philippe it was resuscitated and contributed to his overthrow. In 1851, the national guard was again reorganized, but in 1855 dissolved. In 1870, the national guard of Paris was formed for the defense of the city against the Prussians. The resistance of a section of the guard to the decree of disarmament led to the communal war, at the close of which the guard was declared dissolved by the National Assembly (1871).

Geneva Convention, a convention signed by the chief European continental powers in 1864, providing for the succor of the sick and wounded in war. It has since been ratified by the United States, Great Britain, Japan, and about forty other nations. The chief provisions are: (1) The neutrality of ambulances and military hospitals. (2) The personnel of such ambulances and hospitals, including sanitary officers and naval and military chaplains, to be benefited by the neutrality. (3) The inhabitants of a country, rendering help to the sick and wounded, are to be respected and free from capture. (4) No distinction to be made between the sick and wounded, on account of nationality. (5) A flag and uniform to be adopted, and an armlet for the personnel of ambulances and hospitals. The flag and armlet to consist of a red Greek cross on a white ground. The Turks use a red crescent in place of the cross. Other provisions have since been added intended to mitigate the severity of naval combat, and cover cases of capture and sinking of vessels. To carry out the terms of this convention, the International Society for the Aid of the Sick and Wounded has been organized, with committees in the chief towns in the United States and in Europe. It first played an important part in the Franco-German War, every nation sending its contingent of ambulances, surgeons, etc. In the Spanish-American War the Cuban Central Relief Committee used the Red Cross Society as an agency in the distribution of relief.

Georgia. Named after King George II. of England. Georgia was the latest settled of the thirteen colonies, which first formed the United States. The country was originally included in the charter of Carolina. In 1732 the territory was granted to a corporation, which sent out the first colony under Sir James Oglethorpe the same year. In 1733 Savannah was founded. General Oglethorpe commanded the forces of Carolina and Georgia in the unsuccessful expedition against St. Augustine in 1740. In 1752, Georgia became a royal government under regulations similar to those of the other colonies. During the Revolution Georgia was overrun by the British, and Savannah captured in 1778. The Constitution of the United States was ratified January 2, 1788. The State seceded January 19, 1861. The principal military events were those about Atlanta, resulting in its evacuation, and Sherman's March to the Sea, all in 1864. Georgia was formally readmitted to the Union July 15, 1870. An International Cotton Exposition was held at Atlanta in 1881, which gave a pronounced impulse to that industry in the South. The State enacted a law in prohibition of the liquor traffic in 1907.

Germany. After the gradual retirement of the Romans from Germany the country became divided into petty states and governments, where the influence of France was soon made apparent on both sides of the Rhine, asserting supremacy over the whole of the west of Germany. Charlemagne, extending his conquests from the North Sea to the Alps, and from the Rhine to Hungary, laid the foundation of that long line of emperors and kings who occupied the German throne for upward of 1,000 years. On the extinction, in 911, of the Carlovingian dynasty, the archbishops, bishops, and abbots arrogated to themselves the right of electing their sovereign, who could not, however, assume the imperial title till he was crowned

by the pope. At this period there were in Germany five nations—the Franks, Saxons, Bavarians, Swabians, and Lorrainers. Their choice of a ruler fell upon the Count of Franconia, who, under the title of Conrad I., reigned King of Germany from 911-18. He was succeeded by Henry, Duke of Saxony, who gained conquests over the Danes, Slavs, and Magyars, which was confirmed and extended by his son and successor, Otho I. (936-73), who carried the boundaries of the empire beyond the Elbe and Saale. In 1039-56 Henry III. extended German supremacy over Hungary. In 1125 the male line of the Franconian dynasty became extinct by the death of Henry V.; Lothaire of Saxony occupied the throne till 1138; when the reins of power were assumed by Conrad III., Duke of Franconia, in whose reign the civil wars of the Guelphs and Ghibellines began. He was the first of the Hohenstauffen dynasty. He was succeeded by the famous Frederick I., surnamed Barbarossa, who, with the flower of his chivalry, perished in the Crusades. In 1273 Rudolf I., the first of the Habsburg line, which still reigns in Austria, began his reign, and restored order by destroying the strongholds of the nobles. For the next 200 years, counting from 1292, the period of the accession of Adolphus, the history of the German Empire presents few features of interest. In 1493 Maximilian I., succeeded his father, Frederick III., married Mary, daughter of Charles the Bold of Burgundy, and became, consequently, involved in the general politics of Europe, while his opposition to the reformed faith preached by Luther embittered the religious differences which marked the close of his reign. He was succeeded by Charles V., who, although opposed to the Reformation, left the princes of Germany to settle their religious differences among themselves, and to quell the insurrection of the peasants in 1525, which threatened to undermine society. He abdicated in favor of his brother Ferdinand in 1556, who granted entire toleration to the Protestants. Ferdinand's reign was disturbed by domestic and foreign aggressions. Anarchy, both civil and religious, now obtained in his dominions to such an extent as to culminate in the Thirty Years' War, which closed under Ferdinand III. by the treaty of Westphalia, 1648. This terrible war depopulated the rural districts of Germany, destroyed its commerce, crippled the powers of the emperors, burdened the people with taxes, and cut up the empire into a multitude of petty states, whose rulers exercised almost absolute power. The male line of the Habsburg dynasty expired with Charles VI., 1740. The reign of this potentate and that of his predecessor, Joseph I., were signalized by the victories won by the imperialist general, Prince Eugene, and Marlborough, over the French. During the Seven Years' War Frederick the Great, of Prussia, maintained his character for skillful generalship at the expense of Austria. During the life-time of Maria Theresa she retained her authority over all the Christian states, but on her death her son, Joseph II., was little more than nominal sovereign. In 1792 Francis II. was crowned Emperor of Germany; in 1804 he assumed the title Francis I. Emperor of Austria; in 1806 he resigned the German crown and assumed the title of Emperor of Austria, having suffered a series of defeats by the armies of the French Republic. From this period till 1814-15 Germany was almost wholly at the mercy of Napoleon, who deposed the established sovereigns, and dismembered the states in the interest of his own favorites. Of the 300 states into which the empire was divided there remained only forty—a number subsequently reduced to thirty-five. The Diet was now reorganized by all the allied states as the legislature and executive organ of the Confederation. The French Revolution of 1830 reacted sufficiently to constrain the rulers of some of the German states to give written constitutions to their subjects. In 1848 insurrectionary movements compelled the convocation of a natural congress of representatives of the people. The Archduke John of Austria was elected vicar of the newly organized government. The refusal of the King of Prussia to accept the imperial crown which was offered him by the parliament was followed by a provisional regency of the empire. In 1850 the Diet was restored by Austria and Prussia. In 1859 the federal army was mobilized, and the Prussian prince regent made commander-in-chief. By the treaty of Gastein, Austria and Prussia agreed to a joint occupation of the Elbe duchies; but to prevent collision it was judged prudent that Austria should occupy Holstein and Prussia Schleswig. Prussia was believed to have the intention of annexing the duchies, while Austria began to favor the claims of Prince Frederick of Augustenburg. In 1866 Austria, disregarding the convention of Gastein, placed the whole matter at the disposal of the Bund. Prussia protested, declared war, and quickly defeated Austria. Austria then gave up all claims to Schleswig-Holstein, and also restored Venetia to Italy.

In 1870 the Franco-Prussian war resulted in the utter humiliation of the French arms, and the cession of Alsace-Lorraine, containing 5,605 square miles of territory, together with the payment of five billion francs as additional indemnity. The German empire, reconstructed in 1870, as a result of this conflict, grew out of the North German Confederation established in 1866. On January 18, 1871, King William of Prussia received at Versailles the title of German emperor. He was succeeded in 1888 by his son Friedrich III. who reigned three months.

Friedrich III. was succeeded by his son William II., whose early reign was marked by the formation of the Triple Alliance, with Austria and Italy, by the acquisition of foreign dependencies, and by rapid industrial and commercial progress. His later reign witnessed an enormous and ever increasing expansion of military and naval armament to keep pace with a colossal ambition for world conquest and world power. In furtherance of these aims, Germany supported Austria against Russia in the Balkans, formed an alliance with Turkey to gain access to Asia, and made bold demands for French and Belgian territory in Africa.

All these plans for vast military conquests were brought to a head when Austria-Hungary, with the approval of Germany, declared war on

Serbia, July 28, 1914. Russia, to aid Servia, began mobilization. This led Germany to declare war on Russia, Aug. 1, and upon France, as an ally of Russia, Aug. 3. Upon Belgium's refusal to grant passage of troops to invade France, German forces stormed Liége, Aug. 4-7, whereupon England declared war on Germany. The Germans took Louvain, Brussels, and Ghent. Defeating the British at Mons and the French at Charleroi, they forced the allied armies back into France. After following the British southward, nearly to Paris, the Germans turned eastward in an attempt to crush the main French armies. Severely defeated in the ensuing battle of the Marne, Sept. 6-10, the Germans retreated and fought an indecisive struggle on the Aisne, Sept. 12-28. Establishing defensive lines from Switzerland to the sea, the German armies maintained their positions on the Franco-Belgian front essentially unchanged for nearly four years, despite terrific battles with huge losses for both sides.

Feb. 4, 1915, Germany declared the waters around the British Isles a submarine war zone. Following the capture of Warsaw, Aug. 4, the Germans soon completed the conquest of Russian Poland. From February to August, 1916, the crown prince made fruitless attempts to capture Verdun. Rumania entered the war against Germany, Aug. 27, but suffered complete defeat with the loss of Bucharest in December.

On Feb. 1, 1917, Germany began unrestricted submarine warfare which led the United States to declare war on Germany, Apr. 6. On Nov. 7 the Bolsheviki, with German assistance, seized power in Russia and on Mar. 3, 1918, signed the Brest-Litovsk treaty for a separate peace with Germany. Mar. 21, 1918, Ludendorff began a series of tremendous attacks to separate and destroy the British and French armies in France before the arrival of effective American aid. After achieving marked local success and approaching within 40 miles of Paris, the German armies were thrown back by allied counter-attacks, July 18, and steadily defeated until November. William II. abdicated and fled to Holland upon the signing of the armistice of Nov. 11, 1918, the terms of which included the surrender of the German fleet and the occupation of the Rhine by the Allies. On Nov. 24 American troops entered Rhenish Prussia.

A new government was proclaimed, with Friedrich Ebert as provisional chief executive. In the parliamentary election held Jan. 19, 1919, the moderate socialists prevailed. On Feb. 11, 1919, a provisional constitution was adopted and Ebert was immediately elected president of the new German state. By the Treaty of Versailles, Germany restored Alsace-Lorraine to France and agreed to make substantial reparations. The years 1920-21 were marked by a considerable revival of industry and trade.

Gettysburg, Battle of, fought July 1-3, 1863, between the Union Army under General Meade, and the Confederates under General Lee. During May the armies lay fronting each other upon the Rappahannock. Early in June Lee began his movement for the invasion of Pennsylvania, crossing the Potomac on the 24th and 25th, and reaching Chambersburg, Pa., on the 27th. General Hooker, then in command of the Army of the Potomac, moved in the same general direction, but on the 28th was relieved, and the command given to Meade. In order to prevent his communications from being severed, Lee turned back toward Gettysburg to give battle. Meade had intended to give battle at a spot several miles from Gettysburg, near which was, however, a small portion of his army. This came into collision about 8 A. M. on July 1st, with the advance of Lee, and was forced back, taking up a strong position on Cemetery Hill, in the rear of Gettysburg. Hancock, who had been sent forward to examine the position reported that Gettysburg was the place at which to receive the Confederate attack, and Meade hurried his whole force to that point. The action on the second day, July 2d, began about 4 P. M. with an attempt made by Lee to seize Round Top, a rocky hill from which the Union position could be enfiladed. When this day's fighting closed Lee was convinced that he had greatly the advantage, and he resolved to press it the next day. On the morning of July 3d, an attempt was made upon the extreme Union right, but repelled. The main attack on the center was preluded by a cannonade from 150 guns, which was replied to by eighty, little injury being inflicted by either side. About noon the Union fire was slackened in order to cool the guns, and Lee, thinking that the batteries were silenced, launched a column of 15,000 or 18,000 against the Union lines. Some of this column actually surmounted the low works, and a brief hand-to-hand fight ensued. But the column was practically annihilated. No official report of the Confederate loss was ever published; the best estimates put it at about 18,000 killed and wounded, and 13,600 missing, most of them prisoners. The Union loss was 23,187, 16,543 of whom were killed and wounded.

Ghibellines (*gĭb'ĕl-lēnz*). The name of a celebrated political faction which existed in Italy during the Thirteenth Century and sprung out of the disputed succession to the imperial throne of Germany, vacated in 1137 by the death of Lothaire II. Conrad of Hohenstaufen, his elected successor, found his claim disputed by Henry of Guelph (surnamed the Proud), Duke of Saxony and Bavaria. At the latter's death his pretentions became personified in his son Henry the Lion, Duke of Brunswick, whose adherents called themselves *Guelphs* after his patronymic, in distinction from the *Ghibellines*, who derived their cognomen from Conrad's lordship of *Weiblingen*, 1140. Their feud after a while extended to Italy, over which the German emperors claimed supremacy against the popes, the *Guelphs* becoming there the supporters of the latter. This strife did not terminate until the French invasion of Charles VIII. in 1495.

Girondists (*ji-ron'dists*), the name given to the moderate Republicans in the first French Revolution. The name was derived from the department of Gironde, which chose for its representatives in the Legislative Assembly five men who greatly distinguished themselves by their oratory, and who, being joined by Condorcet, Brissot, and the moderate Republicans who were the adherents of Roland, formed a powerful

Conservative party. They fell during the Reign of Terror, and most of them perished on the scaffold.

Gladiators, in *Ancient Rome,* professional combatants, who fought in the arena for the amusement of the people. They were at first slaves, prisoners, or convicts; but afterwards freemen fought in the arena, either for hire or from choice. When a gladiator was severely wounded, so as to be unable to fight any longer, his antagonist stood over him with his sword lifted, and looked up to the assembly for its fiat. If the majority turned their thumbs downwards, that was the signal of death. The practice was defended, even by Cicero, as serving to keep up a martial spirit and a contempt of death among the people. Constantine prohibited gladiators' fights by an edict (A. D. 325), but the practice was not wholly extinct till the time of Theodoric (A. D. 500).

God's Truce, or The Truce of God. A singular institution of the Middle Ages, which originated in a council assembled at Limoges at the end of the Tenth Century, and in the council of Orléans, 1016. It consisted in the suspension for a stated time, and at stated seasons and festivals, of that right of private feud for the redress of wrongs, which, under certain conditions, was recognized by mediæval law or usage. It prevailed chiefly in France and the German Empire; and fell gradually into disuse when the right of private redress was restricted, and at last entirely abolished by laws.

Goths. A powerful German people, who originally dwelt on the Prussian coast of the Baltic, at the mouth of the Vistula, but afterwards migrated south. About the beginning of the Third Century we find them separated into two great divisions, the Ostrogoths or Eastern Goths, and the Visigoths or Western Goths. The former were settled in Mœsia and Pannonia, while the latter remained north of the Danube. At the beginning of the Fifth Century, the Visigoths, under their King Alaric, invaded Italy, and took and plundered Rome (A. D. 410). A few years later they settled in the southwest of Gaul, and thence invaded Spain, where they founded a kingdom which lasted for more than two centuries. Meantime, the Ostrogoths extended their dominion almost up to the gates of Constantinople, and, under their King Theodoric (A. D. 489) obtained possession of the whole of Italy. Their dominion over Italy lasted, however, only till 554, when it was overthrown by Narses, the general of Justinian. From this time, the Goths figure no longer in Western Europe, except in Spain, from which they were finally driven by the Arabs. But their name was perpetuated long after in Scandinavia, where a Kingdom of Gothia existed till 1161, when it was absorbed in that of Sweden. Of Gothic literature, in the Gothic language, we have the translation of the Scriptures by Ulphilas, which belongs to the Fourth Century, and some other religious writings and fragments.

Greece. Prior to the first recorded Olympiad, B. C. 776, little is certain in Greek history. Long anterior to this the country had been inhabited, but fact and fable are so mingled in the accounts that have come down to us that it is impossible to distinguish the true from the false. Starting, then, from the period above indicated, we shall give a brief *résumé* of the chief historic events up to the conquest of Greece by the Turks in 1456 A. D.— Olympic Games revived at Elis, 884 B. C.; the first Olympiad dates from 776 B. C.; the Messenian Wars occurred from 743–669; the first sea-fight on record, between the Corinthians and the inhabitants of Corcyra, 664; Byzantium built, 657; the seven sages of Greece (Solon, Periander, Pittacus, Chilo, Thales, Cleobulus, and Bias) flourished about 593; Persian conquests in Ionia occurred in 544; Sybaris in Magna Græcia destroyed, and 100,000 Crotonians under Milo defeat 300,000 Sybarites, 508; Sardis burned by the Greeks, which causes an invasion by the Persians, 504; Thrace and Macedonia are conquered, 496; Athens and Sparta defy the Persians, 490; the Persians are defeated at Marathon, 491; Xerxes invades Greece, but is repulsed at Thermopylæ by Leonidas, 480; battle of Salamis occurs, 480; Mardonius is defeated and slain at Platæa, and the Persian fleet is destroyed at Mycale, 479; battle of Eurymedon, which ends the Persian War, 466; Athens attempts to obtain an ascendency over the rest of Greece, 459; the first "sacred war" begun, 448; Corinth and Corcyra involved in war, 435, which leads to the Peloponnesian War, lasting from 431–404; the Athenian expedition to Syracuse ends disastrously, 415–413; the retreat of the 10,000 under Xenophon occurs, 400; Socrates dies, 399; great sea-fight at Cnidas, 394; the peace of Antalcidas, 387; Thebes arrives at the height of its power in Greece between the years 370–360; the battle of Mantinea, and death of Epaminondas, 362; Philip of Macedon reigns, 353; the sacred war is stopped by Philip, who captures all the towns of the Phocæans, 348; battle of Chæroneia, 338; Alexander enters Greece, conquers the Athenians, and destroys Thebes, 335; he conquers the Persian Empire, 334–331; Greece invaded by the Gauls, 280; they are defeated at Delphi, 279; and finally expelled, 277; internal feuds lead to interference by the Romans, 200; Mummius conquers Greece, and makes it a Roman province, 147-146. Under Augustus and Hadrian Greece was prosperous, 122–133 A. D.; Alaric invades Greece, 396; it is plundered and ravaged by the Normans from Sicily, 1146; conquered by the Latins, 1204; the Turks under Mohammed II. conquer Athens and part of Greece, 1456; thence, till 1822, the country was a province of Turkey. The revolt of the Greeks from Turkish rule took place March 6, 1821, under Alexander Ypsilanti, and on January 1, 1822, they declared their independence. In 1825, the Turks partially reoccupied the country, but were finally forced to evacuate in 1828. At last, on February 3, 1830, a protocol of the allied powers declared the independence of Greece, which was recognized by the Porte on the 25th of April, of this year. The crown was offered to Leopold, Prince of Saxe-Coburg, and when he refused it, to Otho, a young prince of Bavaria, who was proclaimed king of the Hellenes at Nauplia in 1832. But his arbitrary measures, and the preponderance which he gave to Germans in the government, made him unpopular, and, although

after a rebellion in 1843, a constitution was drawn up, he was compelled by another rebellion in 1862 to abdicate. A provisional government was then set up at Athens, and the national assembly offered the vacant throne in succession to Prince Alfred of England and Prince William George of Denmark. The latter accepted it, and on March 30, 1863, was proclaimed as King George I. In 1864, the Ionian islands were annexed to Greece.

Greece long sought to extend its frontier northwards, to include the large Greek population in Thessaly and Epirus. In 1878 Greek troops were moved into Thessaly and Epirus, but were withdrawn on the remonstrance of Britain. The persistence of Greece led, in 1881, to the cession to her of Thessaly and part of Epirus, about one-third less than the territory promised by the Berlin congress. The union of Eastern Rumelia with Bulgaria, in 1885, gave rise to a demand for a rectification of frontiers, and war with Turkey was prevented only by the great powers, who enforced peace by blockading the Greek ports. In 1896 war was declared against Turkey when the people of Crete demanded their right to become a portion of Grecian territory. The result was a disastrous defeat.

In 1912, disputing Turkish boundaries and authority, Greece, Bulgaria, Servia, and Montenegro declared war on Turkey. By treaties which closed the war in 1913, Greece acquired Crete, Thessaly, and parts of Epirus, Macedonia, and Thrace, including the ports of Saloniki and Kavala. Upon the assassination of King George, 1913, his son Constantine I., brother-in-law of the German kaiser, became king.

When the war of nations began, 1914, Greece remained neutral. Conflict between the king, who was pro-German, and premier Venizelos, who was pro-Ally, caused the fall of the cabinet, March, 1915. In October, 1915, Constantine refused to fulfil treaty obligations to aid Servia against Bulgarian attack and declined Great Britain's offer to cede Cyprus to Greece in return for assistance in the war. French and British troops were landed for service in Servia and a military base was established at Saloniki. In 1917 Constantine was forced to abdicate in favor of his son Alexander, after which Greece definitely joined her forces with the Allies. In December, 1920, Constantine was recalled to the throne, and during 1921 conducted a costly war against the Turks.

Gunpowder Plot, The. The name given to a conspiracy projected by Guy Fawkes and some revolutionary associates against James I. and the members of the two Houses of Parliament, with a design to their destruction by undermining the building in which they were expected to assemble, placing there charges of gunpowder, and firing the same, November 5, 1605. The plot, however, proved abortive, and the conspirators met the penalty of their crime.

Hanse Towns. The name given to certain towns in Germany, so called from the Hanseatic League, which was formed in 1241, for the protection of the ports against the piracies of the Swedes and Danes. At first the League consisted only of towns situated on the coast of the Baltic; but it became so powerful, and exercised so many privileges, that ultimately it included many of the principal cities of Europe. The League consisted, in 1370, of sixty-six cities and forty-four confederate towns. The Thirty Years' War in Germany (1618-48) broke up the association. The only towns now known as Hanse Towns are Hamburg, Lübeck, and Bremen.

Habsburg, or Hapsburg (properly Habichtsburg or Habsburg, the hawk's castle). A small place in the Swiss Canton of Aargau, on the right bank of the Aar. The castle was built about 1027 by Bishop Werner of Strassburg. Werner II., who died in 1096, is said to have been the first to assume the title of Count of Habsburg. After the death, about 1232, of Rudolf II., the family divided into two branches the founder of one of which was Albert IV. In 1273, Rudolf, son of Albert IV., was chosen Emperor of Germany, and from him descended the series of Austrian monarchs, all of the Habsburg male line, down to Charles IV. inclusive. After that the dynasty, by the marriage of Maria Theresa to Francis Stephen of Lorraine, became the Habsburg-Lorraine. Francis II., the third of this line, was the last of the so-called "Holy Roman Emperors," this old title being changed by him for that of Emperor of Austria. From the Emperor Rudolf was also descended a Spanish dynasty which began with the Emperor Charles V. (Charles I. of Spain), and terminated with Charles II. in 1700.

Helvetii. A powerful Celtic people, who dwelt in what is now the west of Switzerland. Their chief town was *Aventicum*. About 58 B. C. they resolved, on the advice of Orgetorix, one of their chiefs, to migrate from their country with their wives and children, and to seek a new home in Gaul. They were, however, defeated by Cæsar, and driven back into their own territories, which became thenceforth a Roman colony. In the commotions that followed the death of Nero (A. D. 63) they were almost extirpated.

Holland was an independent country from 863 to 1433, when Philippe of Burgundy united it to his vast estates. In 1477 Mary of Burgundy married Maximilian, and Holland was united to Austria. After Karl V. it passed into Spanish control. In 1579 Holland united with six other provinces in the "Union of Utrecht," and became a republic, called "The Seven Provinces," with William of Orange as stadtholder. In 1806 it was given by Napoleon I. to his brother, Louis Bonaparte. In 1810 it was united to France, but, 1815, it was united to Belgium and formed "The Kingdom of the Netherlands" under William I. In 1830 Holland and Belgium were divided. William II. became king in 1840 and William III. in 1849. William III. was succeeded by Wilhelmina in 1890.

Holland ordered mobilization of troops, July 31, 1914, and, to preserve neutrality in the war of the nations, blocked her roads with barbed wire and barricades, patroled her borders, and refused to export food to Germany. In 1915 the army was increased to 550,000.

Holy Alliance. The name given to a treaty between the Emperors of Russia and Austria and the King of Prussia, ratified in Paris after the fall of the Emperor Napoleon (Septem-

ber 26, 1815), the object of which was professedly to pledge the respective monarchs to conduct their relations to each other under the guidance of Christian principles, but really to pledge each other to the maintenance of their respective dynasties. By the terms of this alliance, no member of the family of Napoleon was ever to occupy a European throne.

Holy Roman Empire, The. The western part of the old Roman Empire, which was severed from the eastern part in 800, and was given by the pope to Charlemagne, who was crowned "Emperor of the Romans." When Charlemagne's empire was divided, Ludwig the German became kaiser; but on the death of Karl the Fat the title fell into abeyance for seventy years. In 962, John XII. gave the title to Otto I. the Great, and changed it into "The Holy Roman Empire." Francis II. renounced the titles of King of the Romans and Emperor of the Romans in 1806, and Napoleon added the Italian states to France, May, 1809.

Home Rule League (1870). Projected by Mr. Butt, who stoutly opposed the repeal of the Union, but agitated for an Irish parliament which should have no power to touch upon imperial matters, but should be empowered to deal with matters of Ireland of a purely local character. On the death of Mr. Butt, in 1879, his scheme passed into the hands of the Land League, and their watchword, "Ireland for the Irish," meant separation from Great Britain. The term Home Rule survived the death of Mr. Butt, and in 1886, Mr. Gladstone, then prime minister, brought in a bill to give Ireland Home Rule, and exclude Irish members from Westminster. The measure broke up the great Whig party under the leadership of Lord Hartington, supported by Mr. Chamberlain (a Radical), Mr. Goschen, and others, who called themselves Unionists, and joined the great Tory party under the government of Lord Salisbury.

Huguenots. A name formerly given to the Protestants in France. The story of the persecutions of the Huguenots is one of the saddest in history. In 1561 they took up arms against their persecutors; the struggle continued until the Edict of Nantes, establishing the rights of the Protestants, was signed by Henry of Navarre, April 13, 1598. The massacre of St. Bartholomew, in which, according to various authorities, from 2,000 to 100,000 Huguenots were murdered throughout the kingdom by secret orders from Charles IX., at the instigation of his mother, Catherine de' Medici, began on the night of August 24, 1572.

Hundred Years' War, The (1337-1453). A war between England and France, caused by Edward III.'s claim to the crown of France. When Charles IV. of France died, without male issue, his cousin Philip of Valois succeeded him as Philip VI., the French law excluding females from the throne. Edward III. of England claimed the crown because through his mother Isabella he was nephew to King Charles IV. The French replied that his claim was worthless since he could not inherit from one who could not herself have ascended the throne. After a long series of contests lasting more than a century, the war closed with the result that England lost all her possessions in France except Calais, which she retained for about a century longer.

Hungary. The Magyars, an Asiatic people of Turanian race, allied to the Finns and the Turks, dwelt in what is now Southern Russia before they descended under Arpád into the plain of the Danube, towards the end of the Ninth Century, and conquered the whole of Hungary and Transylvania. During the first half of the Tenth Century their invasions and incursions spread terror throughout Germany, France, and Italy; but at length their total defeat by Otho I. of Germany put an end to their maraudings, and under their native dynasty of Arpáds they settled down to learn agriculture and the arts of peace. Stephen I. (997–1030) was the first who was successful in extending Christianity generally amongst the Hungarians, and was rewarded by a crown from Pope Sylvester II. and with the title of *apostolic king* (1000). Stephen encouraged learning and literature, and under him Latin became not only the official language of the government, but the vehicle of Hungarian civilization, which it unfortunately continued to be for the next 800 years. In 1089 King Ladislaus extended the boundaries of Hungary by the conquest of Croatia and Slavonia, and King Coloman by that of Dalmatia in 1102. During the Twelfth Century the Hungarians first attained, through French connections, a certain refinement of life and manners. About the middle of the Thirteenth Century King Bela induced many Germans to settle in the country which had been depopulated by the Mongol invasions. With Andrew III. (1290–1301) the male line of the Arpád Dynasty became extinct, and the royal dignity now became purely elective. Charles Robert of Anjou was the first elected (1309). Louis I. (1342–82) added Poland, Red Russia, Moldavia, and a part of Servia, to his kingdom. The reign of Sigismund (1387–1437), who was elected Emperor of Germany, is interesting from the invasion of Hungary by the Turks (1391), and the war with the Hussites. Sigismund introduced various reforms, and founded an academy at Buda. Matthias Corvinus (1458–90), combining the talents of a diplomatist and general, was equally successful against his enemies at home and abroad, and is even yet remembered by the popular mind as the ideal of a just and firm ruler. He founded a university at Pressburg. During the reigns of Ladislaus II. (1490–1516) and Louis II. (1516–26) the rapacity of the magnates and domestic troubles brought the power of Hungary low, and the battle of Mohacs (1526) made a great part of the country a Turkish province for 160 years. The rest was left in dispute between Ferdinand of Austria and John Zapolya; but eventually, by the help of the Protestants, passed to the former, and has since remained under the scepter of the Habsburgs. In 1686 Leopold I. took Buda and recovered most of Hungary and Transylvania. In 1724 Charles VI. secured by the Pragmatic Sanction the Hungarian Crown to the female descendants of the House of Habsburg, and the loyalty of the Hungarians to his daughter, Maria Theresa, saved the dynasty from ruin. Maria

Theresa did much for the improvement of Hungary by the promulgation of the rural code called Urbarium, and by the formation of village schools. On the advent of the French revolution, and during the wars which ensued, the Hungarians once more played a prominent part in support of the Habsburg Crown. Napoleon fell, but the revolution had given an impetus to ideas of national and popular rights which the Hungarians, long stifled under the Germanic traditions and tendencies of their rulers, were amongst the first to feel. For a time Francis I. and Metternich stood stiffly out against all concessions, and tried to govern by pure absolutism, but ended by summoning in 1825 a new diet. The diet distinguished itself by adopting the Magyar language in its debates instead of the Latin to which it had been accustomed. Succeeding diets in 1830 and 1832 made new demands in the direction of religious equality, a popular suffrage, and abrogation of the privileges of the nobles. The Austrian Government attempted to repress the Hungarian national movement by imprisoning Deák, Kossuth, and others of the leaders. The struggle continued till 1848, when the French Revolution of that year gave the impulse for a similar rising in Vienna. Prince Metternich fled to London, and the Viennese court made a formal concession of all important demands; but these had no sooner been granted than the government began secretly to work against their being put in operation. The dependencies of the Hungarian Crown, the Croats and the Wallachians of Transylvania, were privately encouraged to revolt, and in December of the same year an Austrian army took the field with the avowed object of annihilating the independence of Hungary; but a series of pitched battles resulted on the whole so much in favor of the Hungarians that Austria was obliged to call in the aid of Russia, which was at once granted. After a heroic struggle the Hungarians had to succumb. But the struggle was continued by the Hungarians in the form of a constitutional agitation. At last, in 1867, a separate constitution and administration for Hungary was decreed, and on June 8th the emperor and empress were crowned king and queen of Hungary. The dualism of the Austrian Empire was thus finally recognized and constituted.

At the close of the World War the Austro-Hungarian Empire was dismembered. Hungary was greatly reduced in size, portions of the former kingdom becoming parts of Rumania, Poland, Czecho-Slovakia, and Jugoslavia. In 1919 the soviet rule established by Bela Kun was overthrown and a more conservative government took charge of the new Hungarian state. In 1921 an attempt by the former Emperor Charles to seize control was quickly defeated.

Huns. The name given to several nomadic Scythian tribes, which devastated the Roman Empire in the Fifth Century. They inhabited the plains of Tartary, near the boundaries of China, many centuries before the Christian era; and they were known to the Chinese by the name of Hiongun, and also Han. It was in order to put a stop to the continual aggressions of the Huns that the great wall of China was built; and after this the Huns split up into two separate nations, named respectively the Northern and the Southern Huns. The first-mentioned of these gradually went west to the Volga, where they encountered the Alanni, whom they defeated. Here the Huns remained for about two centuries; but, under the Emperor Valens, they crossed the Bosphorus; afterward invading Rome, under their leader Attila. In 451 he was defeated by the Goths and Romans at the terrible battle of Chalons, on the plain of the Marne in France, where 300,000 dead were left upon the field. Attila, however, continued to menace Rome until his death in 453. The Huns then broke up into separate tribes and were finally driven eastward across the Don. So fearful were the devastations of Attila that the western Christians called him the "scourge of God," and the term "Hun" became synonymous with the worst known extremes of barbaric cruelty and wanton destruction. Hence its universal application to the Germans consequent upon the atrocities perpetrated by them during the world war.

Hussites (*hŭs'ĭtz*). The followers of John Huss (*q. v.*), who avenged his death by one of the fiercest and most sanguinary civil wars ever known. They took the field under Ziska, 1418, gained the battle of Prague, July 14, 1420, and nearly annihilated the Imperialists at Deutschbrod, January 8, 1422. After occupying the whole of Bohemia and Moravia, they threatened Vienna, and in 1426 gained the victories of Aussig and Mies. The Emperor Sigismund was at length too glad to come to terms with the Hussites, and the Treaty of Iglau, in 1436, terminated hostilities between Catholic and Protestant for the time being.

Hyksos, The, or Shepherd Kings of Lower Egypt. A race of Arabs which invaded ancient Egypt, and continued dominant, according to Manĕtho, for 500 years (B. C. 2085-1575), but according to Breasted only about a century (B. C.1657-1557). They formed or were contemporary with the Fifteenth, Sixteenth, and Seventeenth Dynasties of Upper Egypt. It is supposed that Abraham went to Egypt while the Sixteenth Dynasty was regnant; and that Joseph was viceroy about B. C. 1715, in the same dynasty.

Idaho. The region within the present limits of the State was included in the Louisiana Purchase of 1803. Idaho was included first in Oregon and subsequently in Washington. The first settlement of consequence was the Cœur d'Alene Mission, which was established in 1842. The permanent settlement of the territory did not begin until the discovery of gold in 1860.

Idaho was made a Territory in 1863 and was admitted to statehood in 1890. The state granted suffrage to women in 1896; enacted statutory Prohibition in 1915; and adopted constitutional Prohibition in 1916.

Illinois. The name is derived from that of an Indian tribe, Illini, signifying superior men. First explored in 1673 by Marquette, and in 1679 by La Salle. French settlements were formed at Crevecœur, Kaskaskia, and Cahokia in 1682. With the subjugation of Canada, in 1763, the French dominion east of the Mississippi became English. In 1783 Illinois was

ceded to the United States by England and became part of the Northwest Territory in 1787. After the successive severance of Ohio in 1800, of Indiana in 1805, and of Michigan in 1809, the remainder of the Northwest Territory was reconstituted as Illinois Territory, then embracing Wisconsin and part of Minnesota. On December 13, 1818, Illinois with its present limits was admitted as a State, being the eighth adopted under the Federal Constitution. The early history was an unbroken contest with the savages, the most notable incidents being the Fort Dearborn Massacre, August 15, 1812, and the Black Hawk War, 1831 to 1832. In 1913 partial suffrage was granted to women by legislative enactment.

Incas. A Peruvian Dynasty (1130–1571) which succeeded the Aymara Dynasty, and was reigning when (in 1533) Pizarro conquered Peru. The Incas called themselves descendants of the Sun. The first Inca was Manco-Capac, 1130. Atahualpa was taken prisoner by the Spaniards and put to death in 1533. Tupac-Amaru was beheaded in 1571.

India. The country was entered and partly subdued by Alexander the Great. About 126 B. C. it was also invaded by the Tartars, or Scythians of the Greeks, and Sakas of the Hindus. From the Tenth to the Twelfth Century of the Christian era the Mohammedans overran and conquered considerable portions of Hindustan, and subsequently the Mogul Empire was formed. In 1498, India was first visited by Vasco da Gama, and later the Portuguese and Dutch established settlements on the peninsula; but the former never acquired more than a paltry territory on the west coast, and the latter a few commercial factories. The French influence in India, at one time considerable, also yielded to the superior enterprise of the British, and finally the French relinquished the field. In 1625, the first English settlement was made by a company of merchants in a small spot of the Coromandel coast, of five square miles, transferred in 1653 to Madras. A short time previous a settlement had also been obtained at Hooghly, which afterward became the Calcutta station. In 1687, Bombay was erected into a presidency. In 1773, by act of the British Legislature, the three provinces were placed under the administration of a governor-general, and Calcutta was made the seat of a supreme court of judicature. Hitherto the affairs of India had been managed by the East India Company, but in 1784 a board of control was appointed, the president of which became secretary of state for India. From the year 1750, when the warlike acquisition of territory commenced under Lord Clive, a succession of conquests, almost forced upon the British contrary to their inclinations, placed nearly all India under their sway.

During the World War India furnished several hundred thousand troops for service chiefly on various Asiatic fronts. The dismemberment of Turkey, at the close of the World War, caused dissatisfaction among the Mohammedan population. The activities of the nationalist party increased the unrest. During 1920-21 serious uprisings against British rule occurred in various parts of India.

Indiana. Originally settled by the French at Vincennes in 1702, but little is known of its early history. In 1763, it became a British possession, and in 1783, by treaty with Great Britain, it became part of the United States. In 1787, it was made part of the Northwest Territory, this term being applied to all the public domain north of the Ohio River. This region was much devastated from 1788 to 1791 by the Indians, but their defeat in the latter year gave the settlers peace for a time. Indiana was organized territorially July 4, 1800. In 1811, an Indian war, instigated by Tecumseh, broke out, but the power of the savages was broken at Tippecanoe. Hostilities did not entirely cease till 1815. The State was admitted December 11, 1816. In 1827, the Erie Canal opened an outlet for the produce of the West, and the national road was commenced. These stimulated immigration, and the new State grew rapidly. A new constitution was adopted in 1851. Statutory Prohibition was enacted to take effect April 2, 1918.

Indians, American. According to the estimate of James Mooney, United States government expert, the total Indian population north of Mexico at the date of the discovery of America in 1492 was 1,115,000. In 1920 the Indian population of the United States, Alaska, and Canada was, in round numbers, 450,000. For a long period there was such a constant and rapid decrease in the number of Indians in the United States that many anthropologists predicted their early extinction. The low point in Indian population, however, was reached in 1900 when the census showed a total of only 237,000 within the boundaries of the United States. In 1920 this Indian population had risen to 336,000.

In 1910 there were living representatives in the United States of 280 tribes, and in Alaska of 21 tribes. In addition, there were remainders of 45 Eskimo tribes. It is estimated that there were survivors of about 150 tribes in Canada, making a total representation of approximately 500 tribes. About 100 tribes are supposed to have become extinct since Columbus discovered America. The following table shows the present distribution of Indians in the United States:

State	Area of Indian Lands Acres	Income of Indians Dollars	Population (1920)
Alaska			18,398
Arizona	18,653,014	5,482,039	42,400
California	517,118	1,586,226	16,241
Colorado	468,874	153,264	796
Florida	23,542	5,900	454
Idaho	682,939	1,491,630	4,048
Iowa	3,251	58,667	345
Kansas	272,519	629,086	1,466
Michigan	153,418	63,789	7,510
Minnesota	1,508,553	2,313,449	12,681
Montana	6,053,673	4,290,484	12,374
Nebraska	359,542	1,021,234	2,461
Nevada	740,635	609,133	5,900
New Mexico	4,697,224	2,196,417	21,530
New York	87,677	33,198	6,432
North Carolina	63,211	198,042	8,268
North Dakota	2,105,320	1,586,205	9,018
Oklahoma	19,551,890	39,393,608	119,255
Oregon	1,718,006	1,739,595	6,629
South Dakota	6,685,734	4,331,940	23,010
Utah	1,641,307	400,148	3,057
Washington	2,718,886	2,408,685	11,114
Wisconsin	590,111	1,646,960	10,319
Wyoming	2,102,286	886,536	1,748
All Other States			9,281
Total	71,398,730	72,526,235	354,735

Iowa. The name of the State, originally applied to the river so called, is derived from the Indian. It was a part of the Louisiana Purchase, acquired in 1803. It was first visited by a Frenchman, who gave his name, Dubuque, to the place where he settled in 1788. In 1834 the territory now included in Iowa was placed under the jurisdiction of Michigan, and in 1836 under that of Wisconsin. In 1838 Iowa became a separate territory, including also the greater part of Minnesota and the whole of Dakota. The delimitation of the State occurred when it was admitted as such in 1846. Immigration was rapid and continued in spite of a bloody massacre of pioneer settlers at Spirit Lake in March, 1857. In the same year the original constitution of 1846 was revised and the state capital was removed from Iowa City to Des Moines. In 1915 Iowa reenacted statutory Prohibition to take effect January 1, 1916.

Ireland. According to ancient native legends, Ireland was in remote times peopled by tribes styled Firbolgs and Danauns, eventually subdued by Milesians or Gaels, who acquired supremacy in the island. The primitive inhabitants of Ireland are now believed to have been of the same Indo-European race with the original population of Britain. Although Ireland, styled *Iernis*, is mentioned in a Greek poem five centuries B. C., and by the names of *Hibernia* and *Juverna* by various foreign pagan writers, little is known with certainty of her inhabitants before the Fourth Century after Christ, when, under the appellation of *Scoti*, or inhabitants of *Scotia*, they became formidable by their descents upon the Roman Province of Britain. These expeditions were continued and extended to the coasts of Gaul till the time of Laogaire McNeill, monarch of Ireland, 430 A. D., in whose reign St. Patrick attempted the conversion of the natives. From the earliest period each province of Ireland appears to have had its own king, subject to the *Ard-Righ*, or monarch, to whom the central district called Meath was allotted and who usually resided at Tara. Each clan was governed by a chief selected from its most important family, and who was required to be of mature age, capable of taking the field efficiently when occasion required. The laws were peculiar in their nature, dispensed by professional jurists styled *Brehons*, who, as well as the poets and men of learning, received high consideration, and were endowed with lands and important privileges. Cromlechs, or stone tombs and structures, composed of large uncemented stones, ascribed to the pagan Irish, still exist in various parts of Ireland; lacustrine habitations, or stockaded islands, styled *Crannogs* or *Crannoges*, in inland lakes, also appear to have been in use there from early ages. It is remarkable that a greater number and variety of antique golden articles of remote ages have been found in Ireland than in any other part of northern Europe; and the majority of the gold antiquities illustrative of British history now preserved in the British Museum are Irish. In the Sixth Century extensive monasteries were founded in Ireland, in which religion and learning were zealously cultivated. From these establishments numerous missionaries issued during the succeeding century, carrying the doctrines of Christianity under great difficulties into the still pagan countries of Europe, whose inhabitants they surprised and impressed by their self-devotion and asceticism. Among the eminent native Irish of these times were Columba, or Colum Cille, founder of the celebrated monastery of Iona; Comgall, who established the convent of Bangor, in the County of Down; Ciaran of Clonmacnoise; and Adamnan, Abbot of Iona and biographer of Columba. Of the Irish missionaries to the continent the more distinguished were Columbanus, founder of Bobio; Gallus of St. Gall, in Switzerland; Dichuill, patronized by Clotaire; and Ferghal, or Virgilius, the evangelizer of Carinthia. The progress of Irish civilization was checked by the incursions of the Scandinavians, commencing towards the close of the Eighth Century, and continued for upward of 300 years. From the close of the Eighth to the Twelfth Century Ireland, although harassed by the Scandinavians, produced many writers of merit, among whom were Ængus, the hagiographer; Cormac McCullenan, King of Munster and Bishop of Cashel, the reputed author of *Cormac's Glossary;* Cuan O'Lochain; Gilla Moduda; Flan of Monasterboice; and Tighernach, the annalist. Of the Irish architecture of the period examples survive at Cashel. The well-known round towers of Ireland are believed to have been erected about this era as belfries, and to have served as places of security for ecclesiastics during disturbances. But this is mere surmise, the date of their erection having never been established nor their use satisfactorily explained. The skill of the Irish musicians in the Twelfth Century is attested by the enthusiastic encomiums bestowed by Giraldus Cambrensis upon their performances.

The first step toward an Anglo-Norman descent upon Ireland was made by Henry II. in 1155. The chief Anglo-Norman adventurers, Fitz Gislebert, Le Gros, De Cogan, and De Curci, encountered formidable opposition before they succeeded in establishing themselves on the lands which they thus invaded. The government was committed to a viceroy, and the Norman legal system was introduced into such parts of the island as were reduced to obedience to England. The country was wholly subdued in 1210; in 1315, it was invaded by Edward Bruce, who was crowned king 1316, and slain 1318. Richard II. landed at Waterford with a large army, and gained the adherence of the people. In 1494 was passed Poyning's Law, making the Irish Parliament subject to the English Council. In 1542, Henry VIII. assumed the title of *king*, instead of *lord* of Ireland.

The attempts of the English Government to introduce the Reformed faith and English institutions stirred up great dissensions in Ireland. In 1601-02 occurred the famous but unsuccessful insurrection of Tyrone. In consequence of repeated rebellions, over 500,000 acres of land in Ulster became forfeited to the English Crown, and James I. divided his land among such of his English and Scottish subjects as chose to settle there. In 1641 occurred More and Maguire's Rebellion, which was an endeavor to expel the Protestant settlers in Ulster. Be-

tween the years 1649-56, Cromwell reduced the whole island to subjection.

In the Revolution of 1688, the native Irish generally took the part of James II., and the English and Scotch "colonists" that of William and Mary. The war was kept up until William defeated James at the battle of the Boyne, 1692. In 1778 the penal laws against the Catholics were made much more lenient. On Jan. 1, 1801, the legislative union of Great Britain and Ireland was consummated. As a result of O'Connell's agitation, Parliament passed, in 1829, the Catholic Emancipation Bill. A terrible famine, 1845-46, caused hundreds of thousands of Irish to emigrate to America.

The period 1860-90 was marked by the suppression of the Fenian movement, 1864; by the activities of the Land Leaguers, "moonlighters," and "boycotters," 1880-85; by the Phoenix Park murders, 1882; and by forced evictions resulting in riots, 1886, all leading to the stringent Crimes Act of 1887 and to increased agitation for home rule. In 1903 a liberal Land Act enabled tenants to purchase their holdings. In 1905 the Sinn Fein (ourselves) party, devoted to securing absolute independence for Ireland, was formed. In 1914 Asquith's Home Rule bill passed Parliament, but, owing to the opposition of Ulster and the onset of the World War, the operation of home rule was deferred.

The Easter rebellion in Dublin, 1916, was an abortive attempt to throw off British rule. Winning the elections of 1918, the Sinn Fein party organized the Dail Eireann (Irish Parliament) Jan. 21, 1919, and demanded recognition for the Irish Republic. After two years of turmoil and guerrilla warfare, an agreement was signed Dec. 6, 1921, creating the Irish Free State, with the same status within the British Empire as Canada or Australia, and giving Ulster the option of joining or remaining separate. This agreement, promptly approved by the British Parliament, was ratified Jan. 7, 1922, by the Dail Eireann. A provisional government was then formed to complete the establishment of the Irish Free State.

Ironsides, Cromwell's troopers, a thousand strong, and raised by him in the Eastern counties of England, so-called at first from the invincibility displayed by them at Marston Moor; were selected by Cromwell "as men," he says "that had the fear of God before them, and made conscience of what they did. . . . They were never beaten," he adds, "and wherever they were engaged against the enemy, they beat continually."

Israelites (Hebrew *Yisreëli*), the descendants of Jacob, "the chosen people." The twelve tribes descended from Jacob's children were called "Israel" in Egypt, and throughout the Pentateuch, the books of Joshua, Judges, Samuel, and Kings. The name was afterward given to the larger portion, or ten northern tribes, after the death of Saul, a distinction that obtained even in David's time. But more definitely was the name applied to the schismatical portion of the nation, including all the tribes save Judah, Simeon, and Benjamin, which set up a separate monarchy in Samaria after the death of Solomon. After the exile the two branches became blended, and are again called by the old name by Ezra and Nehemiah. But by degrees the name "Jews" (*q. v.*) supplanted this appellation, especially among foreigners. The history of the Israelites, especially during the early periods, is inseparably bound up with that of their rulers, patriarchs, etc., as Abraham, Jacob, Moses, Joshua, the Judges, David, Solomon, etc., to all of which the reader is referred. The following is a short summary of the leading points in the history of the Israelites: Abraham called, B. C. 1921; Isaac born, 1896; Esau and Jacob born, 1837; death of Abraham, 1822; Joseph sold into Egypt, 1729; Moses born, 1571; institution of the Passover and the Exodus, 1491; promulgation of the Law from Sinai, 1491; the tabernacle set up, 1490; Joshua leads the Israelites into Canaan, 1451; the first bondage, 1413; the second, 1343; the third, 1304; the fourth, 1252; the fifth, 1206; the sixth, 1157; Samson slays the Philistines, 1136; Samuel governs as Judge, about 1120; Samson pulls down the temple of Dagon, 1117; Saul made king, 1095; David kills Goliath, about 1063; death of Saul and accession of David, 1055; David captures Jerusalem and makes it his capital, 1048; Solomon lays the foundations of the temple, 1012; it is dedicated, 1004; death of Solomon and division of the kingdom, 975.

In the reign of Solomon the prophet Ahijah was intrusted with the announcement to Jeroboam that, in punishment for the many acts of disobedience to the divine law, and particularly of the idolatry so extensively practiced by Solomon, the greater part of the kingdom would be transferred to him. This breach was never healed. A spirit of disaffection had long been rife, even in the reigns of David and Solomon, fostered by various causes, not the least among which was the burdensome taxes imposed by the latter monarch for the support of his luxurious court and for the erection of his numerous buildings. But however much these causes may have operated to create a breach between the North and South districts of Palestine, certain it is that God Himself expressly forbade all attempts on the part of Rehoboam or his successors to subdue the revolted provinces, and, with slight exceptions, the subsequent history of the two nations still more widely separated them. The precise amount of territory contained in the Kingdom of Israel cannot be accurately ascertained; it was approximately as nine to four compared with the sister Kingdom of Judah; the ten tribes included in Israel, it is supposed, were Ephraim and Manasseh (East and West), Issachar, Zebulon, Asher, Naphtali, Gad, Reuben, and part of Dan; the population was probably, at the separation, about 4,000,000. It was not long before the new kingdom showed signs of weakness. It developed no new power, which is not surprising when we consider that it was but a section of David's Kingdom shorn of many sources of strength. "The history of the Kingdom of Israel is, therefore, the history of its decay and dissolution." The first symptom of decline was shown in the emigration of many families who adhered to the old religion of the Israelites back to Judah; and to check

this Jeroboam set up rival sanctuaries with visible idols, 975 B. C., but which only increased the evil he wished to check. As soon as the golden calves were set up the priests and Levites flocked back to Judah, where they were warmly received. Jeroboam's whole policy aimed singly at his own aggrandizement. To supply the want of a priesthood, divine in its origin, a line of prophets was raised up remarkable for their purity and austerity. Jeroboam reigned twenty-two years; his son Nadab was violently cut off after a brief reign of two years, with all his house, and so ended the line of Jeroboam. The fate of this dynasty was but a type of those that followed. Domestic famine, the sword of the foreigner, and internal dissensions helped the tottering kingdom on its downward way, and only one brief era of prosperity occurred, under the sway of Jeroboam II., who reigned forty-two years. The Syrian invasion, under Phul, 771 B. C., compelled Menahem, the King of Israel, to pay heavy tribute, and in the reign of Pekah we find them leading many of the Israelites into captivity. In 721 Samaria was taken by Shalmaneser, the ten tribes were carried into captivity, and an end was put to the Kingdom of Israel. See *Jews* for the subsequent history of the chosen people.

Italy. The ancient history of Italy is more conveniently treated under *Rome*. We, therefore, glance at more modern times, after the Western Empire had fallen before a mixed horde of barbarous mercenaries, chiefly composed of the Heruli. Under the Hohenstaufen dynasty, Italy enjoyed an interregnum from foreign rule of about sixty years, which, however, was wasted in suicidal conflicts between the two factions of the Guelphs and Ghibellines. The most terrible incident of this period was the massacre of the Sicilian Vespers. Notwithstanding the inveterate internecine feuds of Italy, it was a period of great splendor and prosperity. The free cities or republics of Italy rivaled kingdoms in the extent and importance of their commerce and manufactures, the advancement of art and science, the magnificence of their public edifices and monuments, and the prodigious individual and national wealth to which they attained. Unhappily, a spirit of rivalry and intolerance grew up during this period of mediæval splendor, and in the arbitrary attempts of these states to secure supremacy over each other they gradually worked their own destruction. After the battle of Waterloo the final reconstitution of Italy was decreed by the Congress of Vienna. The accession of Pius IX., in 1846, seemed the inauguration of a new era for Italy. A general amnesty was followed by wise, liberal measures, which were also adopted by Tuscany and Piedmont, in emulation of Rome. By a simultaneous outbreak in Sicily and Milan in January, the great revolution of 1848 was inaugurated in Italy. The revolution of France in February imparted a strong impulse to that of Italy, and speedily Naples, Piedmont, and Rome conceded constitutional rights to the popular demands. The Milanese unanimously revolted against Austrian rule on the 17th of March, and after five days of heroic fighting the Austrians were expelled from the city, and Radetsky, with 70,000 troops, compelled to retreat. On the 29th, Charles Albert entered Lombardy, the avowed champion of Italian independence. In the Congress of Paris, at the close of the Russian War (1856), Cavour strongly urged the expediency of a withdrawal of French and Austrian troops from Rome and the legations. The victories of Magenta and Solferino were quickly followed by the abrupt and inconclusive Peace of Villafranca, July 11, 1859. On the 18th of March, 1860, Parma, Modena, and the Emilian provinces were incorporated with Sardinia, and the grand-duchy of Tuscany on the 22d. On the 17th of March, the law by which Victor Emmanuel assumed the title of King of Italy was promulgated amid universal rejoicing. On the 6th of the ensuing May, Garibaldi, with about 1,000 volunteers, set sail from Genoa for Sicily, where a revolutionary outbreak had taken place. His swift and comparatively bloodless conquests of the two Sicilies is one of the most extraordinary incidents in modern history. At the close of the German-Italian war, Venetia, 1866, became part of the Kingdom of Italy by treaty with Austria. Turin, the chief town of Piedmont, was the capital from 1859 till 1865; the court was transferred to Florence during the latter year. In 1867 the French army was withdrawn from Rome. In 1870 the whole of the papal states were absorbed by the kingdom of Italy and Rome was its recognized capital. In 1878 Victor Emmanuel died, and was succeeded by his son Humbert I. In 1882 Italy entered the triple alliance with Germany and Austria-Hungary. Humbert was assassinated July 29, 1900; succeeded by Victor Emmanuel III. In 1911 Italy entered into war with Turkey over affairs in Tripoli; by the treaty of Lausanne, Oct., 1912, Italy acquired full sovereignty over Tripoli.

Bound by the Triple Alliance to assist Germany and Austria-Hungary in case of attack, Italy refused to aid them in 1914, arguing that they were engaged in an aggressive war. As war progressed, popular opinion urged the conquest of *Italia Irredenta* — the "unredeemed" Austrian districts of Trentino and Trieste, largely Italian in population but never Italian possessions. Italy denounced the Triple Alliance, May 4, 1915, and declared war upon Austria-Hungary, May 24. In 1916 Italian forces captured the important Austrian fortress of Gorizia. Following severe defeat at Caporetto, Oct. 24, 1917, the Italian armies retreated to the Piave.

In June, 1918, the reorganized Italian and allied forces crushed a powerful Austrian offensive and, by a great counter-thrust, begun October 24, completely routed the Austrian armies, compelling Austria to accept a truce of virtual surrender, November 4.

By the peace treaty of St. Germain, 1919, Italy was awarded practically all of *Italia Irredenta*, including the port of Trieste, together with parts of Tirol and Dalmatia.

Jacobins, the members of a political club which exercised a very great influence during the French Revolution. It was originally called the *Club Breton*, and was formed at Versailles, when the States General assembled there

in 1789. It then consisted exclusively of the members of the States General, all more or less liberal or revolutionary, but of very different shades of opinion. On the removal of the court and national assembly to Paris this club began to acquire importance. It now met in a hall of the former Jacobin Convent in Paris, whence it received the name of the Jacobin Club, which was first given to it by its enemies, the name which it adopted being that of the *Society of Friends of the Constitution.* It now also admitted members who were not members of the National Assembly, and held regular and public sittings. It exercised a great influence over the agitation, of which the chief seat and focus was in the capital, and this influence was extended over the whole country by affiliated societies. Its power increased, until it became greater than that of the National Assembly. It reached the zenith of its power when the National Convention met in September, 1792. The agitation for the death of the king, the storm which destroyed the Girondists, the excitement of the lowest classes against the *bourgeoisie* or middle classes, and the reign of terror over all France were the work of the Jacobins. But the overthrow of Robespierre on the 9th Thermidor, 1794, gave also the death blow to the Jacobin Club; and on November 9, 1794, the Jacobin Club closed. The term Jacobin is often employed to designate persons of extreme revolutionary sentiments.

Janizaries (Turkish, *Yeñi-tcheri,* new soldiers), an Ottoman infantry force, somewhat analogous to the Roman prætorians, part of them forming the guard of the sultan. They were originally organized about 1330, and subsequently obtained special privileges, which in time became dangerously great. The regular janizaries once amounted to 60,000, but their numbers were afterwards reduced to 25,000. The irregular troops amounted to 300,000 or 400,000. Their power became so dangerous and their insurrections so frequent that several unsuccessful attempts were made to reform or disband them. At various times sultans had been deposed, insulted, and murdered by the insurgent janizaries. At last, in June, 1826, they rebelled on account of a proposal to form a new militia, when the sultan, Mahmoud II., having displayed the flag of the prophet, and being supported by their aga or commander-in-chief, defeated the rebels and burned their barracks, when 8,000 of them perished in the flames. The corps was abolished, and a curse laid upon the name. As many as 15,000 were executed, and fully 20,000 were banished.

Japan. Although Japan has passed through the successive eras of tribal government, pure monarchy, feudalism, anarchy, and modern empire, its ruling dynasty boasts of forty-six centuries of unbroken succession, and claims descent from Jimmu Tenno, first mikado, a fabulous warrior, whose descent from the sun goddess is a matter of faith with the Japanese, who base upon it their claim of the mikado's divinity. The empire claims to have had a previous existence of 2,479 years; but its history dates from Jimmu 667 B. C., and from his death until 571 A. D. thirty-one mikados ruled; the famous Yamato Daké and Sujin the Civilizer belong to this period. Jingu Kogo, Empress of Japan, 270 A. D., conquered Corea in person. In 552 A. D. Buddhism was introduced into Japan, and thenceforth became a potent influence in the formation of character. About this time a succession of infant mikados contributed to loss of power in the mikadoate, and to the formation of noble families, who, one by one, gained ascendency, and ruled the mikados; the feudal system began its existence, and feuds between the rival families were constant. The Fujiwarra family were opposed by the Sugawara, and succeeded by the Tairas and Minamotos. In 1184, Yoritomo became first shogun, (a term meaning general), the dual system of government, which ended only in 1867, began, and the shogunate monopolized the real power of the nation, of which the mikado was nominal and spiritual head. From 1199 to 1333 both the mikadoate and the shogunate were under the power of the Hojo family, who set up and removed rulers at their own pleasure; but they promoted the arts, and defeated an invasion of the Mongol Tartars. The Ashi-Kaga family next came into power, and occasioned a fifty-six years' war between the northern and southern dynasties, and strengthened feudalism at the time when all Europe was throwing off its chains. In 1536, Hideyoshi conquered the Coreans, and brought marine architecture to a higher state of perfection; he became taiko, and this period is called the age of taiko. In 1542, Europeans landed on Tanigashima; fire-arms were introduced, Portuguese merchants were attracted, and in 1549, Francis Xavier landed, and with an interpreter preached Christianity in various parts of the empire; he paved the way for the success of others, and priests and Jesuits flocked to Japan, when a total of 600,000 converts was recorded. Wabunaga protected the Christians, as the latter persecuted the Buddhists, whom he hated; but by intrigues and quarrels among themselves the priests alienated the support of the shogun, who persecuted the native Christians. The Jesuits stirred them up to resistance, and after a brief battle between Hedéyori, leader of the Christians, and Iyésayŭ; during which 100,000 men perished, the priests were exiled from Japan, 1615. In 1624 all foreigners except the Dutch and Chinese were banished from Japan, the Japanese were forbidden to leave the country, and all larger vessels were destroyed. In 1637 the great massacre of Christians began, the twenty or less Dutch traders were confined to the island of Deshima, and 100 years' intercourse with Christian nations resulted only in the adoption of gunpowder, fire-arms, and tobacco. For two centuries and a half after Iyésayŭ, Japan had peace; feudalism and anarchy were perfected, and the Tokugawa was the most prominent of a number of families who divided Japan; the power of the shogun increased, the last four rulers of the shogunate being known to Europeans under the title of "Tycoon." In 1853, Commodore Perry, with a fleet of American vessels, arrived at Yeddo, and the Perry treaty with the United States was concluded by him with the supreme ruler of Japan. This usurpa-

tion of authority increased the rivalry; after a brief revolution the government was changed to its ancient form and the mikado became the only ruler of Japan. This occurred in 1868. The United States opened Japan to the world after the failure of the Portuguese, Spaniards, Dutch, and Russians.

Owing to conflicting interests in Corea, Japan declared war upon China in July, 1894, and soon won decisive victories. By the Treaty of Shimonoseki the terms of peace included recognition of Corean independence, the cession to Japan of Formosa and some smaller islands, with the peninsula of Liao-Tung, including Port Arthur, a large war indemnity, and a very great relaxation of restrictions on foreign industry and commerce in China. In 1904-05, war with Russia occurred over Manchuria (See Russo-Japanese War).

Emperor Mutsuhito, whose reign of forty-five years saw Japan develop into one of the greatest nations of the world, died at Tokyo, July 30, 1912. He was succeeded by his son Yoshihito.

In August, 1914, Great Britain, at war with Germany and Austria-Hungary, asked Japan for assistance according to the alliance of 1905. Japan declared war upon Germany, Aug. 23, captured Tsingtao, the fortified port of Kiao-chow, Sept. 27, and took possession of the province. German islands in the Pacific were also taken.

By the Treaty of Versailles, 1919, Japan was awarded all of Germany's former rights in the Chinese province of Shantung and was given mandates over various islands in the Pacific. In 1921, Japan sent delegates to the Arms Conference at Washington, and signed a four-power treaty with the United States, Great Britain, and France.

Jews (Heb. *Yehuda*). The history of the Jews begins with the return of the remnant of the kingdom of Judah from the Babylonish captivity in consequence of the Edict of Cyrus. Below will be found a brief *résumé* of the chief historical events in the history of the Jews according to the biblical narrative. According to Eusebius, the Scripture history ends in 442 B. C., and thenceforward the Roman historians and Josephus furnish the best accounts. *The Babylonish Captivity.*—Daniel prophesies at Babylon, B. C. 603; Obadiah prophesies, 587; Daniel interprets the handwriting on the wall, 538; he prophesies the speedy return from bondage and the coming of a Messiah, 538. *The Return from Captivity.*—Cyrus, ruler of all Asia, authorizes the return of the Jews and the rebuilding of the Temple at Jerusalem, 536; Haggai and Zechariah flourish, 520; the second Temple finished, 515; Ezra arrives in Jerusalem to correct abuses, 458; beginning of the seventy weeks of years predicted by Daniel, being 490 years prior to the crucifixion of Christ, 457; the walls of Jerusalem rebuilt, 445; Malachi flourishes, 415. *The Jews under the Macedonian Empire.*—Alexander the Great marches against Jerusalem to besiege it, but ultimately goes to the Temple and offers sacrifices to the God of the Jews, 332; Jerusalem taken by Ptolemy Soter 320; the Scriptures translated (the Septuagint version) by seventy-two Jewish scribes, at the instance of Ptolemy Philadelphus, 277; Antiochus captures Jerusalem, sacks the Temple, and massacres 40,000 of the people, 170; commencement of the government of the Maccabees, 166; a treaty, the first in Jewish history, made with the Romans, 161; Judas Hyrcanus assumes the title of "King of the Jews," 107; Jerusalem captured by Pompey, 63. *The Jews under the Roman Empire.*—Antipater made ruler of Judea by Julius Cæsar, 49; Herod, son of Antipater, marries Miriamne, daughter of the king, 42; Herod decreed king by the Roman Senate, 40; Jerusalem captured by Herod and Sosius, the Roman general, 37; Herod rebuilds the Temple on a scale of greater magnificence than ever before, 18; Jesus Christ, the long-looked-for Messiah, born four years before 1 A. D., 4 B. C.; Pontius Pilate procurator of Judea, A. D. 22; John Baptist commences his ministry, 25; is beheaded, 27; Christ's ministry and miracles, 27-29; his death and resurrection, 29; the Jews are persecuted for refusing to worship Caligula, 38; receive the right of Roman citizenship, 41; Claudius banishes them from Rome, 50; Titus captures Jerusalem, the city and Temple are sacked and burned, and 1,000,000 Jews perish, 70; Adrian rebuilds Jerusalem, names it Elia Capitolina, and erects a temple to Jupiter, 130; the rebellion of Bar-cocheba, 135-36; final desolation of Judea, more then 500,000 Jews are slain by the Romans, they are banished from Judea by an edict of the Roman Emperor, and are forbidden to return upon pain of death, 136.

DISTRIBUTION OF JEWS AMONG THE NATIONS

America, North		3,379,668
Canada	75,681	
United States	3,300,000	
All other Countries	3,987	
America, South		118,657
Argentina	110,000	
All other Countries	8,657	
Africa		380,668
Abyssinia	25,000	
Algeria	70,271	
Egypt	59,581	
Morocco	103,712	
All other Countries	122,104	
Asia		434,332
Palestine	85,000	
Russia	76,262	
Turkey	177,500	
All other Countries	95,570	
Australasia		19,415
Europe		10,477,891
Austria	200,000	
Belgium	16,000	
Bulgaria	45,000	
Czecho-Slovakia	349,000	
Denmark and Finland	7,950	
France	150,000	
Germany	500,000	
Greece	120,000	
Hungary	450,000	
Italy	43,000	
Jugoslavia	100,000	
Netherlands	122,500	
Norway and Sweden	7,445	
Poland	3,069,330	
Rumania	1,000,000	
Russia	3,907,500	
Switzerland	20,951	
Turkey	75,000	
United Kingdom	286,500	
All other Countries	7,715	
Grand Total		14,810,631

The Jews have suffered much even in modern times and especially in Russia at the hands of the oppressor. In America only have they enjoyed at all times perfect freedom and all the

rights of citizenship. Full emancipation was granted to the Jews in England in 1858.

Kansas, derived from an Indian name meaning "smoky water," was visited by the Spaniards in 1541; afterward by the French in 1719. It came to the United States through the Louisiana Purchase, and was a portion of the territory which, by the Missouri Compromise of 1820, was always to remain untouched by slavery. When the territory of Kansas was organized, in 1854, it was declared by Congress that the Missouri Compromise was abolished. This led to the Kansas troubles, which lasted till 1859, with various vicissitudes, when a free constitution was adopted, forever prohibiting slavery. This imbroglio played an important part in inflaming the passions of North and South, and ripening the conditions which made the Civil War inevitable. Kansas was admitted to the Union in 1861. During the Civil War the State was the scene of irregular warfare, known as "jay-hawking," carried on by Confederate raiders from Missouri and Arkansas and the Unionists who opposed them. The only battle of prominence took place at Lawrence on August 21, 1863. In 1880, the constitution was amended, prohibiting liquor traffic. In 1912, the state granted suffrage to women.

Kentucky. The name Kan-tuck-kee signifies "darkened bloody ground," and the country now included in the State was originally the common hunting ground for the Indian tribes living north and south of it. The first white visit was that of John Finley and others, from North Carolina, in 1767. Daniel Boone began to explore Kentucky in 1769. Colonel James Knox planted a Virginian colony in 1770, followed by others in 1773-74, and James Harrod founded Harrodsburg in 1774. In 1775, the Cherokees ceded the country to Boone, who acted as agent for Colonel Richard Henderson and his company. Kentucky was a part of Virginia till 1790, when it became a separate Territory. It was admitted as a State into the Union in 1792, being the second admitted. A second constitution was adopted in 1800, and the present one in 1850. Kentucky during the Civil War endeavored to hold a position of neutrality. The chief battles fought in the State were Mill Spring, January 19, 1862, and Perryville, October 8, 1862. In 1864, martial law was declared, and civil authority was not restored until October, 1865. In 1900, William Goebel, contesting candidate for governor, was assassinated. A series of notable trials followed. Serious conditions in the tobacco fields, 1906-1910, led to violence and lawlessness by night riders bordering upon civil war.

Lake Erie, Battle of. An important naval engagement in the war of 1812, between the United States and Great Britain, fought in Put-in-bay, Lake Erie, September 10, 1813. The American forces were intrusted to Lieut. Oliver Hazard Perry who equipped a squadron of nine sail at Erie on Presque Isle bay, and, although blockaded by the British fleet under Capt. Barclay, succeeded in getting his squadron out of port, August 12, 1813. On the 28th Perry was made master commandant. On September 10th he lay in Put-in-bay when he discovered the British squadron and went out to meet it. It consisted of six vessels.

The Americans had some advantage in able seamen. Only the Lawrence and the Niagara of the America squadron were regular vessels of war, the others having been built for trading. Their guns were of heavier caliber than those of the English, but of shorter range. This enabled the British to open battle with advantage. Out of 101 officers and men on Perry's flagship Lawrence only 18 were not disabled. In that desperate condition, Perry left the Lawrence and shifted his flag to the Niagara. The action now became general and, after a stubborn contest, Perry forced Barclay's flagship Detroit and three other vessels to surrender. The remaining two attempted to escape, but were soon overtaken and captured.

When Perry saw that victory was secure, he wrote with pencil on the back of an old letter, resting it on his navy cap, the despatch to Gen. Harrison: "We have met the enemy and they are ours—two ships, two brigs, one schooner, and one sloop." The contest had lasted about three hours with a loss on either side of about 130 in killed and wounded, Capt. Barclay himself among the latter. This victory completely established American supremacy on the lake. Congress bestowed gold medals on Perry and Master commandant Elliott, and minor rewards upon the other officers and men.

Lancaster, the name of a royal English house which flourished in two lines in the Thirteenth, Fourteenth, and Fifteenth Centuries. The first commences with Edmund, son of Henry III. and Eleanora of Provence, and brother of Edward I. Thomas, his son and successor in the earldom, cousin-german to Edward II., headed the confederacy of barons against Piers Gaveston, and finally shared the responsibility of his death with Hereford and Arundel. Henry (previously Earl of Leicester), brother and heir of Thomas, joined the conspiracy of Isabella and Mortimer against Edward II., and received the king into his custody at Kenilworth. Henry, his son (previously Earl of Derby), after vainly endeavoring to make peace with John, King of France, under the mediation of the pope at Avignon, was sent with an army into Normandy, and took part in the victory of Poitiers and the subsequent French wars. The next Duke of Lancaster commences a new lineage, that of the princes opposed to the house of York. The first in the line was John of Gaunt, or Ghent, fourth son of Edward III. His name is one of the most celebrated in English history and in the chivalry of the Middle Ages. Henry of Hereford, the successor of John of Gaunt in the dukedom, was son to him by his first wife. He claimed the crown by descent, by the mother's side, from Edmund the first earl, who was popularly supposed to be the elder brother of Edward I., and to have been deprived of the succession by his father for personal reasons. He became king by deposing Richard II., 1399, and was a prince of great ability and valor. He reigned as Henry IV. till his death in 1413, and was succeeded by his son, Henry V. The son of the latter also inherited the crown as Henry VI., and in his reign the feuds of York and Lancaster broke out, which ended in the union of the two houses in the person of Henry VII.

LEAGUE OF NATIONS, PEACE CONFERENCE, AND ARMS CONFERENCE

League of Nations. The League of Nations was provided for by the Peace Conference at Versailles in 1919, through the adoption of a League of Nations Covenant. The avowed object of this covenant was "to promote international co-operation and to achieve international peace and security: by the acceptance of obligations not to resort to war; by the prescription of open, just, and honorable relations between nations; by the firm establishment of the understandings of international law as the actual rule of conduct among Governments, and by the maintenance of justice and a scrupulous respect for all treaty obligations in the dealings of organized peoples with one another." The organization of the League consists of an assembly, a council, and a permanent secretariat.

The assembly consists of representatives of nations which are members of the League. It has power to deal with any matter within the sphere of action of the League, or affecting the peace of the world. Each power represented is entitled to at most three delegates but only one vote. Since five of the British dominions and colonies were given membership, the British Empire casts six votes in the assembly.

The council is composed of representatives of the British Empire, France, Italy, and Japan, together with representatives from four other members of the League. These additional four members of the council are elected by the assembly. At present they are Belgium, Brazil, China, and Spain.

The secretariat is established at the headquarters of the League in the city of Geneva, Switzerland. It consists of the secretary general and the necessary staff of secretaries and advisers. The secretariat prepares schedules of work for the meetings of the assembly and the council, conducts the official correspondence of the League, and looks after carrying out the decisions of the assembly and the council.

The following accessory bodies are attached to the League of Nations and act under its direction: (1) a permanent international court of justice; (2) a military, naval, and air commission; (3) an armaments commission; (4) a commission for the supervision of traffic in arms; (5) a blockade commission; (6) a mandates commission. In addition, the following technical organizations have been built up by the authority of the League: (1) an advisory economic and financial commission; (2) an advisory commission for communication and transit; (3) a health commission. An international labor office is established at Geneva, which works in close connection with the League.

The League of Nations Covenant provided that the council should take such steps as it deemed practicable to bring about reduction of armaments. It provided further that the members of the League should undertake a mutual guarantee of territorial integrity and political independence of all League members. This provision was interpreted at the meeting of the assembly in 1921 to mean a guarantee as against external aggression.

The Covenant further provides that any war or threat of war is to be brought to the attention of the council, whether or not it affects member nations. Members of the League further agree to submit all matters of serious disagreement to arbitration or to inquiry by the council of the League and in no case to go to war within three months after a decision has been rendered. When a member disregards the Covenant and declares war the other members are required to sever economic and other relations with such state. When disputes arise between member states and outside states, or between nonmember states, the nonmember states concerned are to be invited to take advantage of League membership to facilitate settlement of such dispute.

The League has control of the various mandataries created under the Treaty of Versailles, and the secretariat is empowered to receive reports from the nations to whom mandataries were assigned. Amendments to the Covenant can take effect only when ratified by all members of the League represented in the council and by a majority of the members whose representatives compose the assembly. Members of the League are pledged to endeavor to secure fair conditions of labor for men, women, and children.

The Treaty of Versailles which created the League went into effect January 10, 1920, and the first meeting of the League council was held January 16, 1920. Since that date it has held numerous meetings. Its 13th session was called at Geneva in June 1921, and an extra session was held in Geneva in August 1921. The first meeting of the League assembly was held at Geneva in November and December 1920. The regular meeting time of the assembly was fixed for the first Monday of September of each year, at Geneva. The meeting for 1921 was held from September 5 to October 5. Forty-six nations were represented.

The following 51 nations were members of the League, November 1921:

Albania, Argentina, Australia, Austria, Belgium, Bolivia, British Empire, Brazil, Bulgaria, Canada, Chile, China, Colombia, Costa Rica, Cuba, Czechoslovakia, Denmark, Esthonia, Finland, France, Greece, Guatemala, Haiti, Honduras, India, Italy, Japan, Latvia, Liberia, Lithuania, Luxemburg, Netherlands, New Zealand, Nicaragua, Norway, Panama, Paraguay, Persia, Peru, Poland, Portugal, Rumania, Salvador, Serb-Croat-Slovene State (Jugoslavia), Siam, South Africa, Spain, Sweden, Switzerland, Uruguay, Venezuela.

The President of the Assembly of the League (elected Sept. 5, 1921) is Jonkheer van Karnebeek, of the Netherlands.

Secretary General—Sir Eric Drummond, of Great Britain.

Members of International Court of Justice (elected September 1921)—Senator Rafael Altamira, of Spain; Prof. Dionisio Anzilotti, of Italy; Senator Ruy Barbosa, of Brazil; Prof. Antonio S. de Bustamante, of Cuba; Viscount Robert Bannatyne Finlay, of Great Britain; Prof. Max Huber, of Switzerland; Prof. B. T. C. Loder, of Holland; Prof. John Bassett Moore, of the United States; Judge Didrick Galtrup Gjeddo Nyholm, of Denmark; Prof. Yorozuoda, of Japan; Prof. Charles Andre Weiss, of France. Besides the eleven Judges just named, there are four Deputy Judges—Judge Frederik Valdemar Nikolai Beickmann, of Norway; Prof. Demetriu Negulesco, of Rumania; Dr. Wang Chung Hui, of China; and Judge Mihailo Jovanovic, of Jugoslavia.

Council members (as of Nov. 15, 1921): President, Gastao da Cunha, *Brazil*; Paul Hymans, *Belgium*; Dr. V. K. Wellington Koo, *China*; A. J. Balfour, *Great Britain*; Leon Bourgeois, *France*; Marquis Imperiali, *Italy*; Viscount Ishii, *Japan*; Quinones de Leon, *Spain*.

Important Acts of the League in 1921: (1) Through the direct intercession and appeal of the assembly, Poland and Lithuania were brought to accept the basis for a settlement of their dispute about Vilna proposed by M. Hymans on behalf of the League council. (2) An international commission was sent to Albania to investigate the grievances of that state against Jugoslavia and Greece. The League adjusted their boundaries, by mutual agreement. (3) The assembly provided for the calling of an international conference to consider steps for the suppression of the private traffic in arms. (4) On Sept. 16, 1921, the Permanent Court of International Justice was finally and officially established through the election, by the council and the assembly, of eleven judges and four deputy judges. (5) The dispute between Sweden and Finland about the Aland Islands was peacefully solved by a decision of the council—accepted by both parties, the islands to remain Finnish under certain guarantees of autonomy. On Oct. 20, 1921, a convention for the neutralization and demilitarization of the islands was adopted at Geneva by a conference of delegates from ten states under the auspices of the League.

Paris-Versailles Peace Conference, The. After the signing of the armistice on Nov. 11, 1918, the preliminary work of arranging for peace negotiations was cared for by the Inter-Allied Supreme War Council which had brought about the close of the war. Representatives of the powers met informally and outlined the constitution of the Peace Conference. It was determined that the five great Allied Powers, the United States, the British Empire, France, Italy, and Japan, should participate in all the sessions and commissions of the Conference. Other powers were to be called into conference upon questions affecting their special interests.

The Conference opened in Paris on January 18, 1919. The following countries were represented: The United States, France, Great Britain, Italy, and Japan with five members each; Brazil with three members; Belgium, China, Greece, the Hejaz, Poland, Portugal, Rumania, Serbia, Siam, Czechoslovakia, Australia, Canada, South Africa, and India with two members each; Cuba, Guatemala, Haiti, Honduras, Liberia, Nicaragua, Panama, Bolivia, Equador, Peru, Uruguay, and New Zealand with one member each.

The representatives who signed the Peace Treaty were:—Of the United States: President Wilson, Robert Lansing, Henry White, Col. E. M. House, Gen. Tasker H. Bliss. Of the British Empire: David Lloyd George, Andrew Bonar Law, Viscount Milner, Arthur James Balfour, George Nicoll Barnes; For the Dominion of Canada: Charles Joseph Doherty, Arthur Lewis Sifton; For the Commonwealth of Australia: William Morris Hughes, Sir Joseph Cook; For the Union of South Africa: Louis Botha, Jan Christian Smuts; For the Dominion of New Zealand: William Ferguson Massey; For India: Edwin Samuel Montagu, Maharaja Sir Ganga Singh Bahadur. Of the French Republic: Georges Clemenceau, Stephen Pichon, Louis-Lucien Klotz, André Tardieu, Jules Cambon. Of Italy: Baron S. Sonnino, Marquis G. Imperiali, S. Crespi. Of Japan: Marquis Saionzi, Baron Makino, Viscount Chinda, K. Matsui, H. Ijuin.

A Supreme Council, or Council of Ten, was organized as an executive committee of the Conference, to consist of the ranking delegates of the five great powers. Later, the authority of this council was transferred to the Council of Four, consisting of President Wilson and the three premiers, Lloyd George, Georges Clemenceau, and Vittorio Emanuele Orlando.

The Conference undertook first to draft the League of Nations Covenant, of which President Wilson was the foremost advocate. This was entrusted to a committee of ten, two members from each of the five great powers. The final draft of the Covenant, following closely an outline prepared by General Smuts of South Africa, was completed in April. Financial, economic, and boundary questions were considered by various commissions made up of distinguished specialists in these various fields.

The treaty was presented to the German delegates at Versailles on May 7, 1919. Its chief provisions were for a League of Nations, for payment of reparations by Germany, for adjustment of boundaries among new European states, and for mandataries to assume the government of the forfeited German colonial possessions. Upon the protest of the German delegates, certain changes were made in the treaty. A new group of German delegates at length signed the treaty on June 28, 1919.

The Peace Conference continued its sessions throughout the year 1919. The United States delegation left Paris on Dec. 9.

President Wilson submitted the treaty to the United States Senate on July 10, 1919. That body rejected it Nov. 19. It was again submitted in December 1919 and rejected on March 19, 1920.

Arms Conference. President Harding in his address to Congress on April 12, 1921 said, "We are ready to co-operate with other nations to approximate disarmament, but merest prudence forbids that we disarm alone." During the debate in the Senate upon the Naval Appropriations Bill in May, senators repeatedly expressed sentiment in favor of disarmament through international agreement. Senator Borah of Idaho embodied this opinion in the following resolution, which was adopted as an amendment to the Senate bill appropriating $494,000,000 for maintenance and enlargement of the navy in the year 1921-22:

"The President is authorized and requested to invite the Governments of Great Britain and Japan to send representatives to a conference, which shall be charged with the duty of promptly entering into an understanding or agreement by which the naval expenditures and building programs of each of said governments, to wit, the United States, Great Britain, and Japan, shall be substantially reduced annually during the next five years to such an extent and upon such terms as may be agreed upon, which understanding or agreement is to be reported to the respective governments for approval."

Objection to this amendment was raised on the ground that it restricted agreement to three nations only. When the naval bill was considered in conference of the House and Senate, the following joint resolution was substituted for the Borah amendment and was accepted by both houses:

"Joint resolution concurring in the declared purpose of the President of the United States to call an international conference to limit armaments.

"Resolved, by the Senate and House of Representatives of the United States of America in Congress assembled, that the Congress hereby expresses its full concurrence in the declaration of the President in his address to Congress on April 12, 1921, that 'we are ready to co-operate with other nations to approximate disarmament, but merest prudence forbids that we disarm alone,' and, further, fully concurs in his declared purpose and intention to call an international conference to consider the limitation of armaments with a view to lessen materially the burden of expenditures and the menace of war; and that for the expenses preliminary to and in connection with the holding of such conference the sum of $100,000, to be expended under the direction of the President, is hereby appropriated."

On July 10 the State Department issued the following announcement:

"The President, in view of the far-reaching importance of the question of limitation of armament, has approached

with informal but definite inquiries the group of powers heretofore known as the Principal Allied and Associated Powers, that is, Great Britain, France, Italy, and Japan, to ascertain whether it would be agreeable to them to take part in a conference on this subject, to be held in Washington at a time to be mutually agreed upon. If the proposal is found to be acceptable, formal invitations for such a conference will be issued.

"It is manifest that the question of limitation of armament has a close relation to Pacific and Far Eastern problems, and the President has suggested that the powers especially interested in these problems should undertake in connection with this conference the consideration of all matters bearing upon their solution with a view to reaching a common understanding with respect to principles and policies in the Far East. This has been communicated to the powers concerned, and China has also been invited to take part in the discussion relating to Far Eastern problems."

This suggestion of a disarmament conference was cordially received by all the governments concerned, and on August 11 the State Department issued formal invitations to Great Britain, France, Italy, Japan, and China, to join in a conference at Washington on Nov. 11, 1921, the 3d anniversary of the Armistice of 1918.

On Nov. 11 the members of the Conference from the various nations participated in the ceremonies attending the burial of the body of an unknown American soldier in the National Cemetery at Arlington. The formal sessions of the Conference opened on the morning of Nov. 12 in the Continental Memorial Hall, the building of the National Association of the Daughters of the American Revolution at Washington. Full delegations were present from the United States, Great Britain, France, Italy, Japan, China, Holland, Belgium, and Portugal.

The following were the Principal Delegates seated in the Conference:—*United States:* Charles Evans Hughes, Elihu Root, Henry Cabot Lodge, Oscar W. Underwood. *Great Britain:* Hon. Arthur J. Balfour, Lord Lee of Fareham, Sir Robert Borden, Hon. George F. Pearce, V. S. Srinivasa Sastri, Sir J. W. Salmond, Sir Auckland Geddes. *France:* Aristide Briand, René Viviani, Albert Sarraut, Jules Jusserand. *Japan:* Prince Iyesato Tokugawa, Admiral Tomosaburo Kato, Baron Kijuro Shidehara. *Italy:* Carlo Schanzer, Vittorio Rolandi Ricci, Filippo Meda, Luigi Albertini. *Holland:* Jonkheer H. A. van Karnebeek, Jonkheer F. Beelaerts van Blokland, Dr. E. Moresco. *Belgium:* Barton de Cartier de Marchienne. *China:* Dr. S. Alfred Sze, V. K. Wellington Koo, Wang Chung-hui. *Portugal:* Viscount d'Alte and delegation.

Mr. John W. Garrett, of Baltimore, was chosen Secretary General of the Conference. Each delegation was provided with a staff of general and technical advisers. The Advisory Committee of the United States consisted of the following 21 persons, appointed by President Harding:

George Sutherland of Utah, ex-Senator; Herbert C. Hoover of California, Secretary of Commerce; General John J. Pershing, Chief of Staff of the Army; Rear Admiral W. L. Rodgers; Stephen G. Porter of Pennsylvania, Chairman of the House Committee on Foreign Affairs; Governor John M. Parker of Louisiana; Henry P. Fletcher of Pennsylvania, Assistant Secretary of State; Colonel Theodore Roosevelt of New York, Assistant Secretary of the Navy; Colonel J. M. Wainwright of New York, Assistant Secretary of War; Mrs. Charles Sumner Bird of Massachusetts; Mrs. Katherine Phillips Edson of California; Mrs. Eleanor Franklin Egan of New York; Mrs. Thomas G. Winter of Minnesota, President General of the Federation of Women's Clubs; William Boyce Thompson of New York, financier; Willard Saulsbury of Delaware, ex-Senator; Samuel Gompers, President of the American Federation of Labor; John L. Lewis of Indiana, President of the United Mine Workers of America; Walter George Smith of Pennsylvania, lawyer and publicist; Carmi Thompson of Ohio, former Treasurer of the United States; Charles S. Barrett of Georgia, President of the National Farm Bureau; Harold M. Sewell of Maine, former Minister to Hawaii and Consul General in Samoa.

President Harding welcomed the delegates. Upon nomination by Mr. Balfour of the British delegation, Secretary Hughes was unanimously chosen permanent chairman of the Conference. Mr. Hughes, in an epoch making address, stated the purposes of the conference and laid down a detailed program for limitation of naval armaments by the United States, Great Britain, and Japan. These proposals he based upon the following four principles:

1. That all capital shipbuilding programs, either actual or projected, should be abandoned.
2. That further reduction should be made through the scrapping of certain of the older ships.
3. That, in general, regard should be had to the existing naval strength of the powers concerned.
4. That the capital ship tonnage should be used as the measurement of strength for navies, and a proportionate allowance of auxiliary combatant craft prescribed.

The plan outlined contained a provision for the mutual limitation of naval armament by the United States, Great Britain, and Japan,—the famous "10-year naval holiday." Under this agreement, within three months, the navy of the United States should have 18 capital fighting ships, that of Great Britain 22, that of Japan 10. No replacements should be begun for ten years, and thereafter the capital ship tonnage of these three powers should be 500,000 tons for the United States, 500,000 for Great Britain, 300,000 tons for Japan. This is the famous 5-5-3 plan. The program laid down by Secretary Hughes was received with great enthusiasm both in the Conference and by the people of the nations involved.

The Conference was organized in two committees of the whole: one made up of delegates of five nations, Great Britain, France, Italy, Japan, and the United States, to consider limitation of armament; the other made up of delegates of the nine nations represented, including China, Belgium, Holland, and Portugal, to consider a program for dealing with questions affecting the Far East and the Pacific.

While popular interest was centered upon the economic saving to be realized through decreased expenditure for armament, the first and most pressing task of the Conference was the formulation of an agreement to take the place of the Anglo-Japanese treaty. This treaty had long been a source of disturbance in the relations between Japan and the United States. Moved by protests of the over-seas dominions, the British government had refused to definitely renew the treaty in 1921. At the plenary session of the conference on Dec. 10 Senator Lodge of the American delegation presented the draft of a treaty between the United States, the British Empire, France, and Japan. This treaty, known as the Four-Power Pacific Treaty, was signed on Dec. 13 by the delegates of these four powers. The following is the text of this historic document:

The United States of America, the British Empire, France, and Japan, with a view to the preservation of the general peace and the maintenance of their rights in relation to their insular possessions and insular dominions

in the regions of the Pacific Ocean, have determined to conclude a treaty to this effect and have appointed as their plenipotentiaries:

The President of the United States; His Majesty the King of the United Kingdom of Great Britain and Ireland, etc. And for the Dominion of Canada; For the Commonwealth of Australia; For the Dominion of New Zealand; For India; The President of the French Republic; His Majesty the Emperor of Japan:

Who having communicated their full powers, found in good and due form, have agreed as follows:

ARTICLE I

The high contracting parties agree as between themselves to respect their rights in relation to their insular possessions and insular dominions in the regions of the Pacific Ocean.

If there should develop between any of the high contracting parties a controversy arising out of any Pacific question and involving their said rights which is not satisfactorily settled by diplomacy and is likely to affect the harmonious accord now happily subsisting between them, they shall invite the high contracting parties to a joint conference to which the whole subject will be referred for consideration and adjustment.

ARTICLE 2

If the said rights are threatened by the aggressive action of any other power the high contracting parties shall communicate with one another fully and frankly in order to arrive at an understanding as to the most efficient measures to be taken, jointly and separately, to meet the exigencies of the particular situation.

ARTICLE 3

This agreement shall remain in force for ten years from the time it shall take effect, and after the expiration of said period it shall continue to be in force subject to the right of any of the high contracting parties to terminate it upon twelve months' notice.

ARTICLE 4

This agreement shall be ratified as soon as possible in accordance with the constitutional methods of the high contracting parties and shall take effect on the deposit of ratifications, which shall take place at Washington, and thereupon the agreement between Great Britain and Japan, which was concluded at London on July 13, 1911, shall terminate.

The United States delegates made in writing the following reservations with respect to this treaty:

1. That the treaty shall apply to the mandated islands in the Pacific Ocean; provided, however, that the making of the treaty shall not be deemed to be an assent on the part of the United States of America to the mandates and shall not preclude agreements between the United States of America and the mandatory powers respectively in relation to the mandated islands.

2. That the controversies to which the second paragraph of Article I refers shall not be taken to embrace questions which, according to principles of international law, lie exclusively within the domestic jurisdiction of the respective powers.

At the final plenary session of the Conference, February 6, 1922, the delegates signed the treaties adopted Feb. 1 and 4. These included: (1) the five power treaty between the United States, Great Britain, Japan, France, and Italy, providing for limitation of naval armament; (2) the five power treaty, limiting use of submarines and prohibiting use of poison gas in warfare; (3) a nine power treaty, pledging the signatory powers to respect the integrity of Chinese territory and to maintain the "open door" policy; (4) a nine power treaty, providing for adjustment of Chinese tariffs. The Chinese and Japanese delegates also signed an agreement, providing for the restoration of Shantung to China.

Lexington, a town of Massachusetts, ten miles northwest of Boston, noted as the scene of the first fight between the British and Americans in the war of the Revolution, April 19, 1775. On the evening of April 18th, General Gage, the British commander in Boston, sent 800 soldiers, under Major Pitcairn, to destroy the American supplies at Concord. Paul Revere, of Boston, escaping their sentinels, galloped out to Lexington and Concord with the news, so when the British reached Lexington at daybreak, they found about seventy Americans waiting for them on the village common. Captain John Parker, their commander, ordered them not to shoot until the English did. Major Pitcairn rode forward and called out: "Disperse ye rebels!" but though the Americans were outnumbered ten to one, they stood firm. Then Pitcairn ordered his men to fire, and four Americans were killed and nine wounded. Some shots were fired in return, and three English soldiers were wounded; but after that the Americans retreated some being killed as they ran. The British marched on to Concord, but meanwhile the whole country was aroused, and as they came back, hundreds of Americans attacked them from behind the houses and stone walls by the roadside. They were saved from destruction only by the arrival of reinforcements. Though not a very great battle, this was one of the most important ones that ever was fought.

Louisiana. In 1541, De Soto discovered the Mississippi and in 1682 La Salle voyaged down this river to its mouth, naming the country Louisiana and taking possession of it in the name of the King of France. In 1718, Bienville founded New Orleans. In 1733, a settlement was made at Baton Rouge. In 1750, the cultivation of cotton was begun in the territory. In 1755, Louisiana received a large increase in population from the Acadians, who were driven from their homes in Canada. By a secret treaty in 1762, France ceded Louisiana to Spain, and in 1768 the French drove the first Spanish Governor, Don Antonio de Ulloa, from the colony. In 1800, Louisiana was ceded to Napoleon by Spain, and in 1803 was purchased from France by the United States for 60,000,000 francs. In 1806 and 1807, Aaron Burr's scheme to set up an independent nation in the Mississippi Valley caused much disturbance in New Orleans.

In 1812, Louisiana was admitted to the Union as a state, with boundaries as they are now. That same year the first steam vessels on the Mississippi arrived from Pittsburg. The battle of New Orleans between the British and Americans was fought January 8, 1815. During the period from 1815 to 1860 there was continual industrial activity and Louisiana became a leading agricultural State. In 1850, Baton Rouge was made the seat of State government. On January 26, 1861, Louisiana passed the Ordinance of Secession. Port Hudson, the last Confederate stronghold on the Mississippi, was captured by General Banks July 8, 1863, and on May 26, 1865, the war in Louisiana was ended by the surrender of General Kirby Smith. From 1865 to 1874 a period of carpetbag government caused many disturbances. In 1884, the Industrial Cotton Exhibition was opened at New Orleans.

Lundy's Lane, a locality in the province of Ontario, near the Falls of Niagara. Here, July 25, 1814, an obstinate and decisive engagement was fought between an American force, numbering 3,000 men, under General Brown, and a body of about 2,000 British troops commanded by General Drummond. The loss

of the Americans was 743 men; that of the British 878 men.

Lützen, a small town in the Prussian province of Saxony, famous for two great battles fought in its vicinity. The first, a brilliant victory of the Swedes in the Thirty Years' War, took place November 16, 1632. The battle on May 2, 1813, was fought somewhat farther to the south, at the village of Grosgoschen. It was the first great conflict of the united Russian and Prussian army with the army of Napoleon in that decisive campaign, and the French were left in possession of the field.

Maine. Various but unsuccessful attempts at colonization in Maine were made between the years 1602 and 1620 by both the French and English. In 1620, Sir Ferdinando Gorges, as head of the Plymouth Company, received a patent of all the region between 40° and 48° north latitude. In consequence of disputes afterward with the Massachusetts Colony, the company was dissolved, and in 1639 Gorges received a formal charter of the region between the Piscataqua and Kennebec, under the title of Maine. Internecine quarrels between the different settlements, on points of jurisdiction, caused the Massachusetts Colony in 1651 to set up a claim to the province under her charter, and parliament sanctioned it. In 1677, all claims of other grantees were purchased. From this time the history of the province was practically merged in that of Massachusetts. The final separation occurred in 1820, when Maine was admitted to the Union, being the tenth under the constitution. In 1842, the boundary dispute between Maine and Great Britain was settled. The "Maine Liquor Law" was passed in 1851. It was repealed in 1856 and passed again in 1858, being made a part of the Constitution in 1884. The death penalty was abolished in 1876, restored in 1883, and again abolished in 1887. The growth of the wood-pulp and paper-mill industry began about 1880, and in 1890 there was a rapid development of the lumber, granite, ice, and fishery trades. In 1879-80 occurred a notable contest for the governorship between the Republicans and Fusionists.

Mamelukes (*măm'a-lookz*). Originally, male slaves imported from Circassia into Egypt by the rulers of that country. They were instructed in military exercises, but soon exhibited a spirit of insubordination, assassinating the Sultan, Turan Shah, and, in 1258, appointing Ibegh, one of their own number, Sultan of Egypt. They were at length conquered by Selim I., and Cairo, their capital, was taken by storm, after they governed Egypt 263 years. During the French invasion of Egypt by Napoleon I., the Mamelukes formed a fine body of cavalry, and for a time seriously annoyed the invaders, though many afterwards joined them. In 1811, Mehemet Ali annihilated their power by treacherously inveigling and destroying 470 of their chief leaders.

Manila Bay, Battle of. A remarkable engagement between the American Asiatic squadron, under command of Commodore George Dewey, and a Spanish naval force, under command of Admiral Montojo, supported by land batteries, fought on May 1, 1898. When it became evident, in March, 1898, that war between the United States and Spain was inevitable, Commodore Dewey began to mobilize his vessels in the harbor of Hong Kong preparatory to striking a blow at the Philippine Islands on the breaking out of hostilities. By April 1st, he had gathered there his flagship, the "Olympia," a steel protected cruiser; the "Boston," a partially protected steel cruiser; the "Raleigh," protected steel cruiser; the "Concord," steel gunboat; and the "Petrel," steel gunboat. Toward the close of the month, the "Baltimore," a steel protected cruiser, the "Hugh McCulloch," revenue cutter, and two newly-purchased ships loaded with coal and other supplies, joined the fleet. Lying in Manila Bay, one of the largest and most important in the world, was a Spanish squadron, comprising, the "Reina Christina," steel cruiser; "Castilla," wood cruiser; "Velasco," iron cruiser; "Don Antonio de Ulloa," iron cruiser; "Don Juan de Austria," iron cruiser; "Isla de Cuba," steel protected cruiser; "Isla de Luzon," steel protected cruiser; "General Lezo," gunboat; "El Cano," gunboat; "Isla de Mindanao," auxiliary cruiser; "Marques del Duero"; and two torpedo boats. It was supposed that the harbor had been planted with mines and torpedoes and supplied with numerous searchlights, and that the forts on the shore had been strengthened in anticipation of an attack.

The United States squadron entered the bay on the night of April 30th, and at 5 o'clock on Sunday morning, May 1st, opened fire on the Spanish squadron and the forts. Two engagements were fought, and during the brief interval the United States squadron drew off to the east side of the bay to enable officers and men to get their breakfast. The entire battle lasted less than two hours. The Spanish flagship, "Reina Christina," was completely burned; the "Castilla" suffered the same fate; the "Don Juan de Austria" was blown up by a shell from one of the United States vessels; one or more ships were burned; and the entire Spanish fleet was destroyed. After his second attack, in which he destroyed the water battery at Cavite, Commodore Dewey anchored off the city of Manila and sent word to the governor-general that if a shot was fired from the city at the fleet, he would lay Manila in ashes. The Spanish loss was about 2,000 officers and men. The United States squadron did not lose a ship or a man. Two vessels were damaged in their upper works, and eight men were variously injured.

Maryland. One of the thirteen original States, it was named after the mother of Charles II. The State was settled by Lord Baltimore in 1632, under a grant from Charles I. Puritan and Virginian colonies disputed the authority of the proprietary governors, and it was not till 1714, after many broils and considerable bloodshed, extending over three-quarters of a century, that the rights of the Calvert family were finally settled. In 1649, the Assembly passed an act allowing Christians of all sects the public exercise of their faith. Baltimore was founded in 1730. The Virginia boundary was adjusted in 1668, that of Delaware and Pennsylvania.

known in our history as "Mason and Dixon's Line," in 1763. A republican constitution was adopted in 1776. The "Maryland Line" was famous in the Revolutionary War for its gallantry. The Federal Constitution was adopted in 1788. In the War of 1812, Maryland suffered much from Admiral Cockburn's fleet; Frenchtown, Havre de Grace, and Frederick were burned, and Fort McHenry unsuccessfully bombarded. The only important battle fought within the State during the late Civil War was that of Antietam, in September, 1862.

Mason and Dixon's Line. This line was originally the parallel of latitude 39 degrees, 43 minutes, 26.3 seconds which separates Pennsylvania from Maryland. It received its name from Charles Mason and Jeremiah Dixon, two English mathematicians and astronomers, who traced the greater part of it between the years 1763 and 1767, though the last thirty-six miles were finished by others. It was practically the dividing line between the free and the slave States in the East. During the discussion in Congress on the Missouri Compromise, John Randolph, of Roanoke, Virginia, made free use of the phrase, and thereafter it became popular as signifying the dividing line between the free and slave territories throughout the country. The boundary, as thus extended by popular usage, followed the Ohio River to the Mississippi, and west of that was the parallel of 36 degrees, 30 minutes, the southern boundary of Missouri, though Missouri itself was a slave State.

Massachusetts was one of the thirteen original States. Though first visited by the English under Bartholomew Gosnold in 1602, the first permanent settlement was made by the Puritan colony, which landed from the "Mayflower" at Plymouth in 1620. The expedition commanded by John Endicott, which arrived in 1628, acting under the auspices of the Massachusetts Bay Company, which had received a royal charter, gradually planted settlements at Charlestown, Boston, Watertown, Dorchester, Roxbury, Salem, Mystic, Saugus (Lynn), and other places. The restoration of the Stuarts threatened the rights of the colonists, but their charter was finally confirmed in 1662. King Philip's War occurred in 1675-76, and put the colonists in great peril. In 1684, the Massachusetts charter was declared forfeited to the Crown under Charles II., but it was restored after the accession of William and Mary. In 1692, the colonies of Massachusetts Bay and Plymouth were consolidated. The province took active part in the various French and Indian wars, and contributed largely to the expedition which captured Louisburg in 1745. The Boston Massacre in 1770, the destruction of the tea in 1773, and the Port Bill in 1774 were important incidents preceding the Revolution. At Lexington and Concord, in 1775, Massachusetts made the final appeal to arms. At this time the population of the province was 352,000. The State Constitution, still essentially the organic law, was formed in 1780, and the Federal Constitution was ratified in 1788. The total expenditures of the State on account of the late Civil War amounted to $30,162,200.

Mecklenburg Declaration. This declaration was adopted, it is said, in May, 1775, at a midnight meeting of representatives of the militia of Mecklenburg County, North Carolina. It declares that the people of that county are free and independent of the British Crown, and not only is its general tenor that of the Declaration of Independence, but many phrases are word for word as they appear in that document. The minutes of the midnight meeting are said to have been destroyed by fire in 1800. Whether the Declaration of Independence followed the words of the Mecklenburg Declaration or whether the latter, having probably been replaced from memory, was tinctured with the former, is a disputed question.

Mexico. The history of ancient Mexico exhibits two distinct and widely different periods — that of the Toltecs and that of the Aztecs. The Eighth Century is the traditional date when the Toltecs are related to have come from the North. Their capital was established at Tula, north of the Mexican Valley. Their laws and usages stamp them as a people of mild and peaceful instincts, industrious, active, and enterprising. It is related that a severe famine and pestilence all but destroyed the Toltec people in the Eleventh Century, and near the end of the next century, a fresh migration brought, among other kindred nations, the Aztecs into the land. Within two centuries and a half this last people had become predominant. But their rule was in a great degree, a reversion to savagery.

The Aztecs founded, about 1325, the city of Tenochtitlan, or Mexico; a hundred years later they had extended their sway beyond their plateau valley, and on the arrival of the Spaniards, their empire was found to stretch from ocean to ocean. Their government was an elective empire, the deceased prince being usually succeeded by a brother or nephew, who must be a tried warrior; but sometimes the successor was chosen from among the powerful nobles. The monarch wielded despotic power, save in the case of his great feudal vassals; these exercised a very similar authority over the peasant class, below whom, again, were the slaves. The Mexicans apparently believed in one supreme invisible creator of all things, the ruler of the universe; but the popular faith was polytheistic. At the head of the Aztec pantheon was the frightful Huitzilopochtli, the Mexican Mars. The victims were borne to the summit of the great pyramidal temples, where the priests, in sight of assembled crowds, bound them to the sacrificial stone, and, slashing open the breast, tore from it the bleeding heart and held it up before the image of the god.

Cortez landed at Vera Cruz in 1519. Before his energy, and the superior civilization of his followers, the power of the native empire crumbled away. In 1540 Mexico was united with other American territories — at one time all the country from Panama to Vancouver's Island — under the name of New Spain, and governed by viceroys appointed by the mother country. The intolerant spirit of the Catholic clergy led to the suppression of almost every trace of the ancient Aztec nationality and civilization, while the commercial system crippled the resources of the colony; for all foreign trade with any coun-

try other than Spain was prohibited on pain of death. Mexico ranked first among all the Spanish colonies in regard to population, material riches, and natural products. In 1810 the discontent broke into open rebellion, and a guerilla warfare was kept up until, in 1821, the capital was surrendered by O'Donoju, the last of the viceroys. In the following year, General Iturbide, who, in 1821, had issued the plan de Iguala, providing for the independence of Mexico under a prince of the reigning houses, had himself proclaimed emperor; but the guerilla leader Guerrero, his former ally, and General Santa Ana raised the republican standard, and in 1823 he was banished to Italy with a pension. Returning the following year he was taken and shot, and the federal republic of Mexico was finally established.

For more than half a century after this the history of Mexico is a record of disorder and civil war. In 1836 Texas secured its independence, recognized by Mexico in 1845. In that year Texas was incorporated with the United States; but its western boundary was not settled, and war ensued between Mexico and the United States. From the fall of Santa Ana in 1855, down to 1867, great confusion prevailed. In April, 1862, Emperor Napoleon formally declared war against Mexico; but the French finally had to withdraw in 1867, largely because of the attitude of the United States. Maximilian, who had become Emperor of Mexico under French support, was executed in the same year, and Juarez returned to power. On his death in 1872, the chief justice, Lerdo de Tejada, assumed the presidency, in which he was succeeded in 1877 by General Porfirio Diaz, one of the ablest of Mexican soldiers and administrators.

In 1910, a rebellion was started under Madero. In 1911 Diaz was forced to resign; Madero was made president. In 1912 Felix Diaz led an insurrection against Madero, who was assassinated February 24, 1913. Huerta became acting president. A revolt against the Huerta government by the Constitutionalists, followers of Madero, resulted in the appointment of Carranza as their commander-in-chief. The United States declined to recognize Huerta.

On April 9, 1914, a party of American bluejackets landed at Tampico for gasoline. They were arrested by Mexican troops, but released with an apology. Rear-admiral Mayo demanded a salute to the American flag which was refused. The United States navy was ordered to Tampico to enforce the demand. 1,000 marines were landed at Vera Cruz. On April 21 the customs house was seized by order of President Wilson. 3,000 additional troops took the city on April 22. On May 20, delegates of the so-called A-B-C powers—Argentina, Brazil, Chile—met at Niagara Falls, Canada, to arrange peaceful settlement between United States and Mexico. The conference ended without positive results.

Huerta resigned in July, 1915, and left the country; Carbajal became provisional president. The Constitutionalists under Carranza occupied Mexico City in August; Villa arose against Carranza, now provisional president, but was defeated. In October, 1915, Carranza was formally recognized as chief executive by the United States and other governments, and, in 1917, was elected president of Mexico. In May, 1920, a revolution, led by General Obregon, resulted in the deposition and death of Carranza. In September, 1920, General Obregon was elected president and assumed office, December 1, 1920.

Michigan. The name is derived from Indian words, meaning "a weir of fish." Though visited as early as 1610 by French missionaries and fur-traders, the first European settlement was made at Sault Ste. Marie by Father Marquette in 1668. Fort Michilimackinac, now Mackinaw, was established three years later. In 1701 Antoine Cadillac founded Detroit. With other French possessions it came into the ownership of England in 1763. Michigan came into the possession of the United States in 1796, when it was included in the government of the Northwest Territory. The Territory of Michigan was formed in 1805. In 1837 Michigan was admitted as a state. In 1916 Prohibition was adopted by constitutional amendment. In 1918 full suffrage was granted to women.

Minnesota. The name is derived from an Indian word, signifying "cloudy water." Hennepin and La Salle visited the region as early as 1680. Extended explorations were made by John Carver in 1766 and by Lieut. Pike in 1805, after which explorers and settlers followed in considerable numbers. Fort Snelling, at the mouth of the Minnesota River, was built and occupied in 1821. In 1837 lumbering industries began to attract immigration. The Territory established in 1849 embraced about twice the limits of the present State, the western limit extending to the Missouri and White Earth rivers. In 1851, the Sioux ceded all their lands west of the Mississippi to the Big Sioux River. The State was admitted to the Union May 11, 1858. The portion of the State lying west of the Mississippi originally belonged to the Louisiana Purchase, and the eastern portion was a part of what was known as the "Northwest Territory." It was the scene of the Sioux War and massacre in 1862-63.

Mississippi. This region was first traversed by De Soto in 1542, and in 1682 La Salle descended the Mississippi (the name derived from Indian words meaning "great water"), took formal possession, and called the adjacent country Louisiana. Iberville built a fort on the Bay of Biloxi in 1699, and in 1716 Fort Rosalie was erected on the site of Natchez. After the cession of the east portion of Louisiana (including what is now Mississippi) to Great Britain, in 1763, and until the Revolutionary War, immigration proceeded very slowly. The Territory of Mississippi was organized in 1798. In 1804 the boundaries were enlarged, and Mississippi was made to comprise the whole of the present States of Alabama and Mississippi north of the 31st parallel. The region south of that line between the Pearl and Perdido rivers was added in 1812, though claimed by Spain. Alabama was organized as a Territory in 1817, and Mississippi was admitted as a State. The ordinance of secession was passed January 9, 1861. The principal events within the State during the war of 1861-65 were the battles of Iuka and Corinth and the siege of Vicksburg, which sur-

rendered on July 4, 1863. The State was formally readmitted to the Union in 1870. On January 29, 1903, the Yazoo Canal was opened, restoring to Vicksburg the water front it lost during 1876, when the Federal Government attempted to dredge a canal, tapping the Yazoo River. A Prohibition statute was enacted in 1908 which took effect in 1909.

Missouri. The name of the State signifies "big muddy." The settlement and progress of Missouri were at first slower than in the lower portions of French Louisiana. Its oldest town, Ste. Genevieve, was founded in 1755. In 1763, France ceded to Spain the portion west of the Mississippi, and to England the section east of the river. Numbers of French Canadians had settled along the whole line of the river, and an active trade had been carried on between upper and lower Louisiana. With liberal grants of lands to colonists, immigrants flocked hither from Spain. In 1775, St. Louis, originally a depot of the fur-trade, contained 800 inhabitants, while Ste. Genevieve had only 460. Spain sided with the colonists during the Revolution, and her arms were successful in lower Louisiana and Florida. In 1780, however, St. Louis was attacked by a force of English and Indians from Michilimackinac, and was relieved only by the arrival of General Clarke from Kaskaskia with American assistance. With the retrocession of Louisiana to France in 1800, and its subsequent sale to the United States by Napoleon three years later, its political ownership became fixed. Missouri was included in the Territory of Louisiana, which had been set off in 1805, with St. Louis as the seat of territorial government. In 1812, with the admission of the present State of Louisiana into the Union, the name of the Territory was changed to Missouri. With rapid immigration the population had swelled in 1817 to 60,000. In 1820, by the celebrated compromise, Missouri was admitted to the Union as a slaveholding State, on condition that slavery should never exist north of latitude 36° 30′, in lands farther west, out of which new States should be formed. During the late Civil War repeated efforts were made to force secession on Missouri, but unsuccessfully. Though no great battles were fought within the State limits, it was the field of active military operations and, in many sections, of bloody guerilla-fighting. The battle of Wilson's Creek, on August 10, 1861, where General Lyon, the Federal commander, was killed, and the capture of Lexington by the Confederate general, Sterling Price, on September 20, 1861, were the most important events of the first year of the conflict. Several times General Price held more than half the State in his hands, and it was not till 1864 that the Confederates were finally expelled. In June, 1865, a new constitution was ratified by the people. The fifteenth amendment to the Federal Constitution was adopted by the legislature in 1869. Missouri was the eleventh State admitted under the Federal Constitution.

Montana. In 1743, Chevalier de la Verendrye, with a party of French Canadians, entered Montana and discovered the Rocky Mountains, but made no attempt at settlement. The country came into the possession of the United States by the Louisiana Purchase of 1803. In 1804 and 1806, Lewis and Clark made exploring expeditions up the Missouri and across the mountains to the Pacific, crossing Montana twice. Alexander Henry, in 1808, led a party of fur-traders into the Yellowstone country, and in 1806–1810, John Colter, of Lewis and Clark's expedition, engaged in hunting and trapping in the territory. Fort Union, the first permanent fort in Montana, was built in 1829 by Kenneth Mackenzie, and in 1832 the first steamer ascended the Missouri into Montana. Fort Benton was built in 1846 by Alexander Culbertson. In 1853–54, Montana was explored by a scientific and military, expedition sent out by Governor Isaac J. Stevens, of Washington Territory. The Gold Creek mines were discovered in 1862, and in the same year the development of the mines of Beaverhead Valley and Bighole River began. In 1864, Montana was organized as a Territory and Helena and Butte City were founded. From 1864 to 1879 there was war with the Sioux, Blackfeet, and Cheyennes. In 1874, Helena was made territorial capital. The battle of Little Big Horn, when General Custer and his men were massacred, occurred in 1876. In 1881, the first railroad reached Helena, and in 1883 the second was completed. In 1889, Montana was admitted as a State. The Montana State University was opened at Missoula in 1895. Montana granted suffrage to women in 1914 and adopted constitutional Prohibition in 1916.

Nebraska. The name first applied to the river is of Indian origin, and signifies "Shallow Water." When originally organized as a Territory in 1854, it extended from latitude 40° north to the northern national boundary and west to the crest of the Rocky Mountains. The Territory of Colorado was set off from this on February 28, 1861, and that of Dakota a few months later. At the same time Nebraska received from Utah and Washington Territories a tract of 15,378 square miles, lying on the southwest slope of the Rocky Mountains, which, however, was taken from her with an additional portion in 1863 to form the Territory of Idaho. Nebraska was thus cut down to its present limits. Measures to form a State government were made in 1860 and in 1864, but the first was defeated by the popular vote, and the second (being an enabling act of Congress) was not acted on. The Civil War and Indian hostilities checked the growth of the Territory during 1861–65. In 1866, a constitution was framed and ratified by popular vote, and in 1867 Nebraska was admitted as a State. Constitutional Prohibition was adopted in 1916.

Nevada. The region within the limits of Nevada forms part of the Mexican cession of 1848. It was organized by act of Congress as a Territory in 1861, from a portion of Utah, and embraced the region bounded north by the present boundary of the State, east by the 116th meridian, south by the 37th parallel, and west by California. A portion of California which had been included the latter-named State refused to transfer, and by an additional act of Congress, in 1861, a further portion of Utah was added, extending the east boundary the distance of one degree. Nevada became a

State October 31, 1864. In 1866, a third portion of Utah was added, extending the east boundary to the 114th meridian, and at the same time the portion of the State South of the 37th parallel was added from Arizona. The earliest settlements were made by the Mormons in 1848. Gold was discovered in 1849; but the rapid advance in population dates from the discovery of silver in 1859. Among the earliest discoveries was that of the world-renowned Comstock lode. In 1906–07 rich discoveries of gold were made at Goldfield and other points. The State was the twenty-fifth admitted under the Constitution. Suffrage was granted to women in 1914.

New Hampshire. One of the thirteen original States. The first settlements were made within the limits of New Hampshire at Dover and Portsmouth in 1623. The district was annexed to Massachusetts in 1641, became a royal province in 1679, and was again annexed to Massachusetts in 1689. It became a separate province in 1741 and remained so till the Revolution. Indian atrocities were frequent till the English conquered Canada. It was supposed till 1764 that the present State of Vermont was included in the province. The territory, however, was claimed by New York; the controversy lasted till the independence of Vermont was acknowledged in 1790. In 1776, New Hampshire declared its independence and established a temporary government of its own. It took an active part in the Revolutionary War, and the battle of Bennington was fought within its limits. The Constitution of the United States was ratified in 1788. During the Civil War New Hampshire furnished 34,606 men to the Union cause.

New Jersey. The State of New Jersey, one of the thirteen original States, was originally a part of New York, and was first settled about 1617 by the Dutch. A patent granted by Charles II. of England, to his brother, the Duke of York, in 1664, gave the latter a claim on all the country between the Delaware and Connecticut rivers. An expedition under Colonel Nicolls conquered the whole territory. The portion of the province now named New Jersey received its name from Sir George Carteret, to whom the Duke of York had sold his claim, in memory of the Island of Jersey of which the former had been governor. A constitution was formed for it in 1665 as a separate colony. In 1776, a State constitution was formed, and during the Revolution the battles of Trenton, Princeton, Millstone, Red Bank, and Monmouth were fought within the State limits. The Federal Constitution was ratified December 18, 1787, the State capital established at Trenton in 1790, and the present constitution August 13, 1844. The State furnished 79,511 fully equipped troops to the Union army and navy during the Civil War.

New Mexico. The earliest explorers of New Mexico were Spaniards who long held possession of the region. Though one of the most recently settled portions of the Union, it was among the earliest to be occupied by the white man, and Santa Fé, originally an Indian pueblo, claims the title of the oldest town in the country. When the Spaniards first visited this region, they found a people living in communities with substantial dwellings, and marking the decay of a civilization which had flourished in previous centuries. In 1822 the people of New Mexico, together with other inhabitants of Mexico, of which it then formed a part, threw off the Spanish yoke. In 1846 United States troops under Gen. Stephen Kearney occupied New Mexico, which was surrendered by Mexico in the treaty of Guadalupe Hidalgo in 1848. It then included the greater part of the present Arizona and part of Nevada and of Colorado. The territorial government was organized in 1850 and inaugurated in 1851. In 1853 a large strip was added by the Gadsden Purchase. Arizona was set off in 1863, and in 1867 a section was annexed to Colorado. New Mexico became a state on January 6, 1912, the 47th State to be admitted to the Union.

New York. The Bay of New York and the river emptying into it were explored by Hendrik Hudson, a navigator in the employment of the Dutch East India Company, in September, 1609. In 1614, the Dutch made settlements on Manhattan Island, and the name New Netherland was extended to all the unconquered regions lying between Virginia and Canada. Seven years later the Dutch West India Company was incorporated and took possession. In 1623, settlements were made at Albany and on Long Island, and in 1626, Peter Minuit, the Director-General, bought Manhattan Island of the Indians. In 1629, the company passed the act under which the manorial monopolies in land were established. In spite of Indian wars the colony grew so fast that it came in collision with the English on the Connecticut and the Swedes on the Delaware River. The claims made by the English to New Netherland on the score of Cabot's prior discovery were finally enforced in the charter granted by Charles II. to the Duke of York, and the armed expedition of Colonel Nicolls in 1664. The Dutch under Governor Stuyvesant surrendered, and New Netherland became New York, though the Dutch reconquered and held the province for a short period, before English rule became permanent. The tyranny exercised over the province by Francis Nicholson, the lieutenant of Andros, who had been appointed to be governor, caused the revolt in 1689 headed by Jacob Leisler, which was at first successful, though Leisler was two years later executed for treason. In 1687 began the series of French and Indian wars in which the New York colonists bore so important a part. The first of these closed in 1697, with the Peace of Ryswick. The second, or Queen Anne's War, lasted from 1702 to 1713. The most important act in this long conflict between the French and English for the sovereignty of North America, and the end of the historic drama, began in 1754. The contest lasted with varying fortunes until the French were finally driven from their line of fortresses on the lake and the war was ended by General Wolfe's expedition, which resulted in the capture of Quebec and the final overthrow of French power in Canada in 1759. The province of New York entered zealously into the Revolutionary cause,

though it contained a large loyalist faction. Many of the most important military operations were conducted within its limits. The two leading battles fought were that of Long Island on August 27, 1776, whereby the British secured New York City and held it till the end of the war; and the battle of Saratoga, on October 17, 1777, which occasioned the surrender of General Burgoyne's army. On November 25, 1783, New York was evacuated by the British. In 1790, the conflicting claims of New York and New Hampshire were settled by the erection of the disputed territory into the State of Vermont. In 1797, Albany was made the capital of the State, and slavery was abolished in 1817. During the War of 1812 the most notable incidents connected with New York State were the battle of Lundy's Lane, Ontario, near the Niagara frontier, fought by General Winfield Scott, and Commodore McDonough's naval defeat of the British on Lake Champlain, both in 1813. The Erie Canal, originally projected in 1800, was, through DeWitt Clinton's influence, completed in 1825. During the Civil War, the State furnished 455,568 Union troops. In 1917 a constitutional amendment was adopted granting full suffrage to women.

Normandy. An ancient northwest province of France, extending along the English channel, from a point south of the mouth of the Somme to the bay of Cancale, now divided into the departments of Seine-Inférieure, Eure, Calvados, Orne, and La Manche. The Romans included the territory in Gallia Lugdunensis Secunda. It received the name of Normandy from the Northmen, who occupied it in the beginning of the Tenth Century. In 912, Charles the Simple gave his sanction to their conquests, and Rollo, their chief, received the title of Duke of Normandy. The sixth successor of Rollo, William, became in 1066 the conqueror and first Norman king of England. On his death (1087) England and Normandy were separated, the latter reverting to Robert Courteheuse, while William Rufus seized upon the former. Henry I. ruled over both, but his daughter Matilda was only Duchess of Normandy. Her son, Henry II., accomplished another reunion. From King John Normandy was wrested by Philip Augustus of France; but it was twice held by the English, first under Edward III., and a second time, from 1417 to 1450, under Henry V. and Henry VI. Charles VII. of France made it an integral portion of his kingdom.

North Carolina. In 1663 eight noblemen received from Charles II. the patent of the province of Carolina, but a few years prior to this settlements had been made by Dissenters from Virginia and from New England. Albemarle, the name given to the portion now North Carolina, was rapidly augmented by settlers from Virginia, New England, and Bermuda. In 1729, Carolina became a royal government, all but one of the proprietors having sold out to the Crown, and North and South Carolina were formally declared distinct provinces. In 1765, North Carolina received large accessions in parties of Irish Presbyterians, Scotch Highlanders, and Moravians. In 1769, the Provincial Assembly declared against the right of taxation without representation, and in 1774 representatives were sent to the first Continental Congress, which adopted the declaration of colonial rights. In the revolution North Carolina was a leader and its territory was a scene of some important campaigns. In 1776, it united with the other colonies in the Declaration of Independence, and a State constitution was formed the same year. Aside from partisan warfare, the only battle fought in the State was that of Guilford Court House in 1781, between Generals Greene and Cornwallis. The State seceded from the Union May 21, 1861, and the military operations which followed were notable. The most important were the capture of Fort Hatteras in 1861, of Roanoke Island and Fort Macon in 1862, and of Fort Fisher in 1865. The State ratified the 14th Amendment in 1868, and the 15th Amendment in 1869. Statutory Prohibition was adopted by a referendum vote in 1908.

North Dakota. The Territory of North Dakota, of which North and South Dakota were formed, originally constituted part of the Territory of Minnesota, which was organized in 1849 from part of the Louisiana Purchase of 1803. In 1854 the Territory of Nebraska was formed, comprising then the present State of Nebraska and all of Dakota. On March 2, 1861, the Territory of Dakota was organized, comprising then the States of Montana and Wyoming. The first permanent settlements by whites were made in 1859 in Clay, Union, and Yankton counties. On November 2, 1889, the Territory was divided and the States of North and South Dakota formed and admitted to the Union at the same time. The history of the settlement and growth of the country is identical with that of the territories of which it originally formed a part. Constitutional Prohibition adopted in 1889.

North German Confederation, The, was formed after the famous "Seven Weeks' War" and the "Peace of Prague," when Austria was entirely excluded from Germany. The confederation included Hanover, Hesse-Cassel, Nassau and Frankfort (all incorporated with Prussia), and the states north of the Main united to Prussia in a bund. Strictly speaking, therefore, the confederation was Prussia and the states north of the Main. In 1870, during the Franco-German War, the "North German Confederation," being joined by Bavaria, Württemberg, Baden, and Hesse-Darmstadt, became the "German Confederation," and two months afterwards (January 18, 1871), the King of Prussia had the title of "German Emperor" given him.

Northmen. A name applied to the ancient inhabitants of Scandinavia, or Norway, Sweden, and Denmark, but more generally restricted to those searovers, called Danes by the Saxons, who sailed on piratical expeditions to all parts of the European seas, made their first appearance on the coast of England in 787, and from the year 832 repeated their invasion almost every year, till they became masters of all the country under their King Canute, and reigned in England during the next fifty years, down to 1042, when the Saxon Dynasty was restored in the person of Edward the Confessor. In 885, they laid siege to Paris, but were at length

bought off by Charles the Fat. Rollo, one of the most renowned of the Norman chieftains, after ravaging Friesland and the countries watered by the Scheldt, accepted the hand of a daughter of Charles the Simple, and received with her, under the tie of vassalage, possession of all the land in the valley of the Seine, from the Epte and Eure to the sea, which then went by the name of Normandy. They rapidly adopted the more civilized form of life that prevailed in the Frankish Kingdom — its religion, language, and manners — but inspired everything they borrowed with their own vitality. Their conquest of England, in 1066, gave that country an energetic race of kings and nobles on the whole well-fitted to rule a brave, sturdy, but somewhat torpid people like the Anglo-Saxons.

Norway. The early history of Norway is comprised in that of the other Scandinavian countries, and is, like theirs, for the most part fabulous. It is only towards the close of the Tenth Century, when Christianity was introduced under the rule of Olaf I., that the mythical obscurity in which the annals of the kingdom had been previously plunged begins to give place to the light of historical truth.

The introduction of Christianity, which was the result of the intercourse which the Norwegians had with the more civilized parts of Europe, through their maritime expeditions, destroyed much of the old nationality of the people with the heathenism which they had hitherto cherished, although the sanguinary feuds which had raged among the rival chiefs of the land can scarcely be said to have lost their ferocity under the sway of a milder religion. Olaf II., or the Saint (1015–1030), who zealously prosecuted the conversion of his countrymen, raised himself to supreme power in the land by the subjection of the small kings or chieftains, who in the times of heathenism had subdivided the kingdom among them. The war between Olaf and King Knud the Great of Denmark, which terminated in 1030 with the battle of Sticklestad, in which the former was slain, brought Norway under the sway of the Danish conqueror; but at his death in 1036, Olaf's son, Magnus I., recovered possession of the throne, and henceforth, till 1319, Norway continued to be governed by native kings. The death in that year of Haakon V., without male heirs, threw the election of a new king into the hands of the National Assembly, who, after many discussions, made choice of Magnus VIII., of Sweden, the son of Haakon's daughter. He was in turn succeeded by his son Haakon and his grandson Olaf V., who having been elected King of Denmark in 1376 became ruler of the sister Scandinavian kingdoms on the death of his father in 1380. This young king, who exercised only a nominal sway under the guidance of his mother, Queen Margaret, the only child of Valdemar III. of Denmark, died without heirs in 1387. Margaret's love of power and capacity for government brought about her election to the triple throne of the Scandinavian lands, and from this period till 1814, Norway continued united with Denmark; but while it shared in the general fortunes of the latter state, it retained its own constitutional mode of government, and exercised its right of electing to the throne, until, like the sister kingdom, it agreed of its own free will to relinquish this privilege in favor of hereditary succession to the throne. The Napoleonic crisis may be said to have severed this union, which had existed for more than 400 years; for Denmark, after having given unequivocal proofs of adhesion to the cause of Bonaparte, was compelled, after the disastrous War of 1813, to purchase peace at the cost of this long united partner of her state. Crippled in her resources, and almost a bankrupt, she saw herself constrained to sign the treaty of Kiel in 1814, by which it was stipulated by the allied powers that she should resign Norway to Sweden, receiving in return, by way of indemnity, some portion of Swedish Pomerania and the island of Rügen, which were subsequently exchanged with Prussia for Lauenburg on the payment by that state of two million rix dollars. The Norwegians, having refused to admit the validity of the treaty of Kiel, nominated Prince Christian, the heir-presumptive to the throne of Denmark, regent and subsequently King of Norway. This nomination was made by the National Diet, or Storthing, which met at Ejdsvold, where they drew up a constitution based on the French Constitution of 1791. These measures found, however, neither supporters nor sympathizers among the other nations; and with the sanction of the great allied powers, Charles John Bernadotte, Crown-Prince of Sweden, led an army into Norway, and, after taking Fredrikstad and Frederikshald, threatened Christiania. Denmark being unable to support the cause of Prince Christian, and Norway being utterly destitute of the means necessary for prosecuting a war, resistance was of no avail, and the Norwegians, in this untoward conjuncture of affairs, were glad to accept the proposals made to them by the Swedish King for a union with Sweden, on the understanding that they should retain the newly promulgated constitution, and enjoy full liberty and independence within their own boundaries. These conditions were agreed to, and strictly maintained, a few unimportant alterations in the constitution, necessitated by the altered conditions of the new union, being the only changes introduced in the machinery of government. Charles XIII. was declared joint King of Sweden and Norway in 1818. After the union, Norway firmly resisted every attempt on the part of the Swedish monarchs to infringe upon the constitutional prerogatives of the nation; and during the reign of the first of the Bernadotte Dynasty, the relations between him and his Norwegian subjects were marked by jealousy and distrust on both sides; but after his death the people generally became more contented and Norway continued to make rapid progress towards a state of political security and material prosperity far greater than it ever enjoyed under the Danish dominion.

The dissolution of the union with Sweden which had endured since 1814, took place June 7, 1905, following a dispute between the two countries as to their diplomatic representation abroad. Prince Charles of Denmark became King, as Haakon VII.

NOTABLE WARS OF HISTORY

Dates	Historic Name	Leading Battles	Chief Leaders
B. C. 1193–1184	**Trojan War.** Greeks capture Troy.	Siege of Troy.	Hector; Agamemnon.
743–669	**Messenian War.** Sparta conquers Messenia.		
504–469	**Perso-Grecian War.** Greece successfully resists Persian invasion.	Marathon; Thermopylæ; Salamis; Platea; Mycale.	Miltiades; Leonidas; Themistocles; Pausanius.
595–586 448–447 357–346	**Sacred Wars of Greece.** Largely intestine, and without results.		
431–404	**Peloponnesian War.** Athens conquered by Lacedæmonia.	Battles chiefly naval.	Pericles; Alcibiades; Lysander
334–331	**Greco-Persian War.** Greece conquers Persia.	Granicus; Issus; Arbela.	Alexander the Great; Darius.
343–290	**Samnite War.** Romans conquer Samnites.	Caudine Forks; Sentinum.	Fabius Maximus; Caius Pontius.
264–146	**Punic Wars.** Romans destroy Carthage.	Ticinus; Trebia; Thrasymenus; Cannæ; Metaurus; Zama.	Fabius; Scipio; Hannibal.
200–146	**Greco-Roman War.** Greece subdued by Rome.	Cynoscephalæ; Pydna.	Flaminius; Æmilius Paulus; Mummius; Perseus.
112–106	**Jugurthine War.** Romans conquer Numidia.	Muthul; Cirta.	Jugurtha; Metellus; Marius.
90–88	**Roman Social War.** Right of Roman citizenship granted the Socii.		Samnites; Marsians.
88–63	**Mithridatic War.** Mithridates, King of Parthia, defeated.	Chæronea; Cabira.	Lucullus; Pompey; Sulla.
73–71	**Gladiatorial War.** Gladiators defeated.	Petelia.	Spartacus; Crassus.
58–51	**Gallic War.** Gauls conquered by Cæsar.		Cæsar.
50–31	**Roman Civil War.** Roman Empire established.	Pharsalia; Thapsus; Munda; Philippi; Actium.	Cæsar; Pompey; Brutus; Cassius; Antony; Augustus.
A. D. 70	**Jewish-Roman War.** Jerusalem taken; temple destroyed.	Siege of Jerusalem.	Titus.
86–100	**Dacian War.** Country beyond Danube conquered.		Trajan.
409–553	**Barbarian Wars.** Teutonic hordes capture Rome and ravage Italy.	Sack of Rome.	Alaric; Genseric; Attila.
710–1492	**Saracen Conquests.** The Saracens occupy Northern Africa and Spain; defeated in France.	Xerxes; Tours; Tarifa; Granada.	Musa; Tarik; Charles Martel; Cid Rodrigo.
1095–1291	**The Crusades.** Christians capture Jerusalem and ports of Spain, but are finally repulsed.	Siege of Jerusalem; Acre.	Godfrey of Bouillon; Conrad III.; Louis VII.; Frederick II.; Philip Augustus; Richard the Lion-Hearted; Louis IX.; Edward I.; Saladin.
1337–1453	**Hundred Years' War.** England lost all her possessions in France except Calais.	Crécy; Calais; Poitiers; Agincourt.	Edward III. of England; Edward the Black Prince; Henry V. of England; Joan of Arc.
1385–1389	**Austro-Swiss War.** Independence of Switzerland.	Sempach; Näfels.	Arnold von Winkelried; Leopold II.
1419–1436	**Hussite War.** Religious toleration secured.	Prague.	John Ziska; Sigismund.
1455–1485	**Wars of the Roses.** House of York supplants that of Lancaster on English throne.	St. Albans; Bloreheath; Wakefield; Towton; Barnet; Tewksbury.	Richard, Duke of York; Edward, Duke of York; Earl of Warwick; Queen Margaret; Henry VI.
1562–1598	**French Civil War.** Edict of Nantes, Protestant toleration.	Dreux; St.-Denis; Jarnac; Moncontour; Ivry.	Duke of Anjou; Henry III.; Henry IV.; Condé.
1567–1609	**Spanish-Netherlands War.** Independence of the Netherlands achieved.	Zütphen; Nieuport; various sieges and naval conflicts.	William of Orange; Maurice of Nassau; Duke of Alva; Alexander Farnese; Duke of Parma.
1618–1648	**Thirty Years' War.** Religious freedom secured.	Dessau; Leipsic; Lech; Lützen; Nördlingen.	Gustavus Adolphus; Wallenstein; Tilly; Turenne.

NOTABLE WARS OF HISTORY—Continued

Dates	Historic Name	Leading Battles	Chief Leaders
1642–1652	**English Civil War.** English Commonwealth established.	Edgehill; Marston Moor; Naseby; Worcester.	Prince Rupert; Fairfax; Charles I.; Cromwell.
1701–1714	**Spanish Succession.** French and Spanish crowns disunited. Protestant succession in England.	Blenheim; Ramillies; Turin; Oudenarde; Malplaquet.	Duke of Marlborough; Prince Eugène; Marshals Tallard and Villars.
1700–1709	**Swedish-Russian War.** Defeat of Charles XII.	Narva; Pultowa.	Charles XII. of Sweden; Peter the Great.
1740–1748	**Austrian Succession.** Many previous treaties affirmed; Maria Theresa, Empress of Austria.	Dettingen; Fontenoy; Piacenza; Lawfeld.	Marshal Saxe; George II. of England; Duke of Cumberland.
1756–1763	**Seven Years' War.** Prussia gains a high rank.	Prague; Kollin; Rosbach; Lissa; Torgau.	Marshal Daun; Frederick the Great.
1775–1783	**American Revolutionary War.** United States achieve their independence.	Bunker Hill; Saratoga; Monmouth; Yorktown.	Washington; Greene; Burgoyne; Cornwallis; Clinton; Howe; Lafayette; Gates.
1792–1799	**French Revolution.** Bourbons defeated.	Valmy; Jemappes; Wattignies; Lodi; Arcole.	Kellerman; Dumouriez; Jourdan; Moreau; Bonaparte.
1800–1815	**Napoleonic Wars.** France advances to the first place in Europe.	Marengo; Trafalgar; Austerlitz; Jena; Eylau; Friedland; Wagram; Borodino; Leipsic; Waterloo.	Napoleon; Wellington; Nelson; Blücher; Alexander I.; Francis I.; Frederick William III.; Ney.
1812–1815	**War of 1812.** United States entirely independent of Great Britain.	Battles chiefly naval; Burning of Washington; New Orleans.	Com. Perry; Admiral Cockburn; Ross; Jackson.
1821–1828	**War for Greek Independence.** Greece independent of Turkey.	Missolonghi; Navarino.	Admiral Canaris; Byron; Ibrahim Pasha.
1846–1847	**Mexican War.** Boundary between United States and Mexico fixed.	Buena Vista; Cerro Gordo; Capture of Mexico City.	Taylor; Scott; Santa Ana.
1854–1856	**Crimean War.** Independence of Turkey guaranteed. Peace of Paris.	Alma; Balaklava; Inkerman; Malakoff.	Lord Raglan; St. Arnaud; Prince Menschikoff; Gen. Canrobert.
1859	**Italian War.** Papal States and two Sicilies annexed to Italy.	Magenta; Solferino.	Napoleon III.; Victor Emmanuel; Franz Josef I.
1861–1865	**American Civil War.** Abolition of slavery.	Bull Run; Shiloh; Seven Days; Antietam; Murfreesboro; Chancellorsville; Vicksburg; Gettysburg; Chickamauga; Chattanooga; Atlanta; Wilderness.	McClellan; Grant; Sherman; Sheridan; Jackson; Thomas; Lee; Johnston; Meade.
1866	**Seven Weeks' War.** Prussia defeats Austria and unifies Germany.	Langensalza; Königgrätz or Sadowa.	Marshal Benedek; William I.; Beyer.
1870	**Franco-Prussian War.** Paris taken and Alsace and Lorraine added to German Empire.	Wörth; Gravelotte; Sedan; Metz; Capture of Paris.	William I.; Von Moltke; Frederick; Frederick Charles; Napoleon III.; MacMahon; Bazaine.
1877	**Russo-Turkish War.** Rumania, Servia, Montenegro, independent of Turkey. Treaty of Berlin.	Shipka Pass; Kars Plevna.	Grand Duke Nicholas; Gourko; Skobeleff; Todleben; Osman Pasha; Mukhtar Pasha.
1894–1895	**Chinese-Japanese War.** Indemnity to Japan; independence of Korea.	Occupation of Korea by Japanese; Port Arthur; Wei Hai Wei; Nieuchang.	Oyama; Prince Arisugawa; Prince Komatsu.
1898	**Spanish-American War.** End of Spanish rule in America; Cuba, Porto Rico, and Philippines pass to United States.	Manila Bay; Santiago; San Juan; El Caney.	Admirals Dewey, Schley, Sampson, Montojo, Cervera; Generals Shafter, Toral.
1899–1902	**Boer War.** Annexation of Transvaal and Orange river colony to British empire.	Kimberly; Ladysmith; Mafeking; Pretoria.	Joubert; De Wet; Botha; De la Rey; French; White; Bullen; Kitchener; Roberts.
1904–1905	**Russo-Japanese War.** Mutual concessions, confirmed by treaty of Portsmouth. Japan a world power.	Yalu; Telissu; Liaoyang; Sha-ho; Siege of Port Arthur; Mukden; Destruction of Russian fleet.	Admiral Makaroff; Kuropatkin; Linievitch; Stoessel; Oyama; Kuroki; Admiral Togo; Admiral Kamimura; Admiral Rojestvensky; Nogi; Oku.
1911–1912	**Turco-Italian War.** Tripoli ceded to Italy.	Benghazi; Derna; Tobruk; Hodeida.	Aubry; Enver Bey; Farabelli; Fethi Bey.
1912–1913	**Balkan War.** Turkey loses much territory in Europe.	Scutari; Saloniki; Monastir; Adrianople.	Putnik; Zekki Pasha; Savoff; Kleomenes; Abdullah Pasha; Yankovich.
1914–1918	**War of the Nations, or The World War.** Overthrow of Pan-Germanic scheme of world conquest. Defeat of militarism and autocracy. Downfall of the Hohenzollern and Habsburg dynasties. End of Turkish domination over non-Moslems. Triumph of democracy. Restoration of independence to small nations. Establishment of new world order to secure international justice.	Liége, Marne, Aisne, Tannenberg, Ypres, Falklands, Second Ypres, Dunajec, Loos, Gallipoli, Artois, Verdun, Jutland, Isonzo, Champagne, Somme, Vimy Ridge, Caporetto, Cambrai, Erzerum, Chateau-Thierry, Second Marne, St. Quentin, St. Mihiel, Argonne, Samaria, Piave, Cerna-Vardar.	Foch, Joffre, Pétain, Castelnau, Gallieni, D'Esperey, Mangin Gouraud, Haig, French, Allenby, Byng, Horne, Maude, Beatty, Jellicoe, Pershing, Sims, Cadorna, Diaz, Brusilov, Grand Duke Nicholas, Hindenburg, Falkenhayn, Kluck, Mackensen, Ludendorff, Auffenburg, Dankl.

Ohio. The French made the first explorations in what is now Ohio, La Salle's discoveries dating from about 1680. The English, whose patents covered a portion of the region which the French traders aimed to monopolize, came in hostile contact with the latter. It was in this connection that Washington's name first became notable through the Braddock Expedition. In 1763 Canada and the whole region West to the Mississippi previously claimed by France were surrendered to Great Britain. After the Revolutionary War, the United States assumed control over the region afterward known as the Northwest Territory, acknowledging the claim made by Virginia to 3,709,848 acres near the rapids of the Ohio, and a similar claim by Connecticut to 3,666,621 acres near Lake Erie, which became known as the "Western Reserve." These claims were admitted in the sense of ownership, but in no way as question of State jurisdiction. The first permanent settlement was made at Marietta, in 1788. The early years of the Northwest Territory were harassed by Indian warfare, which did not cease till the crushing defeat inflicted on them by General Anthony Wayne in 1794. In 1799, the Northwest Territory was organized, and shortly afterward Ohio (the name being derived from the Indian signifying "beautiful river") was formed into a separate territorial government. In 1803, the Territory was admitted as a State, the fourth under the Federal Constitution. The seat of government was in Chillicothe till 1810, in Zanesville till 1812, and in Chillicothe again till 1816, after which the State capital was fixed at Columbus. In 1818, the first steamboat, the "Walk on the Water," was launched on Lake Erie. In 1836, the first western railroad was opened, from Toledo, Ohio, to Adrian, Michigan, with horse power at first and, in 1837, with steam power. The State began to be noted for wheat growing about 1840, and in 1863 her coal and iron mines began to be developed. Manufacturing became an important industry about 1865, and for a decade grew rapidly. The Standard Oil Company was formed in 1870, and during the next two decades the State's oil fields were rapidly developed. During the Civil War Ohio furnished one-eighth of the federal troops.

Oklahoma. The history of Oklahoma before it was constructed into a separate Territory is identical with that of the region of which Texas and New Mexico formed a part. When Indian Territory was created as a home for all the Indian tribes most of what is now Oklahoma was within its bounds. Some time in the early seventies the name first appeared in political history, the occasion being a bill introduced into Congress to create a Territory out of part of Indian Territory, to be known as Oklahoma. The measure failed of passage and for more than a decade nothing was heard of the country. It was not forgotten, however, as in March, 1889, an amendment was tacked on to the Indian Appropriation Bill providing for the opening to homestead settlers of the little area of land embracing less than 3,000,000 acres and lying in the center of what is now the great State. The land was opened in April, 1889, and the first rush of Oklahoma "boomers" took place. In June, 1890, the territorial government first came into existence, and by the act which brought this about a strip of land known as "No Man's Land," consisting of 3,681,000 acres, was added as Beaver County. Other sections were added from time to time until the Territory contained 24,933,120 acres. In 1906, Congress provided an enabling act whereby Oklahoma and Indian Territory might be created into a State and admitted into the Union. On November 16, 1907, the conditions of this act having been complied with, the President of the United States signed the Constitution of Oklahoma, and issued a proclamation announcing its admission. The first State legislature convened December 2, 1907.

Oregon. The original region named Oregon was the whole province claimed by the United States on the Pacific Coast, extending from latitude 42° to 54° 40′ north. Until 1846 joint possession was held by Great Britain and the United States, and then the latter, by the northwest boundary treaty, abandoned all claim to the country north of the 49th parallel, and the name Oregon was restricted to the region south of that line, which was given up by Great Britain. The first accurate knowledge of the territory was brought back by Captain Robert Gray, an American navigator, who entered the mouth of the Columbia River in 1792, and gave the name of his ship to it. The sale of Louisiana to the United States, in 1803, endowed this country with a title of ownership, and the expedition of Lewis and Clark, in 1804–1806, strengthened the claim. Though a trading-post was established in 1811, by the Pacific Fur Company, under the Astor *régime*, at the mouth of the Columbia River, the region was largely inhabited by Indians and the employés of the Hudson Bay Fur Company until the active emigration of Americans, between 1833 and 1850, introduced a new element. The territorial organization took place in 1848. In 1853, Washington Territory was instituted out of the region north of the Columbia River on the west and of the 46th parallel on the east. In 1858, Oregon was admitted as a State. A Lewis and Clark Centennial Celebration was held at Portland in 1905. Suffrage was granted to women in 1912. Constitutional Prohibition adopted, 1914.

Pennsylvania. Delaware River and Bay were first explored under the auspices of the Dutch East India Company, from 1604 to 1624, and military jurisdiction was established. Till 1664 they continued in possession of both sides of the bay without much colonization, though a Swedish colony settled at Chester, on the west bank of the river, in 1638, where their industry and peacefulness prefigured the characteristics of the Quakers, who were to come later. Under a charter given by Charles II., in 1681, the region west of the Delaware was granted to William Penn, the Quaker, who colonized it and founded Philadelphia in 1682. Under this grant was included Delaware, and the whole region was ruled under the same proprietary until 1699, when a separate legislature, though not a separate governor, was allowed to this section of the province. This union lasted till 1776. The letter of the Penn charter included territory

already covered in the vague grants made to the New England colonies Virginia and Maryland. All the boundary-lines, however, were easily settled, except that separating Pennsylvania and Maryland, which was not defined until the completion of the Mason and Dixon Survey, in 1767. The original Swedish immigrants readily coalesced with the Quaker colonists, and the remarkable thrift of the people, combined with their peaceful Indian policy, soon made Pennsylvania a flourishing region. Large additional bodies of immigrants, Scotch-Irish between 1715 and 1725, and Germans from 1730 onward, rapidly swelled population and wealth. The government instituted by William Penn remained in force until 1776, when the province joined the other colonies in the fight for independence, and a provisional constitution was made by a convention presided over by Benjamin Franklin. Philadelphia was occupied by the British forces from September, 1777, to June, 1778. All the earlier sessions of the Continental Congress were held in this city. The battle of Germantown was fought within the present chartered limits of the city in 1777. From 1790 to 1800 it was the seat of the Government of the United States. In 1790, a new State constitution was formed. In 1794 occurred the disturbance known as the "Whiskey Rebellion" in the western part of the State, growing out of opposition to the excise laws. In 1799, the seat of the State government was removed to Lancaster, and thence in 1812 to Harrisburg, which still remains the capital. In 1862, during the late Civil War, the State was threatened with invasion by the Confederates, but the tide of attack then stopped with invading Maryland. In 1863 General Lee carried out his interrupted purpose, and overran the south portion of the State to within a short distance of Harrisburg. On his retreat General Meade joined battle with him at Gettysburg, near the Maryland line. The battle beginning July 1st, lasted three days, resulting in the Confederate defeat. This Federal victory was probably the important turning-point of the war. As the seventh in the geographical order of the original States, Pennsylvania has become historically the "Keystone" State. Disastrous riots occurred about Pittsburg and elsewhere in 1877 and 1892. In 1908, the famous "State House Cases" were brought to trial, as the result of an alleged $5,000,000 steal by the contractors of the new State capitol, at Harrisburg, and their accomplices.

Persia. The original country of the Persians occupied a small portion of modern Persia on the north of the Persian Gulf. After being under the Assyrians, and next under the Medes, Cyrus (B. C. 559–529), by conquering and uniting Media, Babylonia, Lydia, and all Asia Minor, became the founder of the Persian Empire. The empire was further extended by his son and successor, Cambyses (B. C. 529–522), who conquered Tyre, Cyprus, and Egypt; and by Darius I., who subdued Thrace and Macedonia, and a small part of India. His son Xerxes (486–465 B. C.) reduced Egypt, which had revolted under his father, and also continued the war against the European Greeks, but was defeated at Thermopylæ and at Salamis (480 B. C.), and obliged to defend himself against their attacks in a disastrous war. Artaxerxes I. (465–425 B. C.) had a long and comparatively peaceful reign. Artaxerxes was followed by Darius II. or Darius Nothus, Artaxerxes II. (Mnemon), Artaxerxes III. (Ochus), and Darius III. (Codomannus, 338–330 B. C.), the last of this dynasty, known as the Achæmenian Dynasty. He was defeated by Alexander the Great in three battles, lost his life, and the empire passed into the hands of his conqueror. On the dissolution of the Macedonian Empire, after the death of Alexander (323), Persia ultimately fell to his general, Seleucus and his successors, the Seleucidæ (312). They reigned over it till 236 B. C., when the last Seleucus was defeated and taken prisoner by Arsaces I., the founder of the dynasty of the Arsacidæ and of the Parthian Empire, of which Persia formed a portion, and which lasted till 226 A. D. The supremacy was then recovered by Persia in the person of Ardishír Babigán (Artaxerxes), who obtained the sovereignty of all Central Asia, and left it to his descendants, the Sassanidæ, so called from Sassan, the grandfather of Ardishír. This dynasty continued to reign for about 417 years, under twenty-six sovereigns. The reign of Sapor II., called the Great (310–381), and that of Chosroes I. (Khosru, 531–579), were perhaps the most notable of the whole dynasty. The latter extended the Persian Empire from the Mediterranean to the Indus, from the Jaxartes to Arabia and the confines of Egypt. He waged successful wars with the Indians, Turks, Romans, and Arabs. Chosroes II. (591–628) made extensive conquests, but lost them again in the middle of the reign of the Byzantine Emperor Heraclius. His son, Ardishír (Artaxerxes) III., but seven years old, succeeded him, but was murdered a few days after his accession. He was the last descendant of the Sanssaidæ in the male line. Numerous revolutions now followed, until Yezdigerd III., a nephew of Chosroes II., ascended the throne in 632, at the age of sixteen. He was attacked and defeated by Caliph Omar in 639–636, and Persia became for more than 150 years a province of the Mohammedan Empire. The Arab conquest had a profound influence on Persian life as well as on the language and religion. The old Persian religion was given up in favor of Mohammedanism, only the Guebres, or Parsees, adhering to the faith of their fathers. About the beginning of the Ninth Century the Persian territories began to be broken up into numerous petty states. The Seljuks, a Turkish Dynasty, who first became powerful about 1037, extended its dominions over several Persian provinces, and Malek-Shah, the most powerful of them, conquered also Georgia, Syria, and Asia Minor. Through Genghis Khan the Tartars and Mongols became dominant in Persia about 1220, and they preserved this ascendency till the beginning of the Fifteenth Century. Then appeared (1387) Timurlenk (Tamerlane) at the head of a new horde of Mongols, who conquered Persia and filled the world from Hindustan to the extremities of Asia Minor with terror. But the death of this famous conqueror in 1405 was followed not long after by the downfall of the

Mongol dominion in Persia, where the Turkomans thenceforward remained masters for 100 years. The Turkomans were succeeded by the Sufi Dynasty (1501–1736). The first sovereign of this dynasty, Ismail Sufi, pretended to be descended from Ali, the son-in-law of Mohammed. The great Shah Abbas (1587–1628) introduced absolute power, and made Ispahan his capital. Under Shah Soliman (1666–94) the empire declined, and entirely sunk under his son Hussein. A period of revolts and anarchy followed until Kuli Khan ascended the throne in 1736 as Nadir Shah, and restored Persia to her former importance. In 1747 Nadir was murdered and his death threw the empire again into confusion. Kerim Khan, who had served under Nadir, succeeded in making himself master of the whole of Western Iran or modern Persia. He died in 1779. Aga Mohammed, a Turkoman belonging to the noblest family of the Tribe of the Kajars, seated himself on the throne, which he left to his nephew, Baba Khan. The latter began to reign in 1796 under the name of Futteh Ali Shah. In 1813 he was compelled to cede to Russia all his possessions to the north of Armenia, and in 1828 his share of Armenia. Futteh Ali died in 1834, leaving the crown to his grandson, Mehemet Shah. He died in 1848, and was succeeded by his son, Nasr-ed-Din. In May, 1852, he annexed the Sultanate of Herat, but was compelled to relinquish it by the British. Persia has since acquired portions of territory formerly belonging to the Omân, Afghanistan, and Beluchistan. Muzaffer-ed-Din succeeded in 1896. He was succeeded in January, 1907, by Mohammed Ali, who, after an attempt to overcome the constitution granted by his father, abdicated in favor of Ahmed Mirza.

Early in the war of nations, 1914, Persia proclaimed neutrality.

Philippine War. When the Philippines were taken over by the United States an insurgent army was operating against Spain. After first assisting the United States troops, Aguinaldo, the insurgent leader, desiring absolute freedom of control, turned his forces against them. On Feb. 4, 1899, his army of Filipinos made a night attack near Manila. Although the insurgents were driven back with great loss, the Americans lost 49 soldiers and 148 were wounded. About 13,000 men under General Otis participated in this initial battle of the new conflict in the Philippines. From this time forward the Americans continuously gained ground. On April 26 the insurgents, using artillery for the first time, were defeated by Col. Funston. On May 23 Gen. Lawton arrived with his command at Malolos, having marched 120 miles in 20 days, participating in 22 fights, and capturing 28 towns. In August an arrangement was made with the sultan of the Sulu islands providing for the continuance, by the United States, of the pension formerly paid by Spain, the United States flag to be paramount, and the sultan to repress piracy. In December, 1900, Gen. Lawton was killed while assisting a wounded soldier. Aguinaldo was successful in eluding all efforts until March, 1901, when he was captured by means of a stratagem by Gen. Funston of the Kansas Volunteers. In recognition Funston was brevetted brigadier-general in the regular army. On July 4, 1902, the President proclaimed the Philippine insurrection at an end.

Poland. Formerly an important kingdom of Europe whose territory down to 1914 was divided between Russia, Austria-Hungary, and Prussia. The capital of Poland was at Cracow from about 1320 to the reign of Sigismund III. (1587–1632), when it was removed to Warsaw. At the period of its greatest extent, previous to 1660, it had an area of about 375,000 square miles, extending northward to the Baltic sea and the gulf of Riga, westward to Brandenburg, southward to Hungary and almost to the Crimea, and eastward throughout most of the basin of the Dnieper.

At the outbreak of the great European war in 1914 about six-sevenths of this area was comprised in Russia, including Russian Poland, Lithuania, Volhynia, and a major part of Little Russia, Livonia, and Courland. The portion of Poland which belonged to Austria comprised the crownland of Galicia. The portion belonging to Prussia comprised Posen, West Prussia, and Ermland, in what is now known as East Prussia.

Poland was a state of much influence and promise until rent with serious factional troubles in the eighteenth century. These so weakened it that it fell a prey to the more powerful neighboring states of Russia, Prussia, and Austria. In 1772, 1793, and 1795 occurred the three successive partitions of Poland whereby all the territory of the kingdom was divided between the three adjoining states. Napoleon, in return for military support, promised to reconstruct an independent Poland but accomplished little. Following Napoleon's downfall, the congress of Vienna, 1815, made some readjustments but left the whole of Poland distributed between Russia, Prussia, and Austria.

In 1915 the Germans defeated the armies of the czar, captured Warsaw, and occupied much Polish territory in Russia. Under the separate peace signed with the Bolsheviki in 1918 Germany was granted sovereignty over a large portion of Russian Poland.

Portugal. The name Portugal is a corrupted form of that of the hill fort, *Portus Cale*, which stood on the south bank of the Douro, and is now one of the suburbs of Oporto ("the harbor"). The Carthaginians under Hamilcar subdued the region, and were followed by the Romans. In the Fifth Century A. D., Lusitania, like the rest of the peninsula, was overrun by the Visigoths, and in the Eighth Century was conquered by the Arabs. The warlike Fernando, King of Leon and Castile, in the course of marauding expeditions conquered and occupied the important city and stronghold of Coimbra, in 1064. His son, Alonso IV., seized his brother's territory of Galicia, which included part of the north of Portugal.

Alfonso I. defeated a large Saracen army in the plain of Ourique, Alemtejo, in 1139, took the great stronghold of Santarem, and with the aid of a fleet of English, German, and Flemish crusaders carried Lisbon itself by siege in 1147. Before his death, in 1185, he had kindled the fire of patriotic loyalty in the nation, which his sword had extended to the Mediterranean Sea. The Burgundian Dynasty founded by him con-

tinued to rule Portugal until 1580. Alfonso III. was called the Restorer for his reconquest of Algarve. His son Dinis laid the foundation of the commercial greatness of Portugal.

Henrique the Navigator sent forth expeditions which explored the west coast of Africa, and discovered the Azores, Madeiras, Canaries, Cape Verde, and other islands. Maritime discovery and colonization continued during the reigns of Alfonso V., Joao II., and Manuel. In 1487-88 Bartholomeo Diaz doubled the Cape of Good Hope. In 1497-99 Vasco da Gama made his famous voyage to India, and in 1500 Cabral discovered Brazil. The great navigator Magalhaens was a Portuguese.

When Joao III. ascended the throne in 1521, Portugal was one of the first kingdoms of Europe. In 1580 Philip II. of Spain annexed Portugal to his own dominions. Portugal was now burdened with much of the expense and misery of the Spanish wars in Germany and the Netherlands. Moreover, it lost to the Dutch a great part of its foreign possessions. After a shameful union of sixty years Portugal regained its liberty by a revolt which placed Joao de Braganca on the throne in 1640. In 1668 Spain ceded all claims to Portugal and the Dutch restored Brazil, but nothing could bring back the old prosperity.

Ordered by Napoleon to seize British merchandise in Portugal, Joao VI. sought protection of England and transferred the seat of government to Rio de Janeiro in 1807. The French then occupied Portugal. Wellington's victories over the French, 1808-10, delivered Portugal from Napoleon's tyranny. A revolution took place in Lisbon in 1820 and a constitution was proclaimed. In 1821 Joao returned from Brazil and accepted the constitution. In 1825 he acknowledged the independence of Brazil under his brother Dom Pedro as emperor.

Numerous outbreaks culminated in the assassination of King Carlos on Feb. 1, 1908. Manuel II. succeeded to the throne, but a revolution in 1910 turned the monarchy into a republic.

As an ally of Great Britain, Portugal, in February, 1916, seized German and Austrian ships within her waters. On March 9 Germany declared war on Portugal. Portuguese troops assisted the Allies in Africa and on the Franco-Belgian front. In 1919 a monarchial revolt failed to restore Manuel II. to the throne.

Prohibition. Connecticut enacted local prohibition in 1839. Maine was the first to establish state-wide prohibition. This was done by legislative enactment in 1851, and later was incorporated in the state constitution. The thirty-two states which had adopted state-wide prohibition previous to January 1, 1919, together with the District of Columbia, contained population of 51,300,000, according to the latest U. S. census estimates. In the other sixteen states there were districts under local prohibition embracing 65 per cent of their area and a population exceeding 14,000,000. Practically nine-tenths of the area and two-thirds of the population of the United States had thus come under prohibition by state and local enactments. The list of the thirty-two states which adopted prohibition follows:

Name of State	Constitutional or Statutory	Date Effective
Alabama	Statutory	1915
Arizona	Constitutional	1915
Arkansas	Statutory	1916
Colorado	Constitutional	1916
Florida	Constitutional	1919
Georgia	Statutory	1908
Idaho	Constitutional	1916
Indiana	Statutory	1918
Iowa	Statutory	1916
Kansas	Constitutional	1881
Maine	Constitutional	1884
Michigan	Constitutional	1918
Mississippi	Statutory	1909
Montana	Constitutional	1918
Nebraska	Constitutional	1917
Nevada	Statutory	1918
New Hampshire	Statutory	1918
New Mexico	Constitutional	1918
North Carolina	Statutory	1909
North Dakota	Constitutional	1889
Ohio	Constitutional	1919
Oklahoma	Constitutional	1907
Oregon	Constitutional	1916
South Carolina	Statutory	1916
South Dakota	Constitutional	1917
Tennessee	Statutory	1909
Texas	Statutory	1918
Utah	Statutory	1917
Virginia	Statutory	1916
Washington	Statutory	1916
West Virginia	Constitutional	1914
Wyoming	Constitutional	1920

At this stage it was but a step from state to national prohibition. An amendment to the Federal constitution providing for nation-wide prohibition was adopted by the senate of the United States, Aug. 1, 1917, by a vote of 65 to 20, and by the house of representatives, Dec. 17, 1917, by a vote of 282 to 128. At the general elections of Nov. 5, 1918, legislatures were chosen overwhelmingly in favor of ratification. On Jan. 16, 1919, thirty-six states, the necessary three-fourths, had ratified it by legislative action, and, on Jan. 29, the prohibition amendment was proclaimed to take effect Jan. 16, 1920. The first thirty-six states completed ratification as follows:

In 1918: Mississippi, Jan. 8; Virginia, Jan. 11; Kentucky, Jan. 14; North Dakota, Jan. 25; South Carolina, Jan. 28; Maryland, Feb. 13; Montana, Feb. 19; Texas, Mar. 4; Delaware, Mar. 18; South Dakota, Mar. 20; Massachusetts, Apr. 2; Arizona, May 24; Georgia, June 26; Louisiana, Aug. 8; Florida, Nov. 27.

In 1919: Michigan, Jan. 2; Ohio and Oklahoma, Jan. 7; Maine and Idaho, Jan. 8; West Virginia, Jan. 9; Washington, Tennessee, and California, Jan. 13; Illinois, Indiana, Arkansas, North Carolina, Alabama, and Kansas, Jan. 14; Oregon, Iowa, Utah, Colorado, and New Hampshire, Jan. 15; Nebraska, Jan. 16.

Previous to March 1, 1919, nine additional states ratified the amendment, namely; Missouri and Wyoming, Jan. 16; Wisconsin and Minnesota, Jan. 17; New Mexico, Jan. 20; Nevada, Jan. 21; Vermont and New York, Jan. 29; Pennsylvania, Feb. 25.

The three states, New Jersey, Connecticut, and Rhode Island, which had not ratified up to Jan. 1, 1922, contained a population of about 5,000,000. The forty-five states ratifying contained a population of approximately 100,000,000, and embraced 99 per cent of the area of the United States. The legislatures of Idaho, Kansas, South Dakota, Utah, Washington, and Wyoming voted unanimously for ratification and the average vote in the forty-five state legislatures ratifying was about 6 to 1 in favor of the amendment.

In 1917 Porto Rico adopted prohibition by a referendum vote. The District of Columbia, 1917, and Alaska, 1918, were placed under prohibition by act of Congress.

PRESIDENTS OF THE UNITE

Name	Born		Parents		Paternal Ancestry
	When	Where	Father	Mother	
1. George Washington,	1732	Bridge's Creek, Va.,	Augustine,	Mary Ball,	English,
2. John Adams,	1735	Braintree, Mass.,	John,	Susanna Boylston,	English,
3. Thomas Jefferson,	1743	Shadwell, Va.,	Peter,	Jane Randolph,	Welsh,
4. James Madison,	1751	Port Conway, Va.,	James,	Nelly Conway,	English,
5. James Monroe,	1758	Westmoreland Co., Va.,	Spence,	Eliza Jones,	Scotch,
6. John Quincy Adams,	1767	Quincy, Mass.,	John,	Abigail Smith,	English,
7. Andrew Jackson,	1767	Mecklenburg Co., N. C.,	Andrew,	Elizabeth Hutchinson,	Scotch-Irish,
8. Martin Van Buren,	1782	Kinderhook, N. Y.,	Abraham,	Maria Hoes,	Dutch,
9. William H. Harrison,	1773	Berkeley, Va.,	Benjamin,	Elizabeth Bassett,	English,
10. John Tyler,	1790	Charles City Co., Va.,	John,	Mary Armisted,	English,
11. James K. Polk,	1795	Mecklenburg Co., N. C.,	Samuel,	Jane Knox,	Scotch-Irish,
12. Zachary Taylor,	1784	Orange Co., Va.,	Richard,	Sarah Strother,	English,
13. Millard Fillmore,	1800	Summer Hill, N. Y.,	Nathaniel,	Phebe Millard,	English,
14. Franklin Pierce,	1804	Hillsborough, N. H.,	Benjamin,	Anna Kindreck,	English,
15. James Buchanan,	1791	Stony Batter, Pa.,	James,	Elizabeth Speer,	Scotch-Irish,
16. Abraham Lincoln,	1809	Nolin Creek, Ky.,	Thomas,	Nancy Hanks,	English,
17. Andrew Johnson,	1808	Raleigh, N. C.,	Jacob,	Mary M'Donough,	English,
18. Ulysses S. Grant,	1822	Point Pleasant, Ohio,	Jesse Root,	Harriet Simpson,	Scotch,
19. Rutherford B. Hayes,	1822	Delaware, Ohio,	Rutherford,	Sophia Birchard,	Scotch,
20. James A. Garfield,	1831	Orange, Ohio,	Abram,	Eliza Ballou,	English,
21. Chester A. Arthur,	1830	Fairfield, Vt.,	William,	Malvina Stone,	Scotch-Irish,
22. Grover Cleveland,	1837	Caldwell, N. J.,	Richard Falley,	Anna Neal,	English,
23. Benjamin Harrison,	1833	North Bend, Ohio,	John Scott,	Elizabeth Irwin,	English,
24. Grover Cleveland,	1837	Caldwell, N. J.,	Richard Falley,	Anna Neal,	English,
25. William McKinley,	1843	Niles, Ohio,	William,	Nancy C. Allison,	Scotch-Irish,
26. Theodore Roosevelt,	1858	New York City, N. Y.,	Theodore,	Martha Bullock,	Dutch,
27. William H. Taft,	1857	Cincinnati, Ohio,	Alphonso,	Louise M. Torrey,	English,
28. Woodrow Wilson,	1856	Staunton, Va.,	Joseph R.,	Jessie Woodrow,	Scotch-Irish,
29. Warren G. Harding,	1865	Corsica, Ohio,	George Tryon,	Phebe E. Dickerson,	Scotch-Dutch,

PRESIDENTS OF THE UNITED

Name	Married	Wife's Name	Children		Inaugurated	Residence When Elected	Age When Inaugurated
			Boys	Girls			
1. George Washington,	1759	Mrs. Martha Custis,	..	..	1789	Mt. Vernon, Va.,	57
2. John Adams,	1764	Abigail Smith,	3	2	1797	Quincy, Mass.,	61
3. Thomas Jefferson,	1772	Mrs. Martha Skelton,	..	6	1801	Monticello, Va.,	57
4. James Madison,	1794	Mrs. Dorothy Todd,	..	..	1809	Montpelier, Va.,	57
5. James Monroe,	1786	Eliza Kortwright,	..	2	1817	Oakhill, Va.,	58
6. John Quincy Adams,	1797	Louisa C. Johnson,	3	1	1825	Quincy, Mass.,	57
7. Andrew Jackson,	1791	Mrs. Rachel Robards,	..	..	1829	Hermitage, Tenn.,	61
8. Martin Van Buren,	1807	Hannah Hoes (Goes),	4	..	1837	Kinderhook, N. Y.,	54
9. William H. Harrison,	1795	Anna Symmes,	6	4	1841	North Bend, O.,	68
10. John Tyler,	1813	Letitia Christian,	3	4	1841	Williamsburg, Va.,	51
	1844	Julia Gardiner,	4	2			
11. James K. Polk,	1824	Sarah Childress,	..	..	1845	Nashville, Tenn.,	49
12. Zachary Taylor,	1810	Margaret Smith,	1	3	1849	Baton Rouge, La.,	64
13. Millard Fillmore,	1826	Abigail Power,	1	1	1850	Buffalo, N. Y.,	50
	1858	Mrs. Caroline McIntosh,	..	..			
14. Franklin Pierce,	1834	Jean Means Appleton,	3	..	1853	Concord, N. H.,	48
15. James Buchanan,	....	Unmarried,	..	..	1857	Wheatland, Pa.,	65
16. Abraham Lincoln,	1842	Mary Todd,	4	..	1861	Springfield, Ill.,	52
17. Andrew Johnson,	1827	Eliza McCardle,	3	2	1865	Greenville, Tenn.,	56
18. Ulysses S. Grant,	1848	Julia Dent,	3	1	1869	Washington, D. C.,	46
19. Rutherford B. Hayes,	1852	Lucy Ware Webb,	7	1	1877	Fremont, Ohio,	54
20. James A. Garfield,	1858	Lucretia Rudolph,	4	1	1881	Mentor, Ohio,	49
21. Chester A. Arthur,	1859	Ellen Lewis Herndon,	1	1	1881	New York City,	50
22. Grover Cleveland,	1886	Frances Folsom,	2	3	1885	Buffalo, N. Y.,	47
23. Benjamin Harrison,	1853	Caroline Lavinia Scott,	1	1	1889	Indianapolis, Ind.,	55
	1896	Mary Scott (Lord) Dimmick,	..	1			
24. Grover Cleveland,	....	(See above),	..	..	1893	New York City,	55
25. William McKinley,	1871	Ida Saxton,	..	2	1897	Canton, Ohio,	54
26. Theo. Roosevelt,	1880	Alice Lee,	..	1	1901	Oyster Bay, N. Y.,	42
	1886	Edith Carow,	4	1			
27. William H. Taft,	1886	Helen Herron,	2	1	1909	Cincinnati, Ohio,	51
28. Woodrow Wilson,	1885	Helen Louise Axson,	..	3	1913	Princeton, N. J.,	56
	1915	Mrs. Edith Bolling Galt,	..	..			
29. Warren G. Harding,	1891	Florence Kling,	..	..	1921	Marion, Ohio,	55

TATES—TABLE 1

Father's Business	Educational Advantage	Early Vocation	Politics	Profession	Religious Connections	Name
anter,	Common School,	Surveyor,	Fed.,	Planter,	Episcopalian,	Washington.
armer,	Harvard College, 1755,	Teacher,	Fed.,	Lawyer,	Unitarian,	Adams.
anter,	College of William and Mary, 1762,	Lawyer,	Rep.,	Lawyer,	Liberal,	Jefferson.
anter,	Princeton College, 1771,	Lawyer,	Rep.,	Lawyer,	Episcopalian,	Madison.
anter,	Entered College, William and Mary,	Lawyer,	Rep.,	Politician,	Episcopalian,	Monroe.
awyer,	Harvard College, 1787,	Lawyer,	Rep.,	Lawyer,	Unitarian,	Adams, J.Q.
armer,	Self Taught,	Lawyer,	Dem.,	Lawyer,	Presbyterian,	Jackson.
armer,	Academy,	Lawyer,	Dem.,	Lawyer,	Reformed Dutch,	Van Buren.
atesman,	Entered Hampden-Sidney College,	Medicine,	Whig,	Army,	Episcopalian,	Harrison.
rist,	College, William and Mary, 1806,	Lawyer,	Dem.,	Lawyer,	Episcopalian,	Tyler.
armer,	University of North Carolina,	Lawyer,	Dem.,	Lawyer,	Presbyterian,	Polk.
anter,	Common School,	Soldier,	Whig,	Army,	Episcopalian,	Taylor.
armer,	Public School,	Tailor,	Whig,	Lawyer,	Episcopalian,	Fillmore.
armer,	Bowdoin College, 1824,	Lawyer,	Dem.,	Lawyer,	Episcopalian,	Pierce.
erchant,	Dickinson College, 1809,	Lawyer,	Dem.,	Lawyer,	Presbyterian,	Buchanan.
armer,	Self Taught,	Farmer,	Rep.,	Lawyer,	Liberal,	Lincoln.
exton,	Self Taught,	Tailor,	Rep.,	Politician,	Liberal,	Johnson.
armer,	West Point Military Academy, 1843,	Tanner,	Rep.,	Army,	Methodist,	Grant.
erchant,	Kenyon College, Ohio, 1842,	Lawyer,	Rep.,	Lawyer,	Methodist,	Hayes.
armer,	Williams College, 1856,	Teacher,	Rep.,	Lawyer,	Disciples,	Garfield.
ergyman,	Union College, 1848,	Teacher,	Rep.,	Lawyer,	Episcopalian,	Arthur.
ergyman,	Common School,	Teacher,	Dem.,	Lawyer,	Presbyterian,	Cleveland.
armer,	Miami University, Ohio, 1851,	Lawyer,	Rep.,	Lawyer,	Presbyterian,	Harrison.
ergyman,	Common School,	Teacher,	Dem.,	Lawyer,	Presbyterian,	Cleveland.
on Manfr.,	Entered Allegheny College,	Lawyer,	Rep.,	Lawyer,	Methodist,	McKinley.
erchant,	Harvard,	Publicist,	Rep.,	Publicist,	Reformed Dutch,	Roosevelt.
awyer,	Yale, 1878,	Lawyer,	Rep.,	Lawyer,	Unitarian,	Taft.
ergyman,	Princeton, 1879,	Lawyer,	Dem.,	Teacher,	Presbyterian,	Wilson.
ysician,	Ohio Central College,	Editor,	Rep.,	Publisher,	Baptist,	Harding.

TATES—TABLE II

Served as President	Died	Age at Death	Cause of Death	Place of Death	Place of Burial
yr., 10 mos., 4 d.	1799	67	Acute laryngitis,	Mt. Vernon, Va.,	Mt. Vernon, Va.
yr.,	1826	90	Natural decline,	Quincy, Mass.,	Unitarian Church, Quincy, Mass.
yr.,	1826	83	Chronic diarrhœa,	Monticello, Va.,	Monticello, Albemarle Co., Va.
yr.,	1836	85	Natural decline,	Montpelier, Va.,	Montpelier, Hanover Co., Va.
yr.,	1831	73	Natural decline,	New York City,	Originally, N. Y. Removed, 1858, to Hollywood Cemetery, Richmond, Va.
yr.,	1848	80	Paralysis,	Hall of Congress, Washington, D. C.,	Unitarian Church, Quincy, Mass.
yr.,	1845	78	Dropsy,	Hermitage, near Nashville, Tenn.,	Hermitage, near Nashville, Tenn.
yr.,	1862	79	Asthma,	Kinderhook, N. Y.,	Kinderhook, N. Y.
mo.,	1841	68	Pleurisy,	White House, Washington, D. C.,	North Bend, Ohio.
yr., 11 mo.,	1862	71	Bilious attacks, with bronchitis,	Ballard House, Richmond, Va.,	Hollywood, Richmond, Va.
yr.,	1849	53	Chronic diarrhœa,	Nashville, Tenn.,	Nashville, Tenn.
yr., 4 mo., 5 d.,	1850	65	Cholera morbus and typhoid fever,	White House, Washington, D. C.,	Near Louisville, Kentucky (Springfield).
yr., 7 mo., 6 d.,	1874	74	Paralysis,	Buffalo, N. Y.,	Forest Lawn, Buffalo, N. Y.
yr.,	1869	64	Dropsy and inflammation of stomach,	Concord, N. H.,	Minot Cemetery, Concord, N. H.
yr.,	1868	77	Rheumatic gout,	Lancaster, Pa.,	Woodward Hill Cemetery, Lancaster, Pa.
yr., 1 mo., 11 d.,	1865	56	Assassinated by Booth,	Washington, D. C.,	Oak Ridge Cemetery, Springfield, Ill.
yr., 10 mo., 19 d.,	1875	66	Paralysis,	Greenville, Tenn.,	Greenville, Tenn.
yr.,	1885	63	Cancer of the tongue,	Mt. McGregor, N. Y.,	Riverside, New York City.
yr.,	1893	70	Neuralgia of the heart,	Fremont, Ohio,	Fremont, Ohio.
½ mo.,	1881	49	Assassinated by Guiteau,	Elberon, Long Branch, N. J.,	Lake View Cemetery, Cleveland, Ohio.
yr., 5½ mo.,	1886	56	Bright's disease,	New York City,	Rural Cemetery, Albany, N.Y.
yr.,	1908	71	Heart failure,	Princeton, N. J.,	Princeton, N. J.
yr.,	1901	67	Pneumonia,	Indianapolis, Ind.,	Crown Hill Cemetery, Indianapolis, Ind.
yr., 6 mo., 10 d.,	1901	58	Assassinated by Czolgosz,	Buffalo, N. Y.,	Cemetery, Canton, Ohio.
yr., 5 mo., 20 d.,	1919	60	Embolism,	Oyster Bay, N. Y.	Young's Memorial Cemetery, Oyster Bay, N. Y.
yr.,					
yr.,					

Rhode Island. Supposed to be identical with the ancient Vinland of the Icelandic Sagas, historians credit the first discovery of Rhode Island to the Norsemen about 1000 A. D. The navigator Verrazzano visited Narragansett Bay and its shores in 1524. The State was settled at Providence in 1636, by Roger Williams and his companions, who had been banished from Massachusetts by religious intolerance. In 1638, the Island of Aquidneck, afterward called Rhode Island, was settled at Newport and Portsmouth. A third settlement was formed at Warwick in 1643. The same year Roger Williams went to England and obtained a patent for the united government of the settlements. In 1663, this patent gave way to a charter by Charles II., incorporating the colony of Rhode Island and Providence Plantations, which remained in force for 180 years. The colony suffered severely in King Philip's War, 1675-76, which resulted in the destruction of the Wampanoag and Narragansett tribes of Indians. In 1687, Sir Edmond Andros, who had been made Governor of New York, New England, etc., abrogated the charter, but it became again the ruling constitution after his recall. In the wars between France and England, Rhode Island furnished valuable aid by land and sea for the expeditions against Louisburg, Crown Point, Oswego, and Canada. In 1756, she had fifty privateers at sea. During the War of the Revolution the State supplied many ships and sailors for naval operations. Rhode Island was invaded by the British, and vain attempts were made for several years to drive them thence by Count d'Estaing's fleet and General Sullivan's army. The State was the last to accept the Federal Constitution, May 29, 1790. Dorr's insurrection occurred in 1842, an imbroglio growing out of the bigoted suffrage laws, an inheritance from colonial times. It was only in 1861 that the boundary line between Rhode Island and Massachusetts was finally settled. In 1901, Massachusetts revoked the edict of banishment against Roger Williams, which had stood for nearly three centuries.

RULERS OF THE WORLD

ROMAN EMPERORS

Name	Lineage	Period of Rule		Birth	Death
	THE CÆSARS	B. C.	A. D.	B. C.	A. D
Augustus,	A title conferred by the Senate,	30	14	63	14
		A. D.			
Tiberius,	Stepson of Augustus,	14	37	42	37
Caligula,	Youngest son of Germanicus, nephew of Tiberius,	37	41	12	41
Claudius,	Grandson of Tiberius,	41	54	10	54
				A. D.	
Nero,	Son of Domitius Ahenobarbus,	54	68	37	68
				B. C.	
Galba,	Was proclaimed Emperor,	68	69	3	69
				A. D.	
Otho,	Was proclaimed Emperor,	69		32	69
Vitellius,	Was proclaimed Emperor,	69	69	15	69
Vespasian,	Was proclaimed Emperor,	70	79	9	79
Titus,	Son of Vespasian,	79	81	41	81
Domitian,	Second son of Vespasian,	81	96	51	96
	THE FIVE GOOD EMPERORS				
Nerva,	Was proclaimed Emperor,	96	98	32	98
Trajan,	Adopted son of Nerva,	98	117	53	117
Hadrian,	Nephew of Trajan,	117	138	76	138
Titus Antoninus Pius,	Adopted son of Hadrian,	138	161	86	161
Marcus Aurelius Antoninus,	Nephew of Antoninus Pius,	161	180	121	180
	THE PERIOD OF MILITARY DESPOTISM				
Commodus,	Son of Marcus Aurelius,	180	193	161	192, Dec. 31
Pertinax,	Was proclaimed Emperor,	193		126	193
Didius Julianus,	Was proclaimed Emperor,	193			193
Septimius Severus,	Was proclaimed Emperor,	193	212?	146	211
Caracalla,	Son of Septimius Severus,	212	217	188	217
Macrinus,	Was proclaimed Emperor,	217	218	164	218
Heliogabalus (Elagabalus),	First cousin of Caracalla,	218	222	205?	222
Alexander Severus,	Cousin of Heliogabalus, by whom he was adopted,	222	235	205	235
Maximin,	Was elevated by soldiers,	235	238	...	238
Pupienus and Balbinus,	Appointed by the Senate,	238	238	...	238 238
Gordian,	Grandson of Gordianus I.,	238	244	224	244
Phillip,	Murdered Gordian and usurped the throne,	244	249	...	249
Decius,	Proclaimed Emperor by the army,	249	251	...	251
Gallus,	Was elected Emperor by Senate and soldiers,	251	254	...	254
Æmilianus,		254	...	208?	254?
Valerian,		254	260	...	269
Gallienus,	Son of Valerian,	260	268	...	268
Flavius Claudius,		268	270	214	270
Aurelian,	Was designated by Claudius,	270	275	212	275
Tacitus,		275	276	200	276
Florian,	Proclaimed Emperor,	276	277	...	?
Probus,	Choice of the army,	277	282	...	282
Carus,	Elevated to throne by soldiers,	282	283	222	283

ROMAN EMPERORS — Continued

Name	Lineage	Period of Rule		Birth	Death
		A. D.	A. D.	A. D.	A. D.
Carinus and Numervian,	Elder son of Carus, / Son of Carus,	283	284	. .	285
Diocletian and Maximian,	Was proclaimed Emperor by the army, / Was made Cæsar by Diocletian,	284	305	245	313
Constantius and Galerius,	Was created Cæsar,	305	306	250	306
Constantine the Great,	Eldest son of Augustus Constantius Chlarus,	306	336	272	337
Constantius II.,	Third son of Constantine the Great,	336	361	317	361
Julian the Apostate,	Son of Julius Constantine,	361	363	331	363
Jovian,	Elevated to the throne by the army,	363	364	332	364
	ROMAN EMPERORS OF THE WEST				
Valentinian I.,	Proclaimed Emperor by the army,	364	375	321	375
Gratian,	Son of Valentinian I.,	375	383	359	383
Maximinius,	Made Emperor by the legions in Britain,	383?	. .	?	398
Valentinian II.,	Son of Valentinian I.,	383?	388	371	392
Eugenius,	Assumed the purple,	388	394	. .	. .
Theodosius the Great,	Son of Flavius Theodosia,	394	395	346	395
Honorius,	Second son of Theodosius,	395	423	384	423
Valentinian III.,	Son of Constantius,	423	455	419	455
Maximus,	By force of arms,	455	. .	395?	455
Avitus,		455	457	. .	457
Marjorian or Majarian,	Was elected by Ricimer,	457	461	. .	?
Severus,	Raised to imperial dignity by Ricimer,	461	467	. .	465–7?
Anthenius,	Son-in-law of Emperor Marcian,	467	472	. .	?
Olybrius,	Made Emperor by Ricimer,	472	473	. .	?
Glycerus,	Proclaimed Emperor,	473	. .	. .	?
Nepos,	Proclaimed Emperor by order of Leo,	473	475	. .	480
Romulus Augustulus.	Son of Orestes, / Augustus is deposed and banished by Odoacer, who thus puts an end to the Western Empire of Rome.	475	476	. .	476

KINGS, EMPERORS, AND PRESIDENTS OF FRANCE

Name	Lineage	Period of Rule		Birth	Death
	THE MEROVINGIANS	A. D.	A. D.	A. D.	A. D
Pharamond,		420	428	....	....
Clodian,	Son of Pharamond (obscure),	428	448	....	....
Meroveus,	Founder of the Merovingian Dynasty,	448	457	411?	457
Childeric,	Son of Meroveus, King of the Franks,	458	481	....	481
Clovis I.,	Son of Childeric,	481	511	465	511
Childebert I.,	Son of Clovis,	511	558	495	558
Thierry I.,	Son of Clovis,	....	....	....	534
Clodomir and Clothaire I.,	Son of Clovis, / Fourth son of Clovis,	.... / 558	.... / 561	.... / 497	.... / 561
	KINGDOM DIVIDED INTO FOUR PARTS:				
Charibert, Grothan, Chilperic I., Sigebert,	Reigns at Paris, / King of Orleans and Burgundy, / King of Neustria at Soissons, / King of Austrasia at Metz,	562	584	....	....
Childebert II., Clothaire II.,	Son of Sigebert I. of Austrasia, / Son of Chilperic I.,	584	628	570 / 584	596 / 628
Dagobert I.,	Son of Clothaire II.,	628	638	602	638
Clovis II. and Dagobert II.,	"The Young" son of Dagobert I.,	638	665	633 / 652	656 / 679
Clothaire III.,		665	673	652?	670?
Thierry II.,	Son of Clovis II.,	673	691	652?	691
Clovis III.,	King of Neustria,	691	695	681	695
Childebert III.,	King of Neustria,	695	711	....	....
Dagobert III.,	King of Neustria,	711	715	699	715
Chilperic II.,		715	720	?	720
Thierry IV.,	Son of Dagobert III.,	720	747	712	747
Childeric III.,	Son of Childeric II. (obscure),	747	751	?	755
	THE CARLOVINGIANS				
Pepin the Little (or Short),	Son of Charles Martel,	751	768	714	768
Charlemagne, or Charles the Great,	Son of Pepin the Short,	768	814	742	814
Louis le Debonnaire,	Son of Charles the Great,	814	840	778	840
	CARLOVINGIAN KINGS				
Charles the Bald,	Younger son of Louis le Debonnaire,	843	877	823	877
Louis II.,	Son of Charles the Bald,	877	879	846	879
Louis III., and Carloman,	Sons of Louis II., / Reigns two years,	879 /	884 /	863 / ?	882 / ?
Charles the Fat,	Son of Louis the German,	884	888	839?	888
Count Eudes,		888	898	?	898
Charles the Simple,	Son of Louis the Stammerer,	898	922	879	929
Raoul (Rudolf of Burgundy),		922	936	?	?
Louis IV.,	Son of Charles the Simple,	936	954	921	954
Lothaire,	Son of Louis IV.,	954	986	941	986
Louis V.,	Son of Lothaire,	986	987	966	987

KINGS, EMPERORS, AND PRESIDENTS OF FRANCE—Continued

Name	Lineage	Period of Rule		Birth	Death
	HOUSE OF CAPET	A. D.	A. D.	A. D.	A. D.
Hugh Capet,	Son of Hugh the Great,	987	996	?	996
Robert II.,	Son of Hugh Capet,	996	1031	971	1031
Henry I.,	Son of Robert II.,	1031	1060	1011?	1060
Philip I.,	Son of Henry I.,	1060	1108	1052	1108
Louis the Fat,	Son of Philip I.,	1108	1137	1078	1137
Louis VII.,	Son of Louis VI.,	1137	1180	1120	1180
Philip Augustus,	Son of Louis VII.,	1180	1223	1165	1223
Louis VIII.,	Son of Phillip Augustus,	1223	1226	1187	1226
Louis IX., or St. Louis,	Son of Louis VIII.,	1226	1270	1215	1270
Philip the Bold,	Son of Louis IX.,	1270	1285	1245	1285
Philip the Fair,	Son of Phillip III.,	1285	1314	1268	1314
Louis X.,	Son of Phillip IV.,	1314	1316	1239	1316
Philip the Hardy,	Second son of Phillip IV.,	1316	1321	1294	1322
Charles the Fair,	Youngest son of Phillip the Fair,	1321	1328	1294	1328
	HOUSE OF VALOIS				
Philip of Valois,	Son of Charles of Valois,	1328	1350	1293	1350
John the Good,	Son of Phillip VI.,	1350	1364	1319?	1364
Charles the Wise,	Son of John II.,	1364	1380	1337	1380
Charles VI.,	Son of Charles V.,	1380	1422	1368	1422
Charles the Victorious,	Son of Charles VI.,	1422	1461	1403	1461
Louis XI.,	Son of Charles VII.,	1461	1483	1423	1483
Charles VIII.,	Son of Louis XI.,	1483	1498	1470	1498
Louis XII.,	A descendant of the younger son of Charles V.,	1498	1515	1462	1515
Francis I.,	Son of Charles, Count of Angouleme,	1515	1547	1494	1547
Henry II.,	Son of Francis I.,	1547	1559	1519	1559
Francis II.,	Eldest son of Henry II.,	1559	1560	1543	1560
Charles IX.,	Second son of Henry II.,	1560	1574	1550	1574
Henry III.,	Third son of Henry II.,	1574	1589	1551	1589
	HOUSE OF BOURBON				
Henry IV.,	Son of Antoine de Bourbon, King of Navarre,	1589	1610	1553	1610
Louis XIII.,	Son of Henry IV.,	1610	1643	1601	1643
Louis XIV.,	Son of Louis XIII. and Anne of Austria,	1643	1715	1638	1715
Louis XV.,	Great-grandson of Louis XIV.,	1715	1774	1710	1774
Louis XVI.,	Grandson of Louis XV.,	1774	1793	1754	1793
	FROM THE REVOLUTION OF 1792 TO THE FIRST REPUBLIC				
National Convention,	First sat September 21, 1792,	1792	1795		
Directory nominated,	November 1, 1795,	1795	1799		
	THE CONSULATE				
Bonaparte, Cambaceres, Lebrun,	December 24, 1799,	1799	1804	1769 1753 1739	1821 1824 1824
Bonaparte,	Consul for ten years, May 6, 1802,				
Bonaparte,	Consul for life, August 2, 1802,				
	THE EMPIRE				
Napoleon I.,	Decreed Emperor, May 18, 1804,	1804	1814		
Napoleon II.,	Never reigned,	....	....	1811	1832
	THE RESTORATION				
Louis XVIII.,	Brother of Louis XVI., reëntered Paris May 3, 1814,	1814	1824	1755	1824
Charles X.,	Younger brother of Louis XVIII., deposed 1830,	1824	1830	1757	1836
	HOUSE OF ORLEANS				
Louis Philippe,	Son of Philippe Egalite, abdicated 1848,	1830	1848	1773	1850
	THE SECOND REPUBLIC	Feb. 22,	Dec. 19,		
Provisional Government formed,		1848	1848		
Louis Napoleon,	Elected President,	1848	1852	1808	1873
	THE SECOND EMPIRE				
Napoleon III.,	Nephew of Napoleon I., elected Emperor. Deposed 1870,	1852	1870	1808	1873
	THE THIRD REPUBLIC				
Committee of Public Defense,		1870	1871		
L. A. Thiers,	Elected President,	1871	1873	1797	1877
Marshal MacMahon,	Elected President,	1873	1879	1808	1893
Jules Grevy,	Elected President,	1879	1887	1807	1891
Marie F. S. Carnot,	Elected President,	1887	1894	1837	1894
Jean Casimir-Perier,	Elected President,	1894	1895	1847	1907
Felix François Faure,	Elected President,	1895	1899	1841	1899
M. Émile Loubet,	Elected President,	1899	1906	1838	....
Armand C. Fallières,	Elected President,	1906	1913	1841	....
Raymond Poincaré,	Elected President,	1913	1920	1860	....
Paul Deschanel,	Elected President, served Feb. 18-Sept. 16,	1920	1920	1856	....
Alexandre Millerand,	Elected President, Sept. 23, 1920,	1920	....	1859	....

SOVEREIGNS OF RUSSIA

Name	Lineage	Period of Rule		Birth	Death
	HOUSE OF RURIC	A. D.	A. D.	A. D.	A. D.
Ivan the Great,	Grand Duke of Moscow,	1462	1505	1438	1505
Vasily IV.,	Son of Ivan the Great,	1505	1533	?	?
Ivan the Terrible,	Son of Vasily IV.,	1533	1584	1529	1584
Feodor I.,	Son of Ivan the Terrible,	1584	1598	1557	1598
Boris Godonof,	Was elected to the throne,	1598	1604	1552	1605
Demetrius,	Usurped the throne,	1604	1606	....	1606
Zuiski (Vasily V.),		1606	1610	....	....
An Interregnum,		1610	1613	....	....
	HOUSE OF ROMANOFF				
Michael Romanoff,	Unanimously elected Czar,	1613	1645	1598	1645
Alexis,	Son of Michael Feodorovitch,	1645	1676	1629	1676
Feodor II.,	Eldest son of Emperor Alexis,	1676	1682	1656	1682
Ivan V., and Peter,	Half-brother of Peter the Great, in whose favor he resigned,	1682	1689	1666	1696 ....
Peter the Great,	Son of Alexis,	1689	1725	1672	1725
Catharine I.,	Was married to Peter the Great in 1707,	1725	1727	1679?	1727
Peter II.,	Grandson of Peter the Great,	1727	1730	1715	1730
Anna,	Daughter of Ivan V.,	1730	1740	1693	1740
Ivan VI.,	Son of Antoin Ulrich Leopoldovina and Anna,	1740	1741	1740	1764
Elizabeth,	Daughter of Peter the Great,	1741	1762	1709	1762
Peter III.,	Son of Charles Frederick, Duke of Holstein,	1762	....	1728	1762
Catharine II.,	Wife of Peter III.,	1762	1796	1729	1796
Paul,	Son of Peter III.,	1796	1801	1754	1801
Alexander I.,	Son of Paul,	1801	1825	1777	1825
Nicholas,	Third son of Paul I.,	1825	1855	1796	1855
Alexander II.,	Son of Nicholas I.,	1855	1881	1818	1881
Alexander III.,	Son of Alexander II.,	1881	1894	1845	1894
Nicholas II.,	Son of Alexander III.,	1894	1917	1868	1918
	FEDERAL SOVIET REPUBLIC				
Nikolai Lenine,	Chosen President of Council,	1917	....	1870	....

EMPERORS OF GERMANY

Name	Lineage	Period of Rule		Birth	Death
	CARLOVINGIAN EMPERORS	A. D.	A. D.	A. D.	A. D.
Louis, "The German" and Lothaire,	Son of the Emperor Louis I. He is regarded as the founder of the German Empire,	843	855	804 795	876 855
Louis II.,	Son of the Emperor Lothaire I.,	855	875	822	875
Charles the Fat,	Son of Louis, the German,	875	887	839	888
Arnolph,	Illegitimate son of Karlmann,	887	898	850	899
Louis the Child,	Son of the Emperor Arnolph,	898	911	893	911
	HOUSE OF FRANCONIA				
Conrad I.,	Duke of Franconia,	911	919	?	Dec., 918
	HOUSE OF SAXONY				
Henry the Fowler,	Son of the King of Saxony,	919	936	876	936
Otho the Great,	Son of Henry I.,	936	973	912	973
Otho II.,	Son of Otho I.,	973	983	955	983
Otho III.,	Son of Otho II.,	983	1002	980	1002
Henry the Saint,	Son of Henry the Quarrelsome of Bavaria,	1002	1024	972	1024
	HOUSE OF FRANCONIA				
Conrad II.,	Was crowned Emperor,	1024	1039	?	1039
Henry III.,	Son of Conrad II.,	1039	1056	1017	1056
Henry IV.,	Son of Henry III.,	1056	1106	1050	1106
Henry V.,	Son of Henry IV.,	1106	1125	1081	1125
	HOUSE OF SAXONY				
Lothaire II.,	Was elected King and crowned by the Pope,	1125	1138	?	Dec., 1137
	THE HOHENSTAUFFENS				
Conrad III.,	Elected in an irregular manner,	1138	1152	1093	1152
Frederick Barbarossa,	Nephew of Conrad III.,	1152	1190	?	1189
Henry VI.,	Son of Frederick Barbarossa,	1190	1197	1165	1197
Otho IV.,	Second son of Henry the Lion,	1197	1208	1174	1218
Frederick II.,	Son of Henry VI.,	1218	1250	1194	1250
An Interregnum,		1250	1273	....	....
	HOUSE OF HABSBURG				
Rudolph of Habsburg,	Son of Albert IV.,	1273	1291	1218	1291
	HOUSE OF NASSAU				
Adolph,	Elected,	1291	1298	1252	1298
	HOUSE OF AUSTRIA				
Albert,	Eldest son of Rudolph I.,	1298	1308	1250	1308
	HOUSE OF LUXEMBURG				
Henry VII.,	Son of the Count of Luxemburg,	1308	1313	1262	1313

EMPERORS OF GERMANY—Continued

Name	Lineage	Period of Rule		Birth	Death
	HOUSE OF BAVARIA	A. D.	A. D.	A. D.	A. D.
Louis V. or IV.,	Son of the Duke of Bavaria,	1313	1347	1286	1347
	HOUSE OF LUXEMBURG				
Charles IV.,	Son of John of Luxemburg,	1347	1378	1316	1378
Wenceslaus,	Son of the Emperor Charles IV.,	1378	1400	1361	1419
	HOUSE OF PALATINATE				
Rupert,	Was chosen King,	1400	1410	1352	1410
	HOUSE OF LUXEMBURG				
Sigismund,	Son of Charles IV.,	1410	1438	1361	1438
	HOUSE OF HABSBURG				
Albert,	Third son of Frederick I.,	1438	1440	1414	1486
Frederick III.,	Was elected Emperor,	1440	1493	1415	1493
Maximilian,	Son of Frederick III.,	1493	1519	1459	1519
Charles V.,	Son of Phillip of Burgundy,	1519	1556	1500	1558
Ferdinand I.,	Younger brother of Charles V.,	1556	1564	1503	1564
Maximilian II.,	Son of Ferdinand I.,	1564	1576	1527	1576
Rudolph II.,	Son of the Emperor Maximilian II.,	1576	1612	1552	1612
Matthias,	Younger son of Maximilian II.,	1612	1619	1557	1619
Ferdinand II.,	Son of Charles, Duke of Styria,	1619	1637	1578	1637
Ferdinand III.,	Son of Ferdinand II.,	1637	1657	1608	1657
Leopold I.,	Second son of Ferdinand III.,	1657	1705	1640	1705
Joseph I.,	Son of Leopold I.,	1705	1711	1678	1711
Charles VI.,	Son of Leopold I.,	1711	1741	1685	1740
	HOUSE OF BAVARIA				
Charles VII.,	Son of Maximilian Emmanuel,	1741	1745	1697	1745
	HOUSE OF LORRAINE				
Francis I.,	Son of Leopold, Duke of Lorraine,	1745	1765	1708	1765
Joseph II.,	Son of Francis I.,	1765	1790	1741	1790
Leopold II.,	Third son of Francis I.,	1790	1792	1747	1792
Francis II.,	Son of Leopold II.,	1792	1806	1768	1835
	THE CONFEDERATION OF THE RHINE	1806	1815	....	....
	THE GERMANIC CONFEDERATION	1815	1866	....	....
	THE NORTH GERMAN CONFEDERATION	1866	1871	....	....
	THE HOUSE OF HOHENZOLLERN				
William the Victorious,	Second son of Frederick William III.,	1871	1888	1797	1888
William II.,*	Son of Frederick III. and Grandson of William I.,	1888	1918	1859	....
	GERMAN REPUBLIC				
Friedrich Ebert,	Chosen provisionally, later elected President,	1918	....	1871	....

KINGS AND QUEENS OF ENGLAND

Name	Lineage	Period of Reign		Birth	Death
	ANGLO-SAXON KINGS	A. D.	A. D.	A. D.	A. D.
Egbert,	First King of all England,	827	837	775?	837
Ethelwulf,	Son of Egbert,	838	857	....	858
Ethelbald,	Son of Ethelwulf,	857	860	....	860?
Ethelbert,	Second son of Ethelwulf,	860	866	....	866?
Ethelred I.,	Third son of Ethelwulf,	866	871	....	871
Alfred the Great,	Fourth son of Ethelwulf,	871	901	849	901
Edward the Elder,	Son of Alfred,	901	924	870?	924
Athelstan,	Eldest son of Edward,	925	940	895?	941
Edmund I.,	Brother of Athelstan,	940	946	923	946 or 8
Edred,	Brother of Edmund I.,	946	955	....	955?
Edwy,	Son of Edmund I.,	955	959	939?	959
Edgar,	Second son of Edmund I.,	959	975	943?	975
Edward the Martyr,	Son of Edgar,	975	978	961?	978
Ethelred II.,	Half-brother of Edward,	978	1016	....	1016
Edmund Ironside,	Eldest son of Ethelred,	1016	1017	989	1017
	DANISH KINGS				
Canute,	By conquest and election,	1017	1035	995	1035
Harold I. (Harefoot),	Son of Canute,	1035	1040	....	1040
Hardicanute,	Another son of Canute,	1040	1042	1019	1042
	SAXON KINGS				
Edward the Confessor,	Son of Ethelred II.,	1042	1066	1004	1066
Harold II.,	Brother-in-law of Edward,	1066	....	1022	1066
	NORMAN KINGS				
William I.,	Obtained the Crown by conquest,	1066	1087	1027	1087
William II.,	Third son of William I.,	1087	1100	1056	1100
Henry I.,	Youngest son of William I.,	1100	1135	1068	1135
Stephen,	Third son of Stephen, Count of Blois,	1135	1154	1105	1154
	THE PLANTAGENETS				
Henry II.,	Son of Geoffrey Plantagenet,	1154	1189	1133	1189

*Frederick III., son of William I., was emperor from March 9 to June 15, 1888.

KINGS AND QUEENS OF ENGLAND—Continued

Name	Lineage	Period of Reign		Birth	Death
		A. D.	A. D.	A. D.	A D.
Richard I. the Lion-hearted,	Eldest surviving son of Henry II.,	1189	1199	1157	1199
John,	Youngest son of Henry II.,	1199	1216	1166	1216
Henry III.,	Eldest son of John,	1216	1272	1207	1272
Edward I.,	Eldest son of Henry III.,	1272	1307	1239	1307
Edward II.,	Eldest surviving son of Edward I.,	1307	1327	1284	1327
Edward III.,	Eldest son of Edward II.,	1327	1377	1312	1377
Richard II.,	Son of the Black Prince, eldest son of Edward III.	1377	1399	1366	1400
	HOUSE OF LANCASTER				
Henry IV.,	Son of John of Gaunt, fourth son of Edward III.,	1399	1413	1366?	1413
Henry V.,	Eldest son of Henry IV.,	1413	1422	1388	1422
Henry VI.,	Only son of Henry V.,	1422	1461	1421	1471
	HOUSE OF YORK				
Edward IV.,	His grandfather was Richard, son of Edmund, fifth son of Edward III.,	1461	1483	1441	1483
Edward V.,	Eldest son of Edward IV.,	1483	....	1470	1483
Richard III.,	Younger brother of Edward IV.,	1483	1485	1452	1485
	HOUSE OF TUDOR				
Henry VII.,	Son of Edmund, eldest son of Owen Tudor, by Katharine, widow of Henry V.; his mother, Margaret Beaufort, was great-granddaughter of John of Gaunt,	1485	1509	1457	1509
Henry VIII.,	Only surviving son of Henry VII.,	1509	1547	1491	1547
Edward VI.,	Son of Henry VIII. by Jane Seymour,	1547	1553	1537	1553
Mary I.,	Daughter of Henry VIII. by Katharine of Aragon,	1553	1558	1516	1558
Elizabeth,	Daughter of Henry VIII. by Anne Boleyn,	1558	1603	1533	1603
	HOUSE OF STUART				
James I.,	Son of Mary, Queen of Scots, granddaughter of James IV., and Margaret,	1603	1625	1566	1625
Charles I.,	Only surviving son of James I.,	1625	1649	1600	1649
Commonwealth,	Commonwealth declared May 19, Oliver Cromwell, Lord Protector, Richard Cromwell, Lord Protector,	1649	1658	1599 1626	1658 1712
	HOUSE OF STUART RESTORED				
Charles II.,	Eldest son of Charles I.,	1660	1685	1630	1685
James II.,	Second son of Charles I.,	1685	1688	1633	1701
William III. and Mary II.,	Son of William, Prince of Orange, by Mary daughter of Charles I., Eldest daughter of James II.,	 1689	 1702	1650 1662	1702 1694
Anne,	Second daughter of James II.,	1702	1714	1665	1714
	HOUSE OF HANOVER				
George I.,	Son of Elector of Hanover, by Sophia, daughter of Elizabeth, daughter of James I.,	1714	1727	1660	1727
George II.,	Only son of George I.,	1727	1760	1683	1760
George III.,	Grandson of George II.,	1760	1820	1738	1820
George IV.,	Eldest son of George III.,	1820	1830	1762	1830
William IV.,	Third son of George III.,	1830	1837	1765	1837
Victoria,	Daughter of Edward, fourth son of George III.,	1837	1901	1819	1901
	HOUSE OF SAXE-COBURG*				
Edward VII.,	Son of Victoria,	1901	1910	1841	1910
George V.,	Son of Edward VII.,	1910	....	1865	....

GOVERNORS-GENERAL OF CANADA

Governor-General	Lineage	Term of Office		Birth	Death
The Right Hon. Viscount Monck,	Charles Monck, British statesman, made a peer of the United Kingdom in 1866,	1867	1869	1819	1894
The Right Hon. Lord Lisgar, G. C. M. G.,	Baron Lisgar, a British politician (Sir John Young),	1869	1872	1807	1876
The Right Hon. the Earl of Dufferin, K. P.,	Was created Marquis of Dufferin in 1888 (Frederick Temple Hamilton Blackwood),	1872	1878	1826	1902
The Right Hon. the Marquis of Lorne, K. T., G.C.M.G., P. C.,	Eldest son of the eighth Duke of Argyll (John George Henry Douglas Sutherland Campbell),	1878	1883	1845	1914
The Most Hon. the Marquis of Lansdowne,	Fifth Marquis of Lansdowne (Henry Charles Keith Petty-Fitzmaurice),	1883	1888	1845	....
The Right Hon. Lord Stanley of Preston,	Sixteenth Earl of Derby (Frederick Arthur Stanley),	1888	1893	1841	1908
The Right Hon. the Earl of Aberdeen, K. T.,	Seventh Earl and first Marquis of Aberdeen (John Campbell Hamilton Gordon),	1893	1898	1847	....
The Right Hon. the Earl of Minto, G. C. M. G.,	Fourth Earl of Minto (Gilbert John Elliot-Murray Kynynmound),	1898	1904	1845	1914
The Right Hon. the Earl Grey, G. C. M. G.,	Fourth Earl Grey (Albert Henry George),	1904	1911	1851	1917
His Royal Highness, the Duke of Connaught,	Duke of Connaught (Prince Arthur William Patrick Albert),	1911	1916	1850	....
His Grace, the Duke of Devonshire,	Ninth Duke of Devonshire, (Victor Christian William Cavendish),	1916	1921	1868	....
General Lord Byng of Vimy,	Seventh son of the second Earl of Strafford,	1921	....	1862	....

*Changed to House of Windsor by George V., July, 1917.

PREMIERS OF CANADA

Name	Service		Born	Died
	Term	Years		
Rt. Hon. Sir John A. Macdonald,	1867–1873	6	1815	1891
Hon. Alexander Mackenzie,	1873–1878	5	1822	1892
Rt. Hon. Sir John A. Macdonald,	1878–1891	3	(see above)	(see above)
Hon. Sir. J. J. C. Abbott,	1891–1892	1	1821	1893
Rt. Hon. Sir J. S. D. Thompson,	1892–1894	2	1844	1894
Hon. Sir Mackenzie Bowell,	1894–1896	2	1823	1917
Hon. Sir Charles Tupper, Bart,	1896–Jan. 15 to July 8,	..	1821	1915
Rt. Hon. Wilfrid Laurier,	1896–1911	15	1841	1919
Hon. Robert Laird Borden,	1911–1920	9	1854	....
Hon. Arthur Meighen,	1920–1921	1	1874	....
Hon. William Lyon Mackenzie King,	1921–		1874	....

Russia. The origin of the Russian Empire is involved in much obscurity, but it is usually regarded as having been founded by Rurik, a Scandinavian (Varangian), about 862, his dominions and those of his immediate successors comprising Novgorod, Kieff, and the surrounding country. Vladimir the Great (980–1015), the Charlemagne of Russia, introduced Christianity and founded several cities and schools. But from this period down to the time when the country was overrun by the Tartars, Russia was almost constantly the scene of civil war. For more than two centuries Russia was subject to the Tartars. But Russia's real foundation may be said to date from the accession of Peter the Great in 1689, who first secured to the country the attention of the more civilized nations of Europe. His first military achievement was his conquest of Azov from the Turks in 1696, which, however, he lost again in 1711. He also completed the conquest of Siberia; and, what was of more importance, obtained from Sweden by the Peace of Nystad, in 1721, Livonia, Esthonia, Ingria, or part of Karelia, the Territory of Viborg, Oesel, and all the other islands in the Baltic from Courland to Viborg. Catharine I., widow of Peter I., succeeded on the death of the latter, but died after a reign of only two years. The throne was then occupied successively by Peter II., 1727–30; by Anna, 1730–40; by Ivan VI., 1740–41; by Elizabeth, 1741–62; by Peter III., about six months in 1762; by Catharine II., wife of Peter III., 1762–96; by Paul, 1796–1801; by Alexander I., 1801–25; by Nicholas, 1825–55; by Alexander II., 1855–81. During all these reigns the growth of the empire was continuous. The Kirghiz Cossacks were subdued in 1731, the Ossetes in 1742; the Finnish Province of Kymenegard was gained by the Treaty of Abo in 1743. The three partitions of Poland took place under Catharine II. in 1772, 1793, and 1795. Russia acquired nearly two-thirds of this once powerful state. By the Peace of Kutchuk-Kainarji in 1774, the Turks gave up Azov, part of the Crimea (the other part was taken possession of in 1783), and Kabardah; and by the Peace of Jassy in 1792, Oczakov. Georgia also came under the protection of Russia in 1783, and Courland was incorporated in 1795. A portion of Persian Territory had already been acquired; and in 1801 the formal annexation of Georgia was effected. The Peace of Fredrikshamn, 1809, robbed Sweden of the whole of Finland, which now passed to Russia; the Peace of Bucharest, 1812, took Bessarabia from the Turks; that of Tiflis, 1813, deprived the Persians of parts of the Caucasus; and then the Vienna Congress of 1815 gave the remainder of Poland to Russia. After fresh wars, the Persians lost the provinces of Erivan and Nakhichevan in 1828; and the Turks lost Anapa, Poti, Akhalzik, etc., by the Peace of Adrianople in 1829. The desire to possess further dominions of the sultan led to a war against Turkey in 1853, in which England, France, and Sardinia also took part in 1854, and which ended in the Peace of Paris, 1856. The Russians were compelled to restore to Moldavia the left bank of the Danube in Bessarabia. This district, however, was again restored to Russia by the Congress of Berlin in 1878, which followed the Russo-Turkish War of 1877–78. In 1858, Russia acquired by agreement with China the sparsely populated but widely extended district of the Amur; the subjection of Caucasia was accomplished in 1859 and 1864, and considerable conquests have followed since 1866 both in Turkestan and the rest of Central Asia. A ukase of 1868 annihilated the last remains of the independence of Poland. The following table will show the extent of these continuous accessions of territory:

The extent of Russian Territory under —

Ivan the Great, . .	1462,	about 382,716	sq. m.
Vassili Ivanovitch, .	1505,	" 510,288	"
Ivan the Terrible, .	1584,	" 1,530,864	"
Alexis Michaelovitch,	1650,	" 5,039,094	"
Peter I., ...	1689,	" 5,953,360	"
Anna, ...	1730,	" 6,888,888	"
Catharine II., . . .	1775,	" 7,122,770	"
Alexander II., . . .	1868,	" 7,866,940	"
Alexander II., . . .	1881,	" 8,325,393	"
Nicholas II., . . .	1909,	" 8,647,657	"

The population from 14,000,000 in 1722 has grown to 182,182,600 in 1915. The effort to extend the Russian domain in the East became a fixed policy. In 1881, the Tekke Turcomans were subjected; in 1884, Merv was taken, and Penjdeh was occupied and annexed in 1885, which led to considerable friction between Russia and Britain. A great disturbing element to the Imperial Government of Russia sprang up in Nihilism. Alexander II. was killed by their agency, and many attempts were made to murder the succeeding emperors. In 1891, flour and grain were sent by the United States to relieve distress caused by failure of the harvest. Oppressive measures against the Jews excited unfavorable comment. Alexander III. died November 1, 1894, and was succeeded by his son, Nicholas II. In 1900, following the Boxer Rebellion, China gave to Russia exclusive mining and railway privileges in Manchuria, and the command

of all the Chinese troops there to the Russian authorities. This occupation was to end in three years, and the delay in the withdrawal of Russian troops led to open hostilities between Russia and Japan in 1904. (See Russo-Japanese War.) During 1905-06, Russia was much perturbed by internal disturbances.

When Austria-Hungary made war upon Servia, 1914, Russia mobilized a portion of her troops "for reason of defense against the preparations of Austria." A general mobilization was ordered July 31. Germany, supporting Austria, at once declared war upon Russia (*See* World War). With Grand Duke Nicholas commander-in-chief of army and navy, the Russians attacked Austrian Galicia, looking forward to an attack on Berlin. They were driven out of Prussia, but met with some successes in Galicia. In September, it was estimated, 1,000,000 Austrians faced 1,500,000 Russians along a battle front of 175 miles.

March 22, 1915, Przemysl, great Austrian fortress in Galicia, was taken by the Russians after siege begun early in the war; it was recaptured by Austro-German forces June 3. Slowly the Russians fell back before the Germans; the storming of Warsaw began July 23; the city was entered by German troops Aug. 5 after withdrawal of the Russians; within a month thereafter the German troops took 12 Russian fortresses.

In 1916 Russian forces were engaged along battle lines from Riga to the Rumanian border and in Persia and Asiatic Turkey. Feb. 16 they took the strong Turkish fortress at Erzerum, Armenia.

Early in 1917 the ever-growing revolutionary party in the duma acquired sufficient power to force the abdication of Nicholas II (March 15). A provisional government was then established, of which Kerensky became the head. After a period of great internal dissension, resulting in the disorganization of the army, the Bolsheviki, representing the Soviets or soldiers' and workmen's councils, in November seized control of the government. Under the leadership of Trotzky and Lenine an armistice with Germany was arranged, culminating in a separate peace signed at Brest-Litovsk early in 1918 whereby the Bolshevik government agreed to cede to Germany much valuable Russian territory and to pay a huge indemnity.

The Bolshevik government made Moscow its capital and Lenine its premier. A socialist scheme of ownership and management of land and industry was set up. Trotzky, with his armies, proceeded to suppress rebellion and attempts at independence in the Ukraine and the Baltic provinces. In 1920 these military activities culminated in an unsuccessful attack on Poland.

The vowed purpose of the Bolsheviki to incite revolution in other lands led the Entente Allies and the United States to support anti-Bolshevik movements and to refuse to trade with the Russians. In 1921 the Bolshevik industrial system gave signs of breaking down. Lenine found it necessary to go back to the "capitalistic" management of industry. Owing to paralyzed agricultural production, severe famine prevailed over large areas, threatening the lives of millions of people. A plan of international relief, under the direction of Herbert Hoover, was accepted by Lenine.

Russo-Japanese War. A war between Russia and Japan, waged in Manchuria (1904-05). The chief cause of the war was the occupation of Manchuria by Russia after the Boxer uprising of 1899-1900, endangering Japanese preponderance in Korea. An earlier cause of irritation was the action of Russia, Germany, and France in preventing the retention by Japan of Port Arthur and the Liao-tung peninsula after the Chinese-Japanese war of 1894-95, and the subsequent leasing of this territory from China by Russia. The principal events of the war were the attacks of the Japanese fleet upon the Russian squadron at Port Arthur, Feb. 8 and 9; naval fight off Chemulpo, Feb. 9; Vladivostok bombarded by Admiral Kamimura, March 6; Port Arthur bombarded, March 21-22; defeat of the Russians by the Japanese first army, May 1; Japanese victory at Kinchau, May 27-28; occupation of Dalny by the Japanese, May 29-30; Russians defeated at Telissu and Wafangkau, June 14-15; investment of Port Arthur, July 31, 1904—Jan.1, 1905; sortie of the Port Arthur fleet, resulting in a sea battle, in which most of the Russian vessels were driven back to Port Arthur and the rest dispersed, Aug. 10; Vladivostok squadron defeated, Aug. 14; battle of Liaoyang, resulting in the success of the Japanese, the Russians retiring upon Mukden, Aug. 27—Sept. 4; the Baltic fleet sailed for the Far East, Oct., 1904; Port Arthur surrendered, Jan. 1, 1905; battle of Mukden resulted in the capture of the city, Feb. 19—March 10; battle of the Sea of Japan and the annihilation of the Baltic fleet by Admiral Togo, May 27-28; President Roosevelt urged the Russian and Japanese governments to negotiate for peace, June 8; plenipotentiaries met at Portsmouth, New Hampshire, Aug. 9; treaty of peace signed, Sept. 5, 1905.

St. Bartholomew, Massacre of, a massacre of the Huguenots which took place in Paris,France, beginning on the night of August 23-24 (St. Bartholomew's Day), 1572. A large number of prominent Huguenots had been invited to the royal palace to participate in the wedding festivities of Henry of Navarre. While these guests were in the palace they were slaughtered without mercy, and at a signal the massacre quickly spread over the city. The anti-Huguenot leaders were Charles IX., the Queen-mother Catharine de' Medici, and the Duke of Guise. The massacre spread over France and it is variously estimated that 2,000 to 100,000 lives were lost.

Salic, or Salique Law, The (*săl'-ĭk*). An ancient fundamental law of the Ripuarian Franks, which excluded females from inheriting the French throne. It is supposed to have been established by Pharamond or Clovis, and to have derived its name from the River Saale, in Saxony, whence those Franks originally came. This body of law was revised and reconstituted by Charlemagne; according to it "no portion of *Salic land* can fall to females," but what was

meant by *Salic* land has been long debated among French antiquaries. It was the cause of long wars between England and France, when, in opposition to it, Edward III. claimed the throne of France by a title prior to that of Philip of Valois. It has been recognized in all countries of which the crown has developed on a member of the blood royal of France; it formed the foundation of the pretensions of Don Carlos to the Spanish Crown. It was observed with reference to the great fiefs which had been granted to princes of the blood, by way of appanage; and hence, on the death of Charles the Bold of Burgundy, without a male heir, that duchy reverted to Louis XI.

Scotland was first visited by the Roman troops under Agricola, who penetrated to the foot of the Grampian Mountains. It was afterward exposed to the ravages of the Norwegians and Danes, with whom many bloody battles were fought. Various contests were also maintained with the kings of England. Robert Bruce, however, secured the independence of the country and his title to the throne by the decisive battle of Bannockburn in 1314. He was succeeded by his nephew, Robert Stewart, and he by his eldest son, Robert. The latter was a weak prince, and the government was seized by the Duke of Albany, who stoned to death the eldest son of the king. James, his second son, to escape a similar fate, fled to France; in the year 1424 he returned to Scotland, and, having excited the jealousy of the nobility, he was assassinated in a monastery near Perth. James II., his son, an infant prince, succeeded him in 1437. He was killed by the bursting of a cannon at the siege of the castle of Roxburgh. James III. ascended the throne at the age of seven years. His reign was weak and inglorious, and he was murdered in the house of a miller, whither he had fled for protection. James IV., a generous and brave prince, began his reign in 1488. He was slain at the battle of Flodden. James V., an infant of less than two years of age, succeeded to the crown. He died in 1542, and was succeeded by his daughter, the celebrated Queen Mary. She was succeeded by her son James, who, in 1603, ascended the throne of England, vacant by the death of Queen Elizabeth, when the two kingdoms were united into one great monarchy which was legislatively united in 1707.

Servia. The Serbs, an agricultural people of Galicia, entered the country about 637. From the eighth to the twelfth century they were under Greek or Bulgarian suzerainty. Servia reached its height under Stephen Dushan (1331-1355), when the empire included Bosnia, Albania, Thessaly, part of Bulgaria and nearly all of the Hellenic peninsula. The battle of Kossovo, June 15, 1389, gave Servia to Turkey. It was fully subjugated in 1459; during 345 years of Turkish rule Servia was reduced to a race of peasants. They gained autonomy in 1817. Complete independence was established by the treaty of Berlin, 1878. Prince Peter was proclaimed king in 1903 after the assassination of King Alex. I. and Queen Natalie. Austria's annexation of Bosnia and Herzegovina, 1908, was resented. The Balkan states made war on Turkey, 1912. By the peace of London, 1913, Servia's territory was extended. Suspicion of Servian complicity in the murder of the Austrian heir-apparent in Bosnia, June 28, 1914, led to the Austrian ultimatum which brought on the World War. While successful in resisting attack during 1914, Servia was overwhelmed in 1915 by Austrian and Bulgarian armies which occupied the country until the end of the war in 1918. By the Treaty of Versailles, 1919, Servia became a leading component in the new Serb-Croat-Slovene State, called also Jugoslavia.

Seven Years' War, The (1756-63), was the third, last, and most terrible of the contests between Frederick the Great of Prussia and Maria Theresa (with the other powers of Europe on one side or the other) for the possession of Silesia. This long and desperate conflict made no change in the territorial distribution of Europe, but it increased tenfold the moral power of Prussia, and gave its army a prestige which it retained till the battle of Jena. It cost Europe 1,000,000 lives.

Shays's Rebellion. At the close of the Revolution, the United States were burdened with a very heavy foreign and domestic debt. They were impoverished by the long war, and it was difficult to raise the means to meet the arrears of pay due the soldiers of the Revolution. On the recommendation of Congress, each State endeavored to provide means for raising its quota by a direct tax. This effort produced much excitement in some of the States, and, finally, in 1787, a portion of the people of Massachusetts openly rebelled. Daniel Shays, who had been a captain in the Continental Army, marched at the head of a thousand men, took possession of Worcester, and prevented a session of the Supreme Court. He repeated his performance at Springfield, and the insurrection soon became so formidable that the governor was compelled to call out several thousand militia under General Lincoln, to suppress it. Though some of the insurgents were sentenced to death, none was executed.

Sicilies, The Two, a former kingdom of Italy, consisting of Naples (or South Italy) and Sicily. In 1047, while Greeks and Saracens were struggling for the possession of Lower Italy and Sicily, the twelve sons of Tancred de Hauteville, a count in Lower Normandy, came in with their followers. Robert Guiscard, one of these brothers, subdued Apulia and Calabria, taking the title of duke, and his youngest brother, Count Roger, conquered Sicily. Roger's son and successor, Roger II., completed the conquest of all Lower Italy by subduing Capua, Amalfi, and Naples, at that time celebrated commercial republics, and in 1130 took the title of king, calling his kingdom the Kingdom of the Two Sicilies. In 1759, when Charles IV. ascended the Spanish throne under the name of Charles III., he conferred the Kingdom of the Two Sicilies on his third son Ferdinand, and decreed at the same time that it should never again be united to the Spanish Monarchy. The reign of Ferdinand extended through the stormy period of the French Revolution and the subsequent European commotions. A varied experience followed, during which the country was successively subject to Germany, France, and Spain.

In 1860, an insurrection broke out in Sicily, and an expedition of volunteers from Piedmont and other Italian provinces under Garibaldi sailed from Genoa to the assistance of the insurgents. The result was that the Neapolitan troops were driven from the island. Garibaldi, following up his success, crossed over to the mainland, where he met little or no opposition; Francis II. fled from Naples; the strong places in his hands were reduced; and by a popular vote the Kingdom of the Two Sicilies ceased to exist as such and became an integral part of the Kingdom of Italy.

Sicilian Vespers, the name given to a massacre of the French in Sicily, March 30, 1282. On the evening of Easter Monday the conspirators were already assembled at Palermo; but the massacre was precipitated by an outrage offered by a Frenchman to a Sicilian bride, who was passing along the streets with her train. Instantly the Frenchman was killed, and, the populace being aroused by the conspirators, all the French who could be found in the city were slaughtered. Eight thousand were slain in Palermo alone, and the massacre afterwards spread over the island, the French being even dragged out of the churches to which they had fled for protection. The six hundredth anniversary of the Sicilian Vespers was celebrated with much enthusiasm at Palermo in 1882.

Slavery. The establishment of one man's right to control the liberty, property, and even life of another. Slavery probably arose at an early period of the world's history out of the accident of capture in war. Savages, in place of massacring their captives, found it more profitable to keep them in servitude. All the ancient Oriental nations of whom we have any records, including the Jews, had their slaves. In Greece in general, and especially at Athens, slaves were mildly treated, and enjoyed a large share of legal protection, while by the Romans they were used with considerable rigor. The English word *slave* is simply the name of the Sclavonian race. The wars of the Frankish kings and emperors filled Saracenic Spain with Sclavonic captives to such an extent that in its language, as well as in those of other European countries, a natural name meaning, in its own tongue, *glorious*, became the title of servitude. The African slave trade was commenced by the Portuguese in 1442; it was, however, of only trifling extent till the Sixteenth Century. But the importation of negroes into the West Indies and America having once begun, it gradually increased, until the vastness and importance of the traffic rivaled its cruelty and guilt. The slave trade was abolished in England in 1807 but it was only in 1834 that slavery itself was abolished throughout the British dominions. Long before that time, several of the North American States had decreed the extinction of slavery. Vermont abolished it in 1777, before she had joined the Union. Pennsylvania in 1780, Rhode Island and Connecticut shortly after, New York in 1797, and New Jersey in 1804, provided for the gradual emancipation of their slaves. In Massachusetts the Supreme Court declared that slavery was abolished by the act of adopting the State Constitution of 1780. In 1820, the United States passed a law declaring the slave trade to be piracy, but no conviction was obtained under the statute until November, 1861, when Nathaniel Gordon, master of a vessel called the "Erie," was convicted and hanged at New York. Finally, the abolition of slavery, cause and fruit of the gigantic war of secession, was definitively consecrated in 1865 by the Thirteenth Amendment to the Constitution of the United States. The French emancipated their negroes in 1848, and the Dutch in 1863. Slavery was also partially abolished in Brazil in 1871, and gradual emancipation has been adopted in Cuba.

South Carolina. The first attempt to colonize the territory now included in South Carolina was made by Jean Ribault, a Frenchman, in 1562. The first permanent settlement was made by English colonists, who planted themselves on the banks of the Ashley in 1670, but removed to the site of Charleston in 1680. The province was created by Charles II. in 1683. Both the Carolinas were included under a common name and proprietary government till 1729, when the king formed the province into two royal colonies. Large numbers of French Huguenots had arrived in 1685, and subsequently Swiss, Irish, and German colonists. South Carolina suffered severely from Indian depredations, and joined with Georgia, under Oglethorpe, in a contest with Spanish Florida. She took an active part in the Revolution, and the battles of Fort Moultrie, Charleston, Camden, King's Mountain, Cowpens, Eutaw Springs, etc., were fought on her soil. The United States Constitution was ratified in 1788. In 1832, the State passed the Nullification Act, which threatened civil war, then happily averted, but afterward precipitated in 1861 by the firing on Fort Sumter. The State was readmitted to federal relations in 1868. From 1865 until 1871 there were reconstruction troubles, ending with the election of Wade Hampton as Governor of the State and his recognition by President Hayes. In 1886 Charleston suffered from a severe earthquake which caused much property loss. The present State constitution was adopted in 1897. In 1915 constitutional Prohibition was adopted by an overwhelming majority.

South Dakota. South Dakota became a State November 2, 1889, when the Territory of Dakota was divided into two States. The history of that part of the country will be found under Minnesota, Nebraska, and North Dakota. A prohibitory amendment was adopted at the first state election, but, owing to an adverse U. S. Supreme Court decision, did not go into effect. Constitutional Prohibition was again adopted in 1916.

Spain, the *Spania*, *Hispania*, and *Iberia* of the Greeks, and known to the Romans by the same names, is supposed to have been originally inhabited by a distinct race called Iberians, upon whom a host of Celts are supposed to have descended from the Pyrenees. These two races coalesced and formed the mixed nation of the Celtiberians. About the middle of the Third Century B. C. the Carthaginian influence began to be felt in Iberia, and a considerable tract of territory was brought under subjection to Carthage by Hamilcar, who founded the city of

Barcelona. The Romans had driven the Carthaginians from the peninsula in 206 B. C., and the country was erected into a Roman Province. From the time of the complete supremacy of the Romans till the death of Constantine the condition of Spain was eminently prosperous. Everywhere throughout the country towns of purely Roman character sprang up, and numerous aqueducts, bridges, amphitheaters, etc., were built. Spain was for three centuries the richest province of the Roman Empire. In 409 A. D., hordes of barbarians, Alans, Vandals, and Suevi, crossed the Pyrenees and swept over and desolated the peninsula. About 412 the Visigoths invaded the country, and their king, Athaulf, established the Gothic monarchy in Catalonia. In 711 the Moors obtained mastery of nearly the whole of Spain. The Moors held Spain for the first few years as a dependency of the province of North Africa; but after the downfall of Musa the country was governed (717) by *emirs* appointed by the Caliph of Damascus. During the period of Moorish domination the small independent kingdom of Asturias, or Leon, had been growing in power and extent. In 758 a second independent Christian Kingdom was founded in Sobrarve, which was in 801 swallowed up by the caliphate of Cordova. Thirty-six years afterward was founded the third Christian Kingdom, that of Navarre, and in 933 another independent monarchy was founded in Castile, which, from its central position and consequent greater facilities for expansion, soon became the most powerful of the Spanish states. The Kingdom of Aragon was the last Christian kingdom formed in Spain. The rest of the history of the Spanish kingdoms before their union is undeserving of a detailed account. Ferdinand II., the last sovereign of Aragon, by marriage with Isabella, Queen of Castile, in 1469, by the conquest of Granada in 1492, and that of Navarre in 1512, united the whole of Spain (and French Navarre) under one rule. Charles I. (Charles V. of Germany) succeeded Ferdinand, and in his reign Mexico and Peru were added to the possessions of Spain. Philip II., by his enormous war expenditure and maladministration, laid a sure foundation for the decline of the country; and the reigns of Philip III. and IV. witnessed a fearful acceleration in the decline. That of Charles II. was still more unfortunate, and the death of the latter was the occasion of the War of the Spanish Succession. Philip V. was the first of the Bourbon Dynasty who occupied the throne of Spain. Under Charles III. (1759–88) the second great revival of the country commenced, and trade and commerce began to show signs of returning activity. During the inglorious reign of Charles IV. (1788–1808) a war broke out with Britain, which was productive of nothing but disaster to the Spaniards and by the pressure of the French another arose in 1804, and was attended with similar ill success. Charles's eldest son ascended the throne as Ferdinand VII. Forced by Napoleon to resign all claims to the Spanish Crown, Ferdinand became a prisoner of the French, and Joseph, the brother of the French Emperor, was declared King of Spain and the Indies. But before this time an armed resistance had been organized throughout the whole country. The various provinces elected juntas, or councils, consisting of the most influential inhabitants of the respective neighborhoods, and it was their business to administer local rule. The Supreme Council of Seville declared war against Napoleon and France in 1808. England, on solicitation, made peace with Spain, recognized Ferdinand VII. as king, and sent an army to aid the Spanish insurrection. After many bloody campaigns the French were driven from the country. The reign of Ferdinand's daughter, Isabella II., was disturbed by the Carlist rebellion, 1834–39. Frequent changes of ministry, occasional revolts, the banishment of Queen Christina, the war with the Moors, the annexation of Santo Domingo in 1861, and the quarrels between Spain and her former colonies, Peru and Chile, were the most marked events in the more recent history of Spain. In 1868, Isabella was driven from the throne by a general revolt; and the Cortes, in 1871, elected Prince Amadeo of Italy to be king. Finding the task of ruling constitutionally hopeless, Amadeo abdicated in 1873, upon which the form of government was changed into a republic. During the remainder of 1873, and the whole of 1874, Spain was the scene of general anarchy and much bloodshed. In December, 1874, Alfonso, son of ex-Queen Isabella, was declared King of Spain at Santander, under the title of Alfonso XII. He died in 1886, and his widow, Queen Maria Christina, was chosen regent during the minority of the infant Prince Alfonso XIII. The Prince reached his majority, May 17, 1902, and became king. On May 31, 1904, he married Princess Ena of Battenberg. Industrial and revolutionary disturbances in 1911 culminated in the assassination of Premier Canalejas in November, 1912.

During the World War Spain maintained neutrality, but at the expense of serious internal conflict with pro-German and pro-Ally parties.

Spanish-American War. In 1898, a crisis in Cuban affairs brought on war with the United States, known as the Spanish-American War, which from its opening to its close lasted 114 days. In that time the United States land and sea forces destroyed two Spanish fleets, received the surrender of more than 35,000 Spanish soldiers, took by conquest the fortified cities of Santiago de Cuba, in Cuba, Ponce, in Porto Rico, and Manila, on the island of Luzon, in the Philippines, and secured control, pending negotiations of peace, of the entire Spanish possessions in the West Indies, the Philippines, and Guam of the Ladrone Islands. The Americans suffered no loss of ships or territory and but 279 killed and 1,465 wounded in battle, while the cost to Spain, aside from prisoners, ships, and lost territory, was 2,199 killed, and 2,948 wounded. The cost to the United States in money was $141,000,000.

The principal events immediately preceding and during the war are as follows:

February 15th—The United States battleship "Maine" was blown up in the harbor of Havana. According to the report of the Court of Inquiry appointed by the United States the explosion was due to an external mine.

April 20th—President McKinley, authorized by Congress to intervene in Cuba, using the United States military and naval forces, sent an ultimatum to Spain. The Spanish minister at once left Washington, and the next day the United States minister left Madrid.

April 22d—A proclamation was issued by the President blockading the principal ports of Cuba.

April 23d—President McKinley issued a call for 125,000 volunteers to serve for two years.

April 27th—The batteries of Matanzas, Cuba, were shelled by Admiral Sampson's flagship, the "New York," with the monitor "Puritan" and the cruiser "Cincinnati."

April 29th—The Spanish fleet, commanded by Admiral Cervera, consisting of the "Cristobal Colon," the "Almirante Oquendo," the "Maria Teresa" and the "Viscaya," and the torpedo boats "Furor," "Terror," and "Pluton," left the Cape Verde Islands for Cuba.

May 1st—Commodore Dewey, commanding the United States Asiatic squadron, destroyed the entire Spanish fleet in Manila Bay, Philippines, without losing a man.

May 11th—The "Wilmington," "Winslow," and "Hudson" engaged the Spanish batteries at Cardenas. Ensign Bagley and four of the "Winslow's" crew were killed. Major-General Wesley Merritt was ordered to the Philippines as military governor.

May 12th—A United States fleet, commanded by Rear-Admiral Sampson, bombarded the fortifications of San Juan, Porto Rico.

May 19th—Admiral Cervera's fleet reached Santiago de Cuba, and a few days later was "bottled up" there by the "flying squadron" of Commodore Schley.

May 25th—President McKinley called for 75,000 more volunteers. Twenty-five hundred United States troops sailed from San Francisco for Manila, several thousand more following at a later date.

May 31st—The "Massachusetts," "Iowa," and "New Orleans" bombarded the fortifications at the mouth of Santiago Harbor. They were bombarded again several times after Admiral Sampson took command of the fleet.

June 3d—Assistant Naval Constructor Hobson with seven men ran the collier "Merrimac" to the mouth of Santiago Harbor and sank her in the channel under the fire from the Spanish forts. Hobson and his men were taken prisoners.

June 10th—Six hundred marines were landed at Caimanera, Guantanamo Bay, Cuba, where sharp skirmishing continued for several days, several Americans being killed.

June 12th—The 5th Army Corps, commanded by General Shafter, sailed from Tampa on twenty-nine transports for Santiago, arriving off there on June 20th.

June 13th—President McKinley signed the War Revenue Bill, providing for the raising of revenues by a stamp tax and providing for a popular bond loan which was immediately subscribed.

June 17th—A Spanish fleet under Admiral Camara left Cadiz for the Philippines, but returned after passing through the Suez Canal.

June 22d—General Shafter's troops began disembarking at Daiquiri and Siboney, near Santiago.

June 14th—Roosevelt's Rough Riders were attacked while advancing toward Santiago; sixteen Americans were killed and forty more wounded before the Spaniards were repulsed.

July 1st—General Lawton took El Caney, near Santiago, and General Kent, commanding the 1st division of the 5th Army Corps, which included the 2d, 6th, 9th, 10th, 13th, 16th, and 24th infantry, and the 71st New York volunteers, took San Juan Hill after heavy fighting. Official reports gave the American losses 231 killed and 1,364 wounded and missing.

July 3d—Admiral Cervera's squadron made a dash out of Santiago Harbor, and every vessel was sunk or disabled by the American fleet. General Shafter demanded the surrender of Santiago. The seizure of Guama, in the Ladrone Islands, by the "Charleston" was reported at this time.

July 7th—President McKinley signed resolutions passed by the Senate annexing the Hawaiian Islands to the United States, and the "Philadelphia" was ordered to Honolulu to raise the American flag.

July 17th—General Toral, in command of the Spanish troops at Santiago, General Linares being wounded, surrendered his forces and the east portion of the province of Santiago de Cuba to General Shafter.

July 21st—General Leonard R. Wood, formerly colonel of the 1st Volunteer cavalry, was appointed military governor of Santiago.

July 25th—United States troops, under General Nelson A. Miles, landed at Guanica, Porto Rico, the town having surrendered to the "Gloucester."

July 26th—Through the French ambassador, the government of Spain asked President McKinley on what terms he would consent to peace.

July 28th—Ponce, the second largest city in Porto Rico, surrendered to General Miles, and he was received by the residents with joyful acclamations. Capture of several other towns, with little or no fighting, followed.

July 30th—President McKinley's statement of the terms on which he would agree to end the war was given to the French ambassador. The President demanded the independence of Cuba, cession of Porto Rico and one of the Ladrones to the United States, and the retention of Manila by the United States pending the final disposition of the Philippines by a joint commission.

July 31st—United States troops engaged the Spaniards at Malate, near Manila, in the Philippines, and repulsed them, with some loss on both sides.

August 9th—The French ambassador presented to President McKinley Spain's reply, accepting his terms of peace.

August 12th—Protocols agreeing as to the preliminaries for a treaty of peace were signed by Secretary Hay and the French ambassador. United States military and naval commanders were ordered to cease hostilities. The blockades of Cuba, Porto Rico, and Manila were lifted and hostilities ended.

August 13th—Manila surrendered after a combined assault by the army under General Merritt and Dewey's fleet.

Sparta or Lacedæmon. A celebrated city of ancient Greece; capital of Laconia and of the Spartan state, and the chief city in the Peloponnesus; on the west bank of the Eurotas River, and embraced a circuit of six miles. Sparta was a scattered city consisting of five separate quarters. Unlike Athens, it was plainly built, and had few notable public buildings; consequently, there are no imposing ruins to be seen here as in Athens, and the modern Sparta is only a village of some 4,000 inhabitants.

The Spartan state was founded, according to tradition, by Lacedæmon, son of Zeus. The most celebrated of its legendary kings was Menelaus. Shortly after their settlement in the Peloponnesus it is probable that the Spartans extended their sway over all the territory of Laconia, a portion of the inhabitants of which they reduced to the condition of slaves. They also waged war with the Messenians, the Arcadians, and the Argives, against whom they were so successful that before the close of the Sixth Century B. C. they were recognized as the leading people in all Greece.

Early in the following century began the Persian wars, in which a rivalry grew up between Athens and Sparta. This rivalry led to the Peloponnesian War, in which Athens was humiliated and the old ascendency of Sparta regained. Soon after this the Spartans became involved in a war with Persia, and Athens, Thebes, Corinth, and some of the Peloponnesian States took this opportunity to declare war against them. This war, known as the Bœotian or Corinthian War, lasted eight years and increased the reputation and power of Athens. To break the alliance of Athens with Persia, Sparta, in 387 B. C., concluded with the latter power the peace known by the name of Antalcidas; and the designs of Sparta became apparent when she occupied, without provocation, the city of Thebes, and introduced an aristocratical constitution there. Pelopidas delivered Thebes, and the celebrated Theban War (378–363) followed, in which Sparta was much enfeebled. During the following century Sparta steadily declined, though one or two isolated attempts were made to restore its former greatness.

Stadtholder (Dutch, *Stadhouder*), the name formerly given to the chief magistrate of the United Provinces of Holland. The last Stadtholder was William V., who had to fly to England in 1795, at the invasion of the French Republican army. After the Congress of Vienna (1815), Holland, with Belgium, was erected into a kingdom, and William V., was the first king, under the name of William I.

Star-Chamber, an ancient English tribunal, said to have existed from a very early period, but revived during the reign of Henry VII. One derivation of the name is from the star-covered roof or ceiling of the room in which the tribunal assembled; but this derivation is at least doubtful. The tribunal consisted of privy councillors, and of certain judges, who acted without the intervention of a jury. As this was a violation of *Magna Charta*, and as the tribunal had been guilty of the most grave excesses, especially in the time of Charles I., the Star Chamber was abolished by the Long Parliament in 1641, at the same time as the High Commission Court.

Sumter, Fort (named after General Thomas Sumter, 1734–1832), an American fort associated with both the beginning and the end of the Civil War; built of brick, in the form of a truncated pentagon thirty-eight feet high, on a shoal partly artificial, in Charleston Harbor, three and one-half miles from the city. On the withdrawal of South Carolina from the Union in December, 1860, Major Anderson, in command of the defenses of the harbor, abandoned the other forts, and occupied Fort Sumter, mounting sixty-two guns, with a garrison of some eighty men. The attack on the fort was opened by General Beauregard April 12, 1861, and it surrendered on the 14th; this event marked the beginning of the war. The Confederates strengthened it, and added ten guns and four mortars. In April, 1863, an attack by a fleet of monitors failed. In July batteries were erected on Morris Island, about 4,000 yards off, from which in a week 5,000 projectiles, weighing from 100 to 300 pounds, were hurled against the fort; at the end of that time it was silenced and in part demolished. Yet the garrison held on amid the ruins and in September beat off a naval attack; and in spite of a forty days' bombardment in October–December, 1863, and for still longer in July and August, 1864, it was not till after the evacuation of Charleston itself, owing to the operations of General Sherman, that the garrison retired, and the United States flag was again raised April 18, 1865; an event soon followed by the evacuation of Richmond and the Confederate surrender.

Sweden. When we first hear of Sweden the country was inhabited by numerous tribes, kindred in origin, but politically separate. Two principal groups are recognizable, *Goths* in the South and *Swedes* in the North. Ingiald Hrada, the last ruler of the old royal family of the Ynglingar, who drew their origin from Njord, sought to establish a single government in Sweden and perished in the attempt. To the Ynglingar followed, in the Upland, the dynasty of the *Skioldungar*. Erik Edmundsson acquired the sovereignty of the whole of Sweden about the end of the Ninth Century. The dawn of Swedish history now begins. Efforts to introduce Christianity were made as early as 829 A. D., but it was not till 1000 A. D., that Olaf Skötkonung, the Lap King, was baptized. Erik undertook a crusade against the pagan Finns, and having compelled them to submit to baptism, and established Swedish settlements among them, he laid the foundation of the union of Finland with Sweden. Erik's murder in 1160 by the Danish prince, Magnus Henriksen, who had made an unprovoked attack upon the Swe-

dish king, was the beginning of a long series of troubles. In 1389, the throne was offered by the Swedish nobles to Margaret, Queen of Denmark and Norway, who threw an army into Sweden, defeated the Swedish king, Albert of Mecklenburg, and by the union of Calmar, in 1397, brought Sweden under the same scepter with Denmark and Norway. In 1523, Sweden emancipated itself from the union with Denmark, which had become hateful to the Swedes, and rewarded its deliverer, the young Gustaf Vasa, by electing him king, and declaring its independence of Denmark. Gustaf Vasa, on his death, in 1560, left to his successor a hereditary and well-organized kingdom, a full exchequer, a standing army, and a well-appointed navy. Sigismund, grandson of Vasa, who had been elected king of Poland through the influence of his Polish mother, was compelled to resign the throne in 1599 to his uncle Karl. The deposition of Sigismund gave rise to the Swedo-Polish War of Succession, from 1604–60; and on the death of Karl, in 1611, his son, the great Gustavus Adolphus, found himself involved in hostilities with Russia, Poland, and Denmark. The young king soon concluded treaties of peace with his northern neighbors, and placed the internal affairs of his kingdom in order, and, although he ranks as one of the greatest military commanders of his age, the extraordinary number of benefits which he conferred on every department of the administrative system of Sweden entitles him to still greater renown as the benefactor of his native country. The reign of Christina was disastrous. Karl X. was occupied in generally unsuccessful wars against Poland and Denmark; while the long rule of his son, Karl XI.—from 1660–97—was characterized by success abroad and the augmentation of the regal power. In 1718, the male line of the Vasas expired with the death of Charles XII. His sister and her husband, Frederick of Hesse-Cassel, were called to the throne by election. The weak Adolphus Frederick of Holstein-Gottorp, who was called to the throne on the death of Frederick in 1751, did little to retrieve the evil fortunes of the state; but his son Gustavus III. (1771–92), skillfully recovered the lost power of the Crown. Gustavus IV. was forcibly deposed in 1809, and obliged to renounce the Crown in favor of his uncle Charles XIII. The dominant party in Sweden elected General Bernadotte to the rank of crown-prince, the latter assumed the reins of government, and by his steady support of the allies against the French Emperor secured to Sweden, at the Congress of Vienna, the possession of Norway, when that country was separated from Denmark. Under the administration of Bernadotte, who in 1818 succeeded to the throne as Charles XIV. John, the united kingdoms of Sweden and Norway made great advances in material prosperity, and in political and intellectual progress; and, although the nation at large entertained very little personal regard for their alien sovereign, his son and successor, Oscar (1844–59), and his grandsons, King Charles XV., and King Oscar II., who came to the throne in 1872, so identified themselves with their subjects that the Bernadotte Dynasty secured the loyal affections of every section of the united nations of Sweden and Norway down to 1903.

In that year serious difficulty arose between Norway and Sweden, owing to the desire of the former for autonomous government. In 1905 the two nations separated, and Oscar II. continued monarch of Sweden until his death, December 8, 1907, when he was succeeded by his oldest son, Gustaf V.

Switzerland was in Roman times inhabited by two races — the Helvetii, supposed to have been Celts, on the northwest, and the Rhætians on the southeast. After the conquest of Gaul both races adopted the language and habits of Rome. When the invasions took place the Burgundians settled in Western Switzerland, while the Alemanni, another Germanic tribe, took possession of the country east of the River Aar. A third Teutonic people, the Goths, entered the country from Italy and took possession of the country of the Rhætians. The Helvetii retained their old pagan creed until the Seventh Century, when they were converted by Irish monks. During the Eleventh and Twelfth Centuries the greater part of Switzerland was ruled on behalf of the emperors by the lords of Zahringen, who, however, became extinct in 1218. In 1273, Rudolf of Habsburg, a Swiss nobleman, became emperor. Schwyz, Uri, and Unterwalten, with Lucerne, Zürich, Glarus, Zug, and Berne, eight cantons in all, in 1352, entered into a perpetual league which was the foundation of the Swiss Confederation. In 1415 the people of the cantons invaded Aargau and Thurgau, parts of the Austrian territory, and annexed them; three years later they crossed the Alps and annexed Ticino, and constituted all three subject states. In 1481 the towns of Freiburg and Soleure were admitted into the confederacy. Basel and Schaffhausen (1501) and Appenzell (1513) were next received into the confederation, and its true independence began. War broke out in 1531 between the Catholics and Protestants, and the former were successful. During the Thirty Years' War Berne and Zürich contrived to maintain the neutrality of Switzerland, and in the Treaty of Westphalia, in 1648, it was acknowledged by the great powers as a separate and independent state. In 1798, Switzerland was seized by the French. At the peace of 1815 its independence was again acknowledged. In 1847, the Jesuits were expelled and the monasteries were suppressed. An attempt was made by diplomatic notes to intimidate the Swiss Government, but the revolution of 1848 broke out and prevented further interference. In the same year the radical party carried the constitution of 1848. After a rebellion against the King of Prussia, as Prince of Neufchâtel, the canton was declared a republic, with a constitution similar to that of the other Swiss states.

Tarpeian Rock (*tär-pē' yan*), a precipitous rock forming part of the Capitoline Hill at Rome over which persons convicted of treason to the state were hurled. It was so named, according to tradition, from *Tarpeia*, a vestal virgin of Rome, and daughter of the governor of the citadel on the Capitoline, who, covetous of the golden bracelets worn by the Sabine soldiery, opened the gate to them on the promise of receiv-

ing what they wore on their left arms. Once inside the gate they threw their shields upon her, instead of the bracelets. She was buried at the base of the Tarpeian Rock.

Tartary, properly Tatary, the name under which, in the Middle Ages, was comprised the whole central belt of Central Asia and Eastern Europe, from the Sea of Japan to the Dnieper, including Manchuria, Mongolia, Chinese Turkestan, Independent Turkestan, the Kalmuck and Kirghiz steppes, and the old khanates of Kazan, Astrakhan, and Crimea, and even the Cossack countries; and hence arose a distinction of Tartary into European and Asiatic. But latterly the name Tartary had a much more limited signification, including only Chinese Turkestan and Western Turkestan. It took its name from the Tatars or Tartars.

Temple, Solomon's, the building reared by Solomon as a habitation for Jehovah. David had planned the Temple, but was divinely forbidden to erect it, as he had shed so much blood in his wars. He made great preparations for his son and successor, who, he learned from the prophet Nathan, was destined to achieve the work. It was built on Mount Moriah, chiefly by Tyrian workmen, and had massive foundations. The stone for its erection was dressed before its arrival, so that the edifice arose noiselessly; the floor was of cedar, boarded over with planks of fir; the wainscoting was of cedar, covered with gold, as was the whole interior. It was modeled inside on the tabernacle, which was Jehovah's dwelling while journeyings were continually taking place. There was a Holy and a Most Holy Place. The temple was surrounded by an inner court for the priest. There was also a Great or Outward Court, called specially the Court of the Lord's House. This temple was destroyed by the Babylonians during the siege of Jerusalem under Nebuchadnezzar. On the return from Babylon, a temple, far inferior to Solomon's was commenced under Zerubbabel, B. C. 534, and, after a long intermission, was resumed B. C. 520, and completed B. C. 516, under Darius Hystaspes. The second temple was gradually removed by Herod, as he proceeded with the building or rebuilding of a temple designed to rival the first rather than the second. The work was commenced B. C. 21 or 20; the temple itself was finished in about a year and a half, the courts in eight years, but the subsequent operations were carried on so dilatorily that the Jews reckoned forty-six years as the whole time consumed. In the courts of this temple Jesus preached and healed the sick. It caught fire during the siege of Jerusalem under Titus, and was burned to the ground.

Tennessee. The name is derived from "Tanase," the Indian appellation of the Little Tennessee River. The first permanent white settlement was made on the Tennessee River, about thirty miles from the site of Knoxville, and Fort Loudon built. Indian wars lasted till 1761, when the savages were reduced to terms. From 1777 to 1784 the territory formed a portion of North Carolina. During the four years subsequent, the settlers maintained an organization as the State of Franklin, but were reunited to North Carolina in 1788. In 1789 the Territory, with that of Kentucky, was organized by the United States Government, which had received its cession from North Carolina. In 1794, a distinct territorial organization was made, and in 1796 Tennessee was admitted as a State, the third under the Federal Constitution. The State seceded in June, 1861. The principal military events within her limits during the Civil War were the capture of Forts Henry and Donelson, in February, 1862; the battle of Pittsburg Landing, or Shiloh, in April, 1862; the battle of Murfreesboro, in January, 1863; the battle of Chickamauga, in September, 1863; the battles about Chattanooga, and the battles of Franklin and Nashville, in November, 1864. State was readmitted in 1866. The Centenary of the State was celebrated by an Exposition at Nashville in 1897. In 1907 the National Rivers and Harbors Convention met at Memphis. Statutory Prohibition was enacted in 1909.

Teutones, a tribe of Germany, which, with the Cimbri, invaded Gaul in B. C. 113. In B. C. 102, they were defeated with great slaughter near Aquæ Sextiæ (Aix in the department of Bouches du Rhône) by the Roman general Marius. A tribe of the same name is mentioned by Pliny and others as inhabiting a district north of the Elbe, which appears to have been the original settlement of the Teutones before their invasion of Gaul.

Teutonic Knights, a military religious order of knights, established toward the close of the Twelfth Century, in imitation of the Templars and Hospitallers. It was composed chiefly of Teutons or Germans who marched to the Holy Land in the Crusades, and was established in that country for charitable purposes. In the Thirteenth Century they acquired Poland and Prussia, and they long held sway over a great extent of territory in this part of Europe. The order began to decline in the Fifteenth Century, and was finally abolished by Napoleon in 1809.

Texas. The first attempt at colonization known to history was made by La Salle, who sailed into Matagorda Bay, and erected Fort St. Louis on the Lavaca in 1685. Four years later the French were ousted by the Spaniards. The two nationalities contested the dominion of the country with bitterness, though the right of possession was for the most part with the Spaniards. In 1715, the name of New Philippines was given to the country, and the Marquis de Aguayo was made governor-general, under whose rule Spanish settlements were rapidly multiplied. In 1762-63, France settled the feud by her cession of the Louisiana territory to Spain. The recession of Louisiana to France in 1803, and the sale by the latter power to the United States, still left the boundary of the old Spanish possessions west of Louisiana open to controversy, as there had previously been no well-defined line. In 1806, the territory between the Sabine and Arroya Honda was established as a neutral ground by the Spanish and American generals commanding on the frontier. In the absence of any national settlement, a series of revolutionary intrigues began with the projected movement of Aaron Burr in 1806. Filibustering expeditions into Texas from the United States led to several severe battles, and it was not till 1819 that the

Sabine River was finally established as the Texan boundary. The revolutionary spirit, which made Texas a region of turmoil, did not cease when Mexico became independent under the leadership of Iturbide. Invasions from the United States continued, and, though several peaceable and thrifty American colonies had been planted, the dictator Bustamante, in 1830, forbade the people of the United States from further immigration. The long bitterness between the two races culminated in 1835, and the Americans in the province, after fighting several engagements, organized a provisional government, with Sam Houston as Commander-in-Chief of the Texan forces. A series of sanguinary battles ensued between the Mexican troops under General Santa Ana and the Texan revolutionists, and the atrocities of the Mexicans awakened deep sympathy for the Texans. The issue of the contest was practically settled with the battle of San Jacinto, April 21, 1836, when Santa Ana was taken prisoner. General Houston was elected president of the Texan Republic the same year, and in March, 1837, the United States formally recognized the new government. Intermittent hostilities continued between Mexico and Texas, which, in 1839–40, had been recognized by the leading European governments; but the threats of the former nation to subjugate the Texans were rendered negative by her own weakness and the growing power of the young State. The annexation of Texas to the United States, which led to the Mexican War, occurred by her admittance as a State in 1845, the fifteenth under the Constitution. After the election of Abraham Lincoln the State seceded, February 23, 1861, by force of a popular vote, ratifying the ordinance of the convention called for that purpose. General Twiggs, on February 18th, surrendered to the State authorities all the United States posts, troops, and munitions of war in the department. No very important military operations occurred within the State limits during the war. The last fight of the war took place in Texas, ending in a Federal defeat, on May 13, 1865, and General Kirby Smith surrendered the last Confederate army here on May 26th. Texas was readmitted to her full rights in the Union, March 30, 1870. A period of lawlessness existed in the State for a number of years, but was finally suppressed by the Texas Rangers in 1879. A storm and tidal wave destroyed Galveston in 1900. In the next year vast oil fields were discovered near Beaumont. Colored United States soldiers engaged in a riot at Brownsville in 1905, and were dismissed from the service by the President.

Thebes (*thēbz*). The principal city of Bœotia, seated on the River Ismenus. Its fame was great in legendary Greece; it was built by Cadmus; Amphion reared its walls; the Sphinx, Œdipus, and the fatal combat of Eteocles and Polynices, figured in its story. It played a subordinate part in the history of Greece, until the time of Epaminondas, when by his genius it was raised to the first rank among the states of Hellas. But it fell with his death, and never recovered from the destructive siege by Alexander the Great, in 336 B. C.—A city of Egypt, on the Nile, called *No* in the Old Testament, and in the Iliad celebrated for its 100 gates, and its vast military forces. Amun, or Ammon, was especially worshiped there. Among its ruins are the magnificent temples of Luxor and Karnak, on the east bank of the Nile.

Thermopylæ, a celebrated pass of Ancient Greece, leading from Thessaly into Locris, between Northern and Southern Greece. It lay between Mount Œta (celebrated mythologically as the mountain on which Hercules burnt himself to death) and a morass which fringed the Malic or Maliac Gulf; both the eastern and the weatern entrance to the pass approaching so close to the morass as to leave room for only a single carriage. In this pass, Leonidas, King of Sparta, was appointed to oppose the invading armies of Xerxes (480 B. C.). These were driven back with immense slaughter, in their repeated attempts to force the pass, till at last Ephialtes, a Malain, guided a body of Persians over the mountain, and thus enabled them to fall on the rear of the Greeks, who were all slain (Leonidas included), with the exception of one man. The pass derived its name from the hot springs, sacred to Hercules, by which it was distinguished.

Thirty Tyrants of Rome. The collective title given to a set of military usurpers who sprung up in different parts of the empire during the fifteen years (253–268 A. D.) occupied by the reigns of Valerian and Gallienus, and, amid the wretched confusion of the time, endeavored to establish themselves as independent princes. The name is borrowed from the Thirty Tyrants of Athens, but, in reality, historians can reckon only nineteen: Cyriades, Macrianus, Balista, Odenathus, and Zenobia, in the East; Postumus, Lollianus, Victorinus and his mother Victoria, Marius, and Tetricus, in the West; Ingenuus, Regillianus, and Aureolus, in Illyricum and the countries about the Danube; Saturninus, in Pontus; Trebellianus, in Isauria; Piso, in Thessaly; Valens, in Achæa; Æmilianus, in Egypt; and Celsus, in Africa.

Thirty Years' War (1618 to 1648), a war in Germany, at first a struggle between Roman Catholics and Protestants. Subsequently it became a struggle for political ascendancy in Europe. On the one side were Austria, nearly all the Roman Catholic princes of Germany, and Spain; on the other side were, at different times, the Protestant powers and France. The occasion of this war was found in the fact that Germany had been distracted ever since the Reformation by the mutual jealousy of Catholics, Lutherans, and Calvinists. Certain concessions had been made to the Protestants of Bohemia by Rudolph II. (1609), but these were withdrawn by his successor Matthias in 1614, and four years afterward the Bohemian Protestants were in rebellion. Count Thurn at the head of the insurgents repeatedly routed the imperial troops, compelling them to retire from Bohemia, and (1619) invaded the archduchy of Austria. Matthias having died in 1619, he was succeeded by Ferdinand II., who was a rigid Catholic, but the Protestants elected as their king, Frederick, Elector Palatine, who was a Protestant. Efforts at mediation having failed, the Catholic forces of Germany marched

against Frederick, who, with an army of Bohemians, Moravians, and Hungarians, kept the field till November 8, 1620, when he was totally routed at Weissenberg, near Prague, by Duke Maximilian of Bavaria. The Protestant cause was now crushed in Bohemia, and the people of that province were much embittered. The dominions of Frederick, the Palatinate of the Rhine included, were now conquered, the latter being occupied by Count Tilly, assisted by the Spaniards under Spinola. At the Diet of Ratisbon (March, 1623) Frederick was deprived of his territories, Duke Maximilian receiving the Palatinate. Ferdinand, whose succession to the throne of Bohemia was thus secured, sought foreign assistance, and a new period of war began. Christian IV. of Denmark, induced partly by religious zeal and partly by the hope of an acquisition of territory, came to the aid of his German co-religionists (1624), and being joined by Mansfeld and Christian of Brunswick, advanced into lower Saxony. There they were met by Wallenstein, Duke of Friedland, who in 1626 defeated Mansfeld at Dessau, while Tilly was also successful in driving Christian back to Denmark. In the peace of Lübeck which followed (May, 1629), Christian of Denmark received back all his occupied territory, and undertook not to meddle again in German affairs. After this second success, Ferdinand again roused his people by an edict which required restitution to the Roman Catholic Church of all church lands and property acquired by them since 1552.

To the assistance of the Protestants of Germany came Gustavus Adolphus, King of Sweden, who landed (1630) with a small army on the coast of Pomerania. Joined by numerous volunteers, and aided by French money, he advanced, and routed Tilly at Breitenfeld (or the battle of Leipsic, September, 1631), victoriously traversed the Main and the Rhine valleys, defeated Tilly again near the confluence of the Lech and the Danube (April, 1632), and entered Munich. Meanwhile the emperor sought the aid of Wallenstein, by whose ability and energy Gustavus was obliged to retire to Saxony, where he gained the great victory of Lützen (November, 1632), but was himself mortally wounded in the battle. The war was now carried on by the Swedes under the chancellor Oxenstierna, till the rout of the Swedish forces at Nördlingen (September, 1634) again gave to the emperor the preponderating power in Germany. The Elector of Saxony, who had been an ally of Gustavus, now made peace at Prague (May, 1635), and within a few months the treaty was accepted by many of the German princes. The Swedes, however, thought it to their interest to continue the war, while France resolved to take a more active part in the conflict. Thus the last stage of the war was a contest of France and Sweden against Austria, in which the Swedish generals gained various successes over the imperial forces, while the French armies fought with varied fortunes in West Germany and on the Rhine. Meanwhile the emperor had died (1637), and had been succeeded by his son, Ferdinand III. The struggle still continued till, in 1646, the united armies of the French under the great generals Turenne and Condé, and the Swedes advanced through Suabia and Bavaria. The combined forces of Sweden, Bavaria, and France were then about to advance on Austria, when the news reached the armies that the peace of Westphalia (1648) was concluded, and that the long struggle was ended.

Ticonderoga, a village in Essex County, N. Y., on Lake Champlain. Ticonderoga figured prominently during the colonial and revolutionary periods. In 1755 the French erected a fort here and named it Carillon. Two years later Montcalm started from this place with 9,000 men and captured Fort William Henry on Lake George. In 1758 General Abercrombie endeavored to take the French fort, and was repulsed after losing 2,000 men; but in 1759 it fell into the hands of General Amherst together with Crown Point. Both were then enlarged and strengthened at a heavy expense. In 1775 the works were taken by Ethan Allen while weakly garrisoned. Two years later the fort surrendered to General Burgoyne, and after being dismantled was abandoned.

Tiers Etat (*te-arz a-tah'*). [Fr., the third estate.] This term was universally applied in France to the mass of the people under the old *régime*. Before the cities rose to wealth and influence, the nobility and clergy possessed the property of almost the whole country, and the people were subject to the most degrading humiliations. But as trade and commerce began to render men independent, and they were able to shake off their feudal bonds, the Tiers Etat gradually rose into importance; and at length the third estate, during the Revolution, may be said to have become the nation itself.

Tilsit, a town of Germany, in the Prussian province of East Prussia, on the river Niemen, about sixty miles northeast of Königsberg. It is celebrated for the Peace concluded in the town, in 1807, between the Emperor Napoleon, the Emperor of Russia, and the King of Prussia. The three monarchs met on a raft moored in the river. The population of the town at last census was 34,539.

Toleration, Act of, an Act of Parliament passed in the reign of William and Mary (1689), and confirmed by Anne, relieving all persons who dissented from the Church of England (except Roman Catholics and persons who denied the doctrines of the Trinity) from many of the disabilities under which they had been placed by the acts of former reigns. By the Act of Toleration, such persons were to be no longer prevented from assembling for religious worship according to their own forms, but they were to be required to take the oaths of allegiance and supremacy, and to subscribe a declaration against transubstantiation; and Dissenting ministers were to be also required to subscribe to certain of the Thirty-nine Articles. The benefits of the Act were subsequently (in 1813) extended to persons who denied the doctrine of the Trinity. Most of the remaining disabilities of Nonconformists have been removed by later legislation; and the disabilities of the Roman Catholics (which were continued by the Act of Toleration) were repealed in 1829 by the passing of the Catholic Emancipation Act.

Toltecs, a Mexican race who are supposed to have been supreme in Central America from

the Seventh to the Eleventh Centuries. They were completely obliterated by the Aztecs and Tezcucans, who held the country when the Spaniards first landed. The latter races were of a martial spirit, but they were indebted for their arts, their civilization, and their religion to their milder predecessors. The Toltecs present striking analogies to the Etruscans, and in a less degree to the Egyptians and Assyrians. They were great builders, and their religion was a mystic system of great complexity, intimately connected with the study of astronomy, and interpreted by a priesthood, who formed an exclusive caste.

Tory, a political party name of Irish origin, first used in England about 1679, applied originally to Irish Revolutionary Catholic outlaws, and then generally to those who refused to concur in the scheme to exclude James II. from the throne. The nickname, like its contemporaneous opposite, Whig, in coming into popular use became much less strict in its application, till at last it came simply to signify an adherent of that political party in the state who disapproved of change in the ancient constitution, and who supported the claims and authority of the king, church, and aristocracy, while their opponents, the Whigs were in favor of more or less radical changes, and supported the claims of the democracy. In modern times the term has to some extent been supplanted by Conservative.

Tournament, or Tourney, a common sport of the middle ages, in which parties of mounted knights encountered each other with lances and swords in order to display their skill in arms. Tournaments reached their full perfection in France in the Ninth and Tenth Centuries where they first received the form under which they are known to us. They were introduced into England soon after the Conquest by the Normans. *Jousts* were single combats between two knights, and at a tournament there would often be a number of jousts as well as combats between parties of knights. The place of combat was the *lists*, a large open place surrounded by ropes or a railing. Galleries were erected for the spectators, among whom were seated the ladies, the supreme judges of the tournaments. A knight taking part in a tournament generally carried some device emblematic of a lady's favor. Tournaments gradually went out with the decline of chivalry, and are rare, except in America, where they are a form of sport.

Tower of London. The most ancient, and historically the most interesting pile in the English metropolis; a mass of buildings on the north side of the Thames, immediately to the east of the ancient city walls, its ramparts and gates surrounded by a dry ditch in pentagonal shape; in outer circuit measuring 1,050 yards. Within this the whole of the buildings are encircled by a double line of walls and bulwarks, in some places forty feet high and twelve feet thick; the space between the walls being known as the outer ward, and the interior as the inner ward. The inner ward was formerly the royal quarter. The outer ward was the folk's quarter. The inner ward is defended by twelve massive and conspicuous towers, stationed at unequal distances, and possessing distinctive names and formations. In the center, rearing its head proudly above them all, stands the main quadrangular building and great Norman keep, known as the White Tower. To the north are the barracks, and to the northwest the Church of St. Peter and Vincula. The entrance to the buildings is on the west side by the Lion's Gate.

For centuries the tower was a palace, a prison, a fortress, and a court of law. Here the Plantagenet kings held their gay tournaments, magnificent revels, and pompous religious ceremonials. Here also tragedy succeeded tragedy, and the innocent blood of many of England's bravest and most beautiful poured forth in a cruel stream. Wise statesmen, fair queens, child princes, noble warriors, and priests were slain, their only crimes, in many cases, being their rank, their patriotism, and their faith. "No sadder spot on earth," says Macaulay, of England. . . . "Death is there associated . . . with whatever is darkest in human nature and in human destiny, with the savage triumph of implacable enemies, with the inconstancy, the ingratitude, the cowardice of friends, with all the miseries of fallen greatness and of blighted fame."

The tower is now chiefly used as an arsenal, and has a small military garrison of the yeomen of the guard. The governorship is still a post of distinction.

Treaty, A, in public law, is an agreement of friendship, alliance, commerce, or navigation, entered into between two or more independent states. Treaties have been divided by publicists into *personal* and *real*, the difference being that the former relate exclusively to the persons of the contracting parties — e. g., treaties guaranteeing the throne to a particular sovereign and his family, and the latter are treaties for national objects, independent of the rulers of the state. While personal treaties expire with the death of the sovereign, or the extinction of his family, real treaties bind the contracting parties independently of any change in the sovereignty of the states. The constitution of each particular state must be looked to to determine in whom the power of negotiating and contracting treaties with foreign powers resides. In monarchies, whether absolute or constitutional, it is usually vested in the sovereign. In republics the chief magistrate, senate, or executive council is intrusted. The Constitution of the United States of America (Article II, Section 2) vests it in the President, with the advice and consent of the Senate. No special form of words is necessary for the validity of a treaty; but modern usage requires that an agreement which has originally been verbal should, as soon as possible, be committed to writing. Treaties of alliance may be offensive or defensive; in the former the ally engages to coöperate in hostilities against a specified power, or against any power with which the other may be at war; in the latter, the engagements of the ally extend only to a war of aggression commenced against the other contracting party.

Treaties, Coalitions, Conventions, and Leagues. The principal treaties of history are the following:

Adrianople, 1829, Adrianople restored by the Russians to Turkey.

Aix-La-Chapelle, 1748, celebrated treaty between Great Britain, France, Holland, Hungary, Spain, and Genoa. A number of previous treaties renewed and confirmed.

Aix-La-Chapelle, 1818, between the Allies and France. The latter paid 265,000,000 francs to the Allies.

Amiens, 1802, treaty of peace between Great Britain and Holland, France, and Spain.

Augsburg, League of, 1686, between Holland and other European powers to enforce respect for the treaties of Münster and Nimeguen.

Baden, 1714, terminating the War of the Spanish succession, between France and the Emperor.

Basel, 1795, treaties between France and Prussia and between France and Spain.

Berlin, decree, 1806, issued by Napoleon I., against the commerce of England.

Breda, 1667, treaty between England, Holland, France, and Denmark.

Breslau, 1742, between Maria Theresa of Austria and Frederick II. of Prussia.

Bretigny, 1360, treaty of peace that interrupted the Hundred Years' War between England and France.

Calmar, Union of, 1397, United Denmark, Sweden, and Norway under Queen Margaret of Denmark.

Cambray, 1508, league against Venice, comprising the Pope, the Emperor, and the Kings of France and Spain.

Cambray, Peace of, 1529, between Francis I. and Charles V.

Campo Formio, Peace of, 1797, between France and Austria.

Carlowitz, Peace of, 1699, between Turkey and Austria, Poland and Venice. Humiliating concessions made by Austria.

Carlsbad, Congress of, 1819, held by the German powers to protest against the progress of free institutions and popular rights.

Catholic League, 1576, formed to prevent the accession of Henry IV. of France.

Coalitions Against France, 1792, 1799, 1805, 1806, 1809, 1813, led by England and entered into by the great powers of the Continent to break down French influence in Europe.

Concordat, 1801, between Napoleon I. and Pius VII., whereby the former was made in effect head of the Gallican Church.

Constance, 1183, between Frederick Barbarossa and the Lombard cities.

Copenhagen, 1660, between Denmark and Sweden.

Fontainebleau, 1807, treaty between Napoleon and the royal family of Spain.

Frankfort, 1871, conclusion of the preliminary treaty of Versailles.

Gastein, Convention of, 1865, between Prussia and Austria.

Ghent, 1814, treaty of peace between United States and England, closing War of 1812.

Hague Convention, 1907, concerning the rights and duties of neutral powers in war.

Hamburg, 1241, league with Lübeck, giving rise to the Hanseatic League.

Hay-Pauncefote, 1901, superseded the Clayton-Bulwer treaty, Great Britain withdrawing her objections to a canal constructed by the United States and under the sole guarantee of neutralization by the latter power. The treaty also omitted a clause previously insisted upon, forbidding the fortification of the canal.

Holy Alliance, 1815, a league between the Emperors of Russia and Austria and the King of Prussia, by which they ostensibly bound themselves to Christian principles in political matters.

Hubertusburg, 1763, peace between Austria, Prussia, and Saxony.

Jay's Treaty, 1794, between the United States and Great Britain.

Kiel, 1814, between Denmark, Sweden, and England. Norway and Sweden united.

Kutchuk-Kainardji, 1774, between Turkey and Russia.

London, 1840, quadruple treaty between Great Britain, Austria, Prussia, and Russia on the one hand, and Turkey, touching the states of Egypt.

London, Peace of, 1913, between Balkan states and Turkey, closing Balkan war.

Lunéville, 1801, between France and Austria and the German Empire.

Madrid, 1526, between Charles V. and Francis I.

Münster, 1648, between France and the Emperor of Sweden. By this peace, the principle of a balance of power in Europe was first recognized.

Nanking, 1842, ended the opium war between Great Britain and China.

Nantes, Edict of, 1598, by which Henry IV. of France granted toleration to the Huguenots.

Nystad, 1721, closed the war between Sweden and Russia.

Paris, Treaties of: 1763, terminating the Seven Years' War, in Austria; the French and Indian War. **1783,** terminating the American Revolutionary War. **1814-15,** between France and the Coalition. **1856,** terminating the Crimean War. **1898,** terminating the Spanish-American War.

Partitions of Poland by following countries:
1772, secret treaty between Russia, Prussia, and Austria.
1793, between Russia and Prussia.
1795, between Russia, Austria, and Prussia.

Passau, 1552, securing the liberties of German Lutherans.

Perry's Treaty, 1854, commercial treaty between United States and Japan.

Portsmouth, 1905, treaty between Japan and Russia, closing the Russo-Japanese War.

Prague, 1866, peace between Prussia and Austria.

Pressburg, 1805, peace between France and Austria; ancient states of Venice ceded to Italy, and Independence of Switzerland stipulated.

Pretoria, 1902, terminated the Boer War between Great Britain and the Transvaal.

Pyrenees, 1659, between France and Spain; mutual concessions of territory made.

Quadruple Alliance, 1718, celebrated treaty between Great Britain, France, Austria, and Holland, for the purpose of guaranteeing the succession of the reigning families in Great Britain and France, and settling the partition of the Spanish Monarchy.

Rastatt, 1714, between France and Austria.

Rastatt, Congress of, 1797, between France and the Empire, established a general peace with the Germanic powers.

Ratisbon, 1806, secession of the Germanic princes from the Empire, to the cause of Napoleon, forming the—

Rhine, Confederation of, 1806.

Ryswick, 1697, peace between France and the allied powers, closing the war of the "Patch Note."

St. Clair-Sur-Epte, 911, terminated the war between the Norse under Rolla and Charles the Simple of France.

Saint Germain, 1570, peace between the Catholics and Huguenots.

San Stefano, 1878, this treaty, supplemented by the Congress of Berlin, closed the Russian-Turkish War.

Schönbrunn, 1809, treaty between France and Austria.

Shimonoseki, 1895, closed the war between Japan and China.

The Hague, 1659, between England, France, and Holland, with a view to preserve the equilibrium of Northern Europe.

Thorn, 1466, settled the terms of the Polish conquest of Western Prussia.

Tientsin, 1858, between China and each of the nations of Great Britain, France, Russia, and the United States.

Tilsit, 1807, treaty concluded between France and Russia, whereby Napoleon restored to the Prussian Monarch one-half of his territories, and Russia recognized the Confederates of the Rhine, and the elevation of Napoleon's brothers, Joseph, Louis, and Jerome to the thrones of Naples, Holland, and Westphalia.

Tolentino, 1797, between the Pope and the French Republic.

Triple Alliance, 1668, the celebrated alliance between the States-General and England against France for the protection of the Spanish Netherlands. Sweden afterward joined the league.

Triple Alliance, 1883, between Austria, Germany, and Italy.

Triple Entente, 1906, an unwritten agreement between England, France and Russia—an outgrowth of the "Entente Cordiale."

Troyes, 1420, between England, France, and Burgundy, whereby Henry V. of England succeeded to the throne of France.

Ulm, 1620, by which Frederick V. lost Bohemia.

Utrecht, 1713, terminated the wars of Queen Anne of England, and secured the Protestant succession in England, and enlarged British colonization in America.

Utrecht, Union of, 1579, foundations of the Dutch Republic laid.

Valencay, 1813, between Napoleon and Ferdinand VII. of Spain, whereby the latter restored full possession of his kingdom upon agreeing to maintain its integrity.

Verdun, Contract of, 843, concluded the war between Lothaire, Ludwig the German, and Charles the Bald, and settled their respective imperial dominions after the death of their father, Louis the Pious.

Verona, Congress of, 1822, held by the great powers to adjust Spanish and Grecian disturbances.

Versailles, 1783, between Great Britain and the United States at close of American Revolution: the treaty was signed in Paris. **1783,** between Great Britain, France, and Spain. **1871,** between France and Germany; William I. proclaimed Emperor of Germany.

Versailles, 1919, formulated between the Entente Allies and the United States of America, on the one side, and the Central Powers, Germany, Austria-Hungary, Turkey, and Bulgaria, on the other, following the crushing defeat of the latter group in the decisive campaigns of 1918. The treaty, which terminated the great World War, was signed June 28th, 1919, and ratified soon thereafter by the requisite number of powers. It stipulated the terms of peace, including the matter of territorial possessions and reparations, and instituted a League of Nations.

Vienna, 1725, treaty between the Emperor of Germany and the King of Spain, settling the sovereignty over certain parts of the Spanish dominions. **1731,** treaty of alliance between Germany, Great Britain, and Holland, by which the Pragmatic Sanction was granted, and the Spanish succession settled. **1738,** treaty of peace between Germany and France; Lorraine ceded to France, and France guaranteed the Pragmatic sanction. **1815,** treaty between Great Britain, Austria, Russia, and Prussia, confirming the treaty of Chaumont.

Warsaw, 1683, alliance between Austria and Poland against Turkey, in pursuance of which John Sobieski assisted in raising the siege of Vienna. **1768,** treaty between Russia and Poland.

Washington, 1842, Ashburton treaty defined the northeastern boundary between the United States and Canada.

Washington, 1871, between Great Britain and the United States to adjust the Alabama claims.

Westphalia, 1648, between France, Germany, and Sweden, terminating the Thirty Years' War.

Worms, Concordat of, 1122, between the Emperor and the Pope, ending the War of Investitures.

Zürich, 1859, closed the dispute between Austria and France and Sardinia.

Triumvirate, a coalition of three men in office or authority; specifically applied to two great coalitions of the three most powerful individuals in the Roman Empire for the time being. The first of these was effected in the year 60 B. C., between Julius Cæsar, Pompey, and Crassus, who pledged themselves to support each other with all their influence. This coalition was broken by the fall of Crassus at Carrhæ in Mesopotamia, soon after which the civil war broke out, which ended in the death of Pompey, and establishment of Julius Cæsar as perpetual dictator. After his murder, 44 B. C., the civil war again broke out; and after the battle of Mutina, 43 B. C., Antony, Octavius, and Lepidus coalesced, thus forming the second triumvirate. They divided the provinces of the empire, Octavius taking the West, Lepidus, Italy, and Antony, the East.

Troy, or Ilium (Greek, *Troia or Ilion*), an ancient city in the Troad, a territory in the northwest of Asia Minor, south of the western extremity of the Hellespont, rendered famous by Homer's epic of the Iliad. The region is for the most part mountainous, being intersected by Mount Ida and its branches. There have been various opinions regarding the site of the Homeric city, the most probable of which places ancient Troy at the head of the plain bounded by the modern river Mendereh, supposed to be the Scamander of Homer, and the Dombrek, probably the Homeric Simois. The Ilium of history was founded about 700 B. C. by Æolic Greeks, and was regarded as occupying the site of the ancient city, but this is doubtful; it never became a place of much importance. The ancient and legendary city, according to the Homeric story, reached its highest splendor when Priam was king; but the abduction of Helen, wife of Menelaus, King of Sparta, by Paris, one of Priam's sons, brought about its destruction. To revenge this outrage, all the Greek chiefs, afterwards famous in history, banded themselves against the Trojans and their allies, and went against Troy with a great fleet. The first nine years of the war were spent by the Greeks in driving the Trojans and their allies within the walls of the capital. The tenth year brought about a quarrel between Achilles, the bravest of the Greeks, and Agamemnon, the Greek commander-in-chief, which proved for a time disastrous to their party. This forms the subject of the Iliad. In the end, the city was taken by means of a large hollow wooden horse, in which a number of the bravest of the Greek heroes concealed themselves, while the rest retired to their ships. Thinking that the Greeks had given up the siege, the Trojans incautiously drew the horse within the city, and gave themselves up to revelry. The Greeks within the horse issued from their concealment, and, being joined by their companions without the walls, Troy was taken and utterly destroyed. This is said to have occurred about 1184 B. C. Not only has the site of the ancient city been disputed, but the legends connected with it are held by some scholars to have no historical foundation; nor has this view been altered by the excavations of Schliemann, and his discovery of the remains of a prehistoric city or cities at Hissarlik, the site of the historic Ilium.

Tudor, the name of one of the royal families of England allied to the race of Plantagenets. The line embraced five sovereigns, and commenced in 1485 with Henry Tudor, Earl of Richmond, the grandson of Sir Owen Tudor, a Welsh knight of distinction, and Catherine, widow of Henry V. Henry, after the battle of Bosworth Field, was proclaimed king with the title of Henry VII. From him the crown descended to his son Henry VIII., whose son Edward VI. succeeded, and after him his two sisters, Mary and Elizabeth; the Tudor dynasty expired with the death of Elizabeth in 1603, when the house of Stuart succeeded.

Tuileries (*twē'-lēr-ĭz*), the residence of the French monarchs, on the right bank of the Seine, in Paris. Catharine de' Medici, wife of Henry II., began the building (1564); Henry IV. extended it, and founded the old gallery (1600); and Louis XIV. enlarged it (1654), and completed that gallery. The side toward the Louvre consisted of five pavilions, and four ranges of buildings; the other side had only three pavilions. During the revolution of 1830 the palace was sacked. It was restored by Louis Philippe to its former splendor, but in 1848 it was again pillaged. The Tuileries then

became a hospital for wounded soldiers, a picture gallery, and the home of Louis Napoleon in 1851. On May 23, 1871, it was almost totally destroyed by fire (the work of the communists), and the remaining portions were removed in the year 1883.

Turkish, or Ottoman, Empire comprises territory in Europe, Asia, and Africa. Turkey in Europe consists of a strip of land east of a line from Enos on the Ægean sea to Midia on the Black sea, and Albania; in Asia, Asia Minor, Syria, including Palestine, Mesopotamia, part of Arabia, Candia, and others of the islands of the archipelago; in Africa, Egypt and the Anglo-Egyptian Sudan, over which there is a nominal suzerainty. Formerly the empire was much more extensive, even in recent times comprising Greece, Rumania, Servia, Bessarabia, Tunis, etc. We shall here give a brief sketch of the history of the Ottoman Empire, referring to the article *Turkey* for information regarding the geography, constitution, etc., of Turkey proper.

The Ottoman Turks came originally from the region of the Altai Mountains, in Central Asia. Early in the Eighth Century they came in contact with the Saracens, from whom they took their religion. In the Thirteenth Century they appeared as allies of the Seljukian Turks against the Mongols, and for their aid received a grant of lands from the Seljuk sultan of Iconium in Asia Minor. Their leader, Othman or Osman, of the race of Oghuzian Turkomans, became the most powerful emir of Western Asia, and after the death of the Seljuk sultan of Iconium, in the year 1300, he proclaimed himself sultan. He died in 1326. Thus was founded upon the ruins of the Saracen, Seljuk, and Mongo power the Empire of the Osman or Ottoman Turks in Asia. After Osman, the courage, policy, and enterprise of eight great princes, whom the dignity of caliph placed in possession of the standard of the Prophet, and who were animated by religious fanaticism and a passion for military glory, raised it to the rank of the first military power in both Europe and Asia (1300–1566).

The first of them was Orkhan, son of Osman. He subdued all Asia Minor to the Hellespont, took the title of *Padishah*, and became son-in-law to the Greek Emperor Cantacuzenus. Orkhan's son, Soliman, first invaded Europe in 1355. He fortified Gallipoli and Sestos, and thereby held possession of the straits which separate the two continents. In 1360 Orkhan's second son and successor, Amurath I., took Adrianople, which became the seat of the Empire in Europe, conquered Macedonia, Albania, and Servia, and defeated a great Slav confederation under the Bosnian King Stephen at Kossova in 1389. After him Bajazet, surnamed Ilderim (*Lightning*), invaded Thessaly, and also advanced towards Constantinople. In 1396 he defeated the Western Christians under Sigismund, King of Hungary, at Nicopolis, in Bulgaria; but at Angora, in 1402, he was himself conquered and taken prisoner by Timour, who divided the provinces between the sons of Bajazet. Finally, in 1413, the fourth son of Bajazet, Mohammed I., seated himself upon the undivided throne of Osman. In 1415 his victorious troops reached Salzburg and invaded Bavaria. He conquered the Venetians at Thessalonica in 1420. His celebrated grand-vizier Ibrahim created a Turkish navy. Mohammed was succeeded by his son, Amurath II., who defeated Ladislaus, King of Hungary and Poland, at Varna, in 1444. Mohammed II., the son of Amurath, completed the work of conquest (1451–81). He attacked Constantinople, which was taken May 29, 1453, and the Byzantine Empire came finally to an end. Since that time the city has been the seat of the Sublime Porte or Turkish Government. Mohammed added Servia, Bosnia, Albania, and Greece to the Ottoman Empire, and threatened Italy, which, however, was freed from danger by his death at Otranto in 1480. His grandson, Selim I., who had dethroned and murdered his father in 1517, conquered Egypt and Syria. Under Soliman II., *the Magnificent*, who reigned between 1519 and 1566, the Ottoman Empire reached the highest pitch of power and splendor. In 1522 he took Rhodes from the Knights of St. John, and by the victory of Mohacz, in 1526, subdued half of Hungary. He exacted a tribute from Moldavia, made Bagdad, Mesopotamia, and Georgia subject to him, and threatened to overrun Germany, but was checked before the walls of Vienna (1529). Soliman had as an opponent Charles V. of Germany, as an ally Francis II. of France. From his time the race of Osman degenerated and the power of the Porte declined.

In the latter part of the Sixteenth Century, and most of the Seventeenth Century, the chief wars were with Venice and with Austria. The battle of Lepanto (1571), in which the Ottoman fleet was overthrown by the combined fleets of Venice and Spain, was the first great Ottoman reverse at sea, and the battle of St. Gothard (1664), near Vienna, in which Montecuculi defeated the Vizier Kiuprili, the first great Ottoman reverse on land. In 1683 Vienna was besieged by the Turks, but was relieved by John Sobieski and Charles of Lorraine; in 1687 the Turks were again defeated at Mohacz, and in 1697 (by Prince Eugene), at Szenta. Then followed the Treaty of Carlowitz in 1699, by which Mustapha II. agreed to renounce his claims upon Transylvania and a large part of Hungary, to give up the Morea to the Venetians, to restore Podolia and the Ukraine to Poland, and to leave Azov to the Russians. Eugene's subsequent victories at Peterwarden and Belgrade obliged the Porte to give up, by the Treaty of Passarowitz in 1718, Temeswar, Belgrade, with a part of Servia and Wallachia; but the Turks on the other hand took the Morea from Venice, and by the Treaty of Belgrade in 1739 regained Belgrade, Servia, and Little Wallachia, while for a time they also regained Azov.

Russia, which had been making steady advances under Peter the Great and subsequently, now became the great opponent of Turkey. In the middle of the Eighteenth Century the Ottoman Empire still embraced a large part of Southern Russia. The victories of Catharine II.'s general Romanzoff in the war between 1768 and 1774 determined the political superiority of Russia, and at the Peace of Kutchuk-Kain-

arji, in 1774, Abdul-Hamid was obliged to renounce his sovereignty over the Crimea, to yield to Russia the country between the Bog and the Dnieper, with Kinburn and Azov, and to open his seas to the Russian merchant ships. By the Peace of Jassy, 1792, which closed the war of 1787-91, Russia retained Taurida and the country between the Bog and the Dniester, together with Otchakov, and gained some accessions in the Caucasus. In the long series of wars which followed the French revolution the Ottoman Empire first found herself opposed to France, in consequence of Bonaparte's campaign in Egypt, and finally to Russia, who demanded a more distinct recognition of her protectorate over the Christians, and to whom, by the Peace of Bucharest, May 28, 1812, she ceded that part of Moldavia and Bessarabia which lies beyond the Pruth. In 1817, Mahmud II. was obliged to give up the principal mouth of the Danube to Russia. Further disputes ended in the Porte making further concessions, which tended towards loosening the connection of Servia, Moldavia, and Wallachia with Turkey. In 1821 broke out the war of Greek independence. The remonstrances of Britain, France, and Russia, against the cruelties with which the war against the Greeks was carried on, proving of no avail, those powers attacked and destroyed the fleet of Mahmud at Navarino (1827). In 1826, the massacre of the Janizaries took place at Constantinople, after a revolt. In 1828-29, the Russians crossed the Balkans and took Adrianople, the war being terminated by the Peace of Adrianople (1829). In that year Turkey had to recognize the independence of Greece. In 1831-33, Mehemet Ali, nominally Pasha of Egypt, but real ruler both of that and Syria, levied war against the sultan of Turkey, and threatened Constantinople, when the Russians, who had been called on for their aid by the sultan, forced the invaders to desist. In 1840 Mehemet Ali again rose against his sovereign, but through the active intervention of Great Britain, Austria, and Russia, was compelled to evacuate Syria, though he was, in recompense, recognized as hereditary viceroy of Egypt.

Turkey became involved in war with Russia and was joined by England and France in 1854. This, the Crimean war, speedily terminated with the defeat of Russia, and the treaty of Paris, March 30, 1856. The principal articles were the abolition of the Russian protectorate over the Danubian principalities (Moldavia and Wallachia united in 1861 as the principality of Rumania), the rectification of the frontier between Russia and Turkey, and the cession of part of Bessarabia to the latter power.

In 1875 the people of Herzegovina broke into rebellion. A year later the Servians and Montenegrins took up arms. Meantime the great powers of Europe were pressing reforms on Turkey, and in 1876 a conference met at Constantinople, to make a fresh settlement of her relations with her Christian provinces. All the recommendations of the conference were rejected by Turkey; and in April, Russia, who had been coming forward as the champion of the oppressed provinces, commenced hostile operations in both parts of the Turkish Empire. She was immediately joined by Rumania, who on the 22d of May (1877) declared her independence. After the fall of Kars, November 18, and the fall of Plevna, December 10, the Turkish resistance collapsed, and on the 3d of March, 1878, Turkey was compelled to agree to the Treaty of San Stefano, in which she accepted the terms of Russia. These were modified by the Treaty of Berlin, July 13, by which Rumania, Servia, and Montenegro were declared independent; Rumanian Bessarabia was ceded to Russia; Austria was empowered to occupy Bosnia and Herzegovina, and Bulgaria was erected into a principality.

The main events since the Treaty of Berlin are the French invasion of Tunis in 1881; the treaty with Greece, executed under pressure of the great powers in 1881, by which Turkey ceded to Greece almost the whole of Thessaly and a strip of Epirus; the occupation of Egypt by Great Britain in 1882; and the revolution at Philippopolis in 1885, when the government of Eastern Roumelia was overthrown, and the union of that province with Bulgaria proclaimed. In 1903, revolts broke out in Bulgaria and Albania, attended with massacres and atrocities. In 1909, Abdul-Hamid II. was dethroned by the Young Turks, and Mehmed V. made sultan. Serious internal disturbances occured in 1911. In 1912, because of disputed boundary lines and authority, Greece, Bulgaria, Servia, and Montenegro engaged in war with Turkey, known as the Balkan war. Peace was concluded in 1913 by a treaty signed at London by which Turkey lost all her territory in Europe west of an irregular line from Enos on the Ægean sea to Midia on the Black sea.

On Nov. 10, 1914, Turkey entered the World War as an ally of Germany, attacking Russia and menacing the Suez Canal. In 1915 the Turkish forces on the Gallipoli peninsula repulsed all attempts of the Allies to capture the Dardanelles. During the year some 800,000 Armenians were massacred by Turkish soldiers. In 1916 and 1917, Turkish armies inflicted numerous defeats upon the Allied forces in Mesopotamia and Palestine. However, late in 1917, Jerusalem was captured by the English, and in September, 1918, Turkish military power was utterly crushed by the victorious armies of Gen. Allenby.

By the Treaty of Sevres, signed Aug. 10, 1920, Turkey gave up all possessions in Europe except Constantinople and a small adjoining territory. In Asia, Turkey was deprived of Cilicia, Armenia, Kurdistan, and Konia. As a protest against the treaty, Mustapha Kemel led a strong nationalist revolt. In 1921 the Greeks, under King Constantine, occupied Smyrna and conducted costly military campaigns against the Turks to enforce the treaty terms.

Tuscany (Italian, *Toscana*), formerly a grand-duchy, now a department of Italy; area, 9,289 square miles; population, 2,340,100. The chain of the Northern Apennines forms a considerable portion of its northern boundary, the sea being its boundary on the west. The principal river is the Arno. Cereals cover a large area, and vineyards, olive-yards, and orchards are numerous. The manufacture of silk is considerable. The marble of Tuscany, especially that of Siena, is well known. Tuscany

corresponds to the ancient Etruria, which was, however, of wider extent. After the fall of the Western Empire (476) it passed successively into the hands of the Ostrogoths, Byzantine Greeks, and Lombards. Charlemagne made it a Frankish province, and it was governed by marquises or dukes until the Twelfth and Thirteenth Centuries, when it became broken up into a number of small republics, four of which were Florence, Pisa, Siena, and Lucca. From the first, Florence occupied the leading place, and it gradually extended its territory. In 1569 Pope Pius I. granted to Cosmo I. the title of Grand-duke of Tuscany, and this position was retained, with interruptions, by the celebrated Medici family, until 1737, when it passed to Francis Stephen, Duke of Lorraine. In 1859, when under his descendant, the Grand-duke Leopold, it was annexed to Sardinia by a popular vote, and in 1861 became, with Sardinia, part of the kingdom of Italy.

United States of America. When first visited by Europeans, the country now comprised within the United States was exclusively inhabited by the race commonly called American Indians. According to the Scandinavian sagas, Leif, a Norwegian, sailed about 1001 from Iceland for Greenland, but was driven southward by storms till he reached a country called Vinland, which is supposed to have been Rhode Island or some other part of the coast of New England. In 1497, about five years after the discovery of America by Columbus, John Cabot sailed westward from Bristol, England, and on June 24th discovered land (Labrador), along which he coasted to the southward nearly 1,000 miles. In 1498, his son, Sebastian Cabot, sailed from the same port in search of a northwest passage to China; but finding the ice impenetrable, he turned to the south and coasted as far as Chesapeake Bay. In 1512, the Spaniard Ponce de Leon discovered Florida. In 1539, took place the expedition of the Spaniard De Soto, who, in the course of two years, penetrated overland from Tampa Bay on the west coast of Florida to a point 200 miles beyond the Mississippi. In 1565, the Spaniards founded St. Augustine, the first permanent settlement in the United States. In 1585, an expedition sent by Sir Walter Raleigh made a settlement on Roanoke Island, N. C., which failed. In 1607, the English founded Jamestown on James River, Virginia, their first permanent settlement. The master spirit of this enterprise was Captain John Smith. Plymouth, Mass., was founded in 1620 by the "Pilgrim fathers of New England," a body of Puritans led by John Carver and others, who sailed from England in the "Mayflower." Salem was settled by John Endicott in 1628. In 1630, John Winthrop settled Boston. In 1692, Plymouth Colony was united to Massachusetts. Portsmouth and Dover in New Hampshire were settled in 1623. The first permanent English settlements in Maine were made about the same time. These settlements ultimately fell under the jurisdiction of Massachusetts. Connecticut was colonized in 1635-36 by emigrants from Massachusetts, who settled at Hartford, Windsor, and Wethersfield. Rhode Island was first settled at Providence in 1636 by Roger Williams. In 1623, permanent settlements were made by the Dutch at Fort Orange (now Albany) and at New Amsterdam on the present site of New York. The Swedes settled on the Delaware in 1638, and were expelled in 1655 by a Dutch army. The English seized New Amsterdam in 1664, and with it the whole of New Netherland, which they named New York from the Duke of York, to whom it had been granted by Charles II. New Jersey at this time acquired its distinctive name. In 1681 the territory west of the Delaware was granted to William Penn, who colonized it chiefly with Friends or Quakers, and founded Philadelphia in 1682. Maryland was settled in 1632 by Roman Catholics sent out by Lord Baltimore. The first permanent settlement in North Carolina appears to have been made about 1663, on Albemarle Sound, by emigrants from Virginia. The first permanent settlement in South Carolina was made in 1670 by colonists from England on the Ashley River, near the site of Charleston, which began to be settled about the same time. Georgia was settled by General James Oglethorpe, who, in 1733, founded Savannah. The principal Indian wars were those of 1622 and 1644–46 in Virginia; the Pequot War (1636-37) and King Philip's War (1675-76) in New England; that with the Corees and Tuscaroras in 1711, and that with the Yemassees in 1715, in the Carolinas. Toward the close of the Seventeenth Century the Indians on the northern and western frontiers began to receive aid from the French in Canada, who, whenever their mother country was at war with England, carried on hostilities with the English colonies, and frequently, accompanied by their savage allies, made destructive and bloody inroads into New England and New York. The first conflict with the French, known as King William's War lasted seven years, terminating in 1697. Queen Anne's War (1702–13) was marked by the conquest from the French in 1710 of Acadia (Nova Scotia). The principal event of King George's War was the capture (1745) of Louisburg, the chief stronghold of the French in America, which was restored to the French at the close of the war (1748). Disputes having arisen with the French on the Ohio, an expedition under Washington, was sent toward that river, which, on May 28, 1754, cut to pieces a French detachment under Jumonville, who was slain. This affair began the long contest known as the French and Indian War. Among its prominent events were Braddock's defeat (1755) near Fort Duquesne, when Washington distinguished himself by covering the retreat; the capture by the French of Oswego (1756) and Fort William Henry, at the head of Lake George (1757); and the taking of Louisburg after a siege of seven weeks by Generals Amherst and Wolfe, and the repulse of an attack on Ticonderoga made by a powerful army under General Abercrombie and Lord Howe (1758). The crowning exploit of the war was the taking of Quebec (1759) by an army led by General Wolfe. In 1763, by the Treaty of Paris, Canada and its dependencies were formally ceded to Great Britain. The transfer from the French to the English of the posts between the Great

Lakes and the Ohio led (1763) to a war with the Indian tribes, of which the master spirit was Pontiac. The sentiment of political freedom was strongly developed among the colonists, and republican ideas and feelings transmitted from the period of the commonwealth in England were widely diffused, though at the same time a warm attachment existed for the mother country and a devoted loyalty to the Crown. The first opposition was aroused by an act of parliament in 1761, authorizing sheriffs and officers of the customs to use "writs of assistance" or general search warrants. These writs were resisted in Massachusetts, where the rights of the people were defended by James Otis. In 1765 the Stamp Act was passed, which declared that every document used in trade or legal proceedings, to be valid, must have affixed to it a tax stamp of the minimum value of one shilling, and increasing indefinitely according to the value of the writing. To enforce the act parliament authorized the ministry to send troops, for whom the colonies were required to provide quarters and various necessaries. These acts created great excitement and indignation in America. Everywhere the people determined not to use the stamps, and associations calling themselves "sons of liberty," were organized in opposition to the act and for the general defense of the rights of the colonies. In October a congress of delegates from nine colonies assembled in New York on the invitation of Massachusetts, and drew up a declaration of rights, a memorial to parliament, and a petition to the king, in which they claimed the right of being taxed only by their own representatives. The merchants of the principal cities agreed to purchase no more goods in England till the act was repealed, and the people pledged themselves to use no articles of English manufacture. The Stamp Act was repealed in 1766, but the next year parliament passed an act imposing duties on paper, glass, tea, and some other articles imported into the colonies. The colonies in return revived with renewed vigor their non-importation associations. Massachusetts, and especially Boston, was foremost in the opposition. A military force under General Gage was sent to occupy the town in 1768. A collision took place March 5, 1770, between the soldiers and a crowd of citizens, in which three of the latter were killed and eight wounded. The "Boston Massacre," as this was called, caused great excitement throughout the country. In April, 1770, the government removed all the duties except that of threepence a pound on tea. Combinations were now formed against the importation and use of tea, and measures taken to prevent its being either landed or sold. At Boston, December 16, 1773, a band of men disguised as Indians went on board three tea ships which had recently arrived from England, and emptied the tea into the water. Parliament thereupon, in 1774, passed the "Boston Port Bill," which closed that port to all commerce, and transferred the board of customs to Marblehead and the seat of colonial government to Salem. Other repressive bills were also passed. On September 5th the "Old Continental Congress" met in Philadelphia, in which all the colonies were represented except Georgia. A declaration of rights was agreed upon, in which was set forth the claim of the colonists as British subjects to participate in making their own laws and imposing their own taxes, and to the rights of trial by a jury of the vicinage, of holding public meetings, and of petitioning for redress of grievances. The maintenance of a standing army in the colonies without their consent was protested against, as were eleven acts passed since the accession of George III. in violation of colonial rights and privileges. The first conflict occurred, and the first blood of the Revolution was shed, on April 19, 1775. (See under Lexington.) On the night of the day following the action the king's governor and army found themselves closely beleaguered in Boston. The people everywhere rose in arms, and before the close of summer the power of all the royal governors from Massachusetts to Georgia was at an end. Volunteer expeditions from Vermont and Connecticut, led by Ethan Allen and Benedict Arnold, seized the important fortresses of Ticonderoga (May 10th) and Crown Point (May 12th). The second Continental Congress assembled on May 10th at Philadelphia, in the State house, now known as Independence Hall. It sent another petition to the king, denying any intention of separation from England, and asking only for redress of grievances; but measures were taken to raise an army, to equip a navy, and to procure arms and ammunition. The forces before Boston were adopted as the Continental army, and Washington was nominated and unanimously chosen (June 15th) as commander-in-chief. Before he could reach the seat of war the battle of Bunker Hill had been fought, June 17th. He regularly beleaguered Boston till March 17, 1776, when the British evacuated it and sailed for Halifax. Meantime, an invasion of Canada under General Montgomery resulted in the capture of Montreal and a repulse from Quebec, which was attacked December 31, 1775, by parties led by Montgomery and Arnold. On June 28, 1776, a British fleet attacked Charleston, S. C., and was repulsed with great loss by a small force in Fort Sullivan (afterward Fort Moultrie), commanded by Colonel Moultrie. On July 4th the Declaration of Independence written by Jefferson, was adopted, and in this document the colonies were first designated the "United States of America." Soon after the evacuation of Boston by the British, Washington transferred his army to New York. On June 29th the late garrison of Boston arrived from Halifax, and soon after other British troops from Europe and from the South. The campaign began on Long Island, where, on August 27th, the Americans were defeated with heavy loss, and forced to abandon that island, and soon after the city of New York. Having fought another unsuccessful battle at White Plains (October 28th), Washington early in December was compelled to retreat beyond the Delaware at the head of but 3,000 men. About the same time the British seized and held the island of Rhode Island. On the night of December 25th Washington crossed the Delaware in open boats with 2,400 men, and falling upon the British forces at Trenton, captured about 1,000 Hessians.

On January 3, 1777, he defeated the enemy again at Princeton, taking 230 prisoners. A movement threatening Philadelphia called Washington south. In the battle on the Brandywine, September 11th, he was outnumbered and compelled to retreat with a loss of nearly 1,000 men. On the 26th, the British took possession of Philadelphia without opposition. On October 4th, Washington attacked the British at Germantown, seven miles from Philadelphia, but was repulsed with heavy loss; and soon afterward both armies went into winter quarters, the Americans at Valley Forge, on the Schuylkill, twenty miles from Philadelphia. Meantime, a British army, 7,500 strong, besides Indians, commanded by General Burgoyne, advanced from Canada by Lake Champlain, and took Ticonderoga, Fort Independence, and Whitehall. Strong detachments, which were sent to Bennington, Vt., to destroy a collection of stores, were met there (August 16th) and defeated with the loss of about 200 killed and 600 prisoners by the Vermont and New Hampshire militia led by General Stark. Burgoyne was encountered by General Gates, to whom, after the battles of Stillwater (September 19th) and Saratoga (October 7th), he capitulated at Saratoga (October 17th) with his whole army. The consequences of this victory were apparent in the signing, in February, 1778, of treaties of alliance and of amity and commerce with France. The British evacuated Philadelphia in the night of June 17th with more than 17,000 men. Washington pursued, and on the 28th the two armies engaged in battle on the plains of Monmouth, near Freehold, N. J. The Americans remained masters of the field, while the British retreated to New York. An attempt made in August, with the assistance of the French fleet under Count d'Estaing, to drive the British from Rhode Island, proved a failure. On December 29th the British, having defeated the American forces at Savannah, took possession of the city. In September, 1779, Savannah was besieged by a French and American force, and on October 9th an assault was made upon it, which was repulsed with a loss to the allies of nearly 800 men, among them Casimir Pulaski. About this time the British evacuated Rhode Island, to concentrate their forces at New York. One of the most brilliant achievements of the war was the storming (July 16, 1779) of Stony Point on the Hudson by General Wayne. On the ocean, which swarmed with American privateers, Paul Jones chiefly distinguished himself. Charleston, S. C., after a feeble defense of several weeks, was surrendered to the British on May 12, 1780, by General Lincoln. The rest of South Carolina nominally submitted to the royal authority; but a guerilla warfare was kept up by Sumter, Marion, and other partisan leaders. Congress sent General Gates to recover South Carolina. On his first encounter with Cornwallis at Camden, August 16th, he was routed with great loss, and with the remnant of his force fled to North Carolina. Early in September Cornwallis marched into North Carolina, where, on October 7th, at King's Mountain, a detachment from his army was totally defeated by 900 militia, who killed and captured upward of 1,100 of the enemy. Cornwallis withdrew to South Carolina. On July 10th, a French fleet arrived at Newport, bringing the Count de Rochambeau and 6,000 soldiers. In September a treasonable plot schemed by Arnold was discovered. The principal military operations of 1781 were in the south, where Greene had superseded Gates. At the Cowpens, S. C., on January 17th, General Morgan won a brilliant victory over the British under Colonel Tarleton. On March 15th, the British gained a victory at Guilford Court House, N. C., but drew from it no advantage; and on September 8th occurred the drawn battle of Eutaw Springs, which nearly terminated the war in South Carolina. Cornwallis, having advanced into Virginia in April, was opposed by Lafayette, Wayne, and Steuben, and fortified himself at Yorktown. Meanwhile, the American army under Washington and the French army of Rochambeau had formed a junction on the Hudson. The allied army arrived before Yorktown September 28, 1781, and began a regular siege, which lasted till October 19th, when Cornwallis surrendered with his whole force of 7,247 men, besides 840 sailors; 106 guns were taken. This victory substantially terminated the contest. A preliminary treaty of peace was signed at Paris, November 30, 1782, by Franklin, Adams, Jay, and Laurens. On September 3, 1783, a definitive treaty was signed at Versailles, by which the United States were formally acknowledged by Great Britain to be free, sovereign, and independent. New York, the last position held by the British on our coast, was evacuated November 25, 1783. On June 12, 1776, while the resolution of independence was under consideration in Congress, a committee of one from each colony was created to draft a form of confederation, and the articles reported by it were adopted November 15, 1777. Having been ratified by all the States, they went into effect on March 1, 1781. Dissatisfaction with the confederation, owing to the weakness of the central government under it, soon became widespread, and in 1786 a convention of delegates from several States at Annapolis, Md., recommended the calling of a convention of delegates from all the States to propose changes in the articles of confederation. This plan was approved by Congress on February 21, 1787, and the convention organized at Philadelphia on May 25th, by the choice of Washington as president. It remained in session until September 17th, when it adjourned after adopting the Constitution. All the States were represented except Rhode Island. Having been ratified by the requisite number of States, the Constitution went into effect on March 4, 1789. At the first election Washington was chosen president and John Adams vice-president, and Washington was inaugurated in New York on April 30th. In the summer of 1790 an Indian war broke out with the tribes of the northwest, who, after inflicting defeats on Generals Harmar and St. Clair, were finally quelled by General Wayne, and peace was restored in August, 1795. At the second presidential election in 1792, Washington again received the unanimous votes of the electoral colleges, and Adams was reëlected vice-president. The whiskey insurrection against an unpopular excise law in 1794 threw Western

Pennsylvania into confusion, but was energetically suppressed by the president. Two parties had sprung up, the Federalists, supporters of the Constitution as it was, and the Republicans or Democrats, who desired to limit the federal power. The Republicans were active in their sympathy for the French Republic. At the third presidential election (1796) the Federalists, among whom Alexander Hamilton was prominent, supported John Adams and the Republicans Thomas Jefferson. Adams, who received seventy-one electoral votes, was chosen president while Jefferson, who received sixty-eight, the next highest number, became, by the Constitution as it then was, the vice-president. At the beginning of the administration the relations with France were threatening, and envoys were sent to adjust the difficulties; but the French Government refused to receive them. This excited great indignation in the United States, and Congress made preparations for war. The measures adopted were not without effect. A fresh embassy was sent, and a treaty was concluded in 1800. During the troubles with France two acts were passed by Congress, known as the alien and sedition laws: the first, which was limited to two years, empowering the president to order aliens who were conspiring against the peace of the United States to quit the country; the other, which was to remain in force till March 4, 1801, providing among other things for the punishment by fine and imprisonment of seditious libels, upon the government. These laws became exceedingly unpopular, and were bitterly denounced as harsh and unconstitutional. They contributed largely to the dissatisfaction with Mr. Adam's administration, which led in the next presidential election to the success of the Republican candidates, Jefferson and Burr, each of whom received seventy-three votes. The tie threw the election into the House of Representatives, where, on the thirty-sixth ballot, Jefferson was chosen president and Burr vice-president. This contest led to the adoption of the twelfth amendment of the Constitution, requiring the electors to designate which person is voted for as president and which as vice-president. Jefferson's administration for the most part was marked by vigor and enlightened views, and in 1804 he was reëlected, with George Clinton as vice-president. The vast territory then called Louisiana was purchased from France in 1803. A war with Tripoli, ended in 1805, humbled the Barbary pirates. In 1806 Aaron Burr secretly organized a military expedition, chiefly in the western States, which led to his arrest and trial at Richmond in 1807, on a charge of attempting to dismember the Union and to establish an independent dominion west of the Alleghanies; but no overt act being proved against him, he was acquitted. The relations with Great Britain began in 1805 to be disturbed by the unfriendly acts of that power directed against American commerce, and by the exercise of the asserted right to search American vessels for suspected deserters from her navy. In 1806, an act was passed prohibiting the importation of certain articles of British production. In 1807, Congress laid an embargo, which prohibited the departure from American ports of vessels bound for foreign countries. This measure was vehemently denounced by the Federal party, and was repealed in 1809. In the presidential election of 1808 the Republican candidates, James Madison for president and George Clinton for vice-president, were elected. Congress continued the non-importation system. A long negotiation was carried on with the English Government without result, and on June 18, 1812, war was declared against Great Britain. In the summer of 1811, hostilities, excited as was alleged by British emissaries, were begun by the Indian tribes north of the Ohio under the lead of Tecumseh. William Henry Harrison, Governor of Indiana Territory, defeated them on the banks of the Tippecanoe River, November 7, 1811. The campaign of 1812 closed with little or no credit to the American arms on land, the principal event being the surrender of Detroit (August 16th) by the American General Hull to General Brock. But the navy achieved a series of brilliant victories, which were followed by others during the succeeding years of the war. The campaign of 1813 was marked by alternate successes and reverses. The principal events were the defeat of General Winchester at the River Raisin by the British and Indians, the capture of York (now Toronto) and of Fort George in Canada by the Americans, the repulse of a British attack on Sackett's Harbor, and the defeat of the British and Indians near Thames River, Canada, by General Harrison, Tecumseh being slain. On Lake Erie, September 10th, a British fleet of six vessels was captured after a severe contest by Lieutenant O. H. Perry. On July 5, 1814, the British were defeated at Chippewa by General Brown, and on the 25th at Bridgewater or Lundy's Lane by Generals Brown and Winfield Scott. On September 11th the United States fleet, under Commodore Macdonough, totally defeated the English fleet on Lake Champlain; and on the same day the British army, which had invaded New York and laid siege to Plattsburgh, retreated to Canada. In August, a British fleet arrived in the Chesapeake with an army of 5,000 men commanded by General Ross, who marched on Washington, and, after putting to flight the militia at Bladensburg, took possession of the federal city on the 24th, and burned the capitol, the president's house, and other public buildings. On the next day the British retired to their ships, and on September 12th-13th attacked Baltimore, where they were repulsed by the citizens, and General Ross was killed. After protracted negotiations a treaty of peace was signed at Ghent, December 24, 1814, which provided for the mutual restoration of all territory taken during the war. Nothing was said of the impressment of American seamen, one of the main causes of the war, but the practice was discontinued. Before the news of peace could cross the Atlantic, a British army, 12,000 strong, was defeated at New Orleans (January 8, 1815) by fewer than 5,000 men under General Jackson. In the same year Commodore Decatur compelled the rulers of Algiers, Tunis, and Tripoli to make indemnity for former outrages, and to agree to abstain from depredations on American commerce. The presidential election of 1812 had resulted in the reëlection of Mr. Madison. El-

bridge Gerry was chosen vice-president. At the presidential election of 1816 James Monroe of Virginia, and Daniel D. Tompkins of New York, Democrats, were elected president and vice-president, respectively. Monroe's administration began under very favorable circumstances. Party distinctions had so nearly disappeared, that Democrats and Federalists combined to support the government. He was reëlected in 1820 by all the electoral votes except one. Daniel D. Tompkins was reëlected vice-president. The main event of Monroe's administration was the Missouri controversy, by which, for the first time, the country was disastrously divided upon the slavery question. In the session of 1818-19 a bill was introduced in Congress authorizing the Territory of Missouri to form a constitution, whereupon James Tallmadge of New York moved in the House of Representatives to insert a clause prohibiting any further introduction of slaves, and granting freedom to the children of those already in the Territory on their attaining the age of 25. This motion was carried, but the Senate refused to concur. In the session of 1819-20 the debate was long and acrimonious. The Senate sent to the House the Missouri bill with the prohibition of slavery in that State struck out, but with the proviso that it should not thereafter be tolerated north of latitude 36° 30′. This compromise was at length agreed to. The other great event of Mr. Monroe's administration was the recognition (1822) of the Spanish American republics, which had declared and maintained their independence for several years. In 1823 the president in his annual message put forth a declaration, famous as the "Monroe Doctrine," in which it was announced that any attempt on the part of European governments to extend their system to any portion of this hemisphere would be considered dangerous to the peace and safety of the United States. In 1819, Florida had been ceded by Spain. In the presidential election of 1824 none of the four candidates (Andrew Jackson, John Quincy Adams, William H. Crawford, and Henry Clay) had a majority of the electoral votes, and Adams was elected by the House of Representatives. John C. Calhoun had been elected vice-president by the electoral colleges. Adam's administration was remarkable for order, method, and economy, but party spirit was higher than it had been for many years. At the election of 1828 General Jackson was chosen president, while John C. Calhoun was reëlected vice-president. In his first annual message (December, 1829) the president took strong ground against the renewal of the charter of the United States bank, as not being authorized by the Constitution. Congress, in 1832, passed a bill to recharter it, but Jackson vetoed it; and the charter expired by limitation in 1836. The commercial part of the community generally took the side of the bank, and the party formed in opposition to the president assumed the name of Whigs, while his supporters adhered to the old name of Democrats. In 1832 arose the so-called nullification movement in South Carolina, growing out of the tariff acts of that year and of 1828. A State convention held in November declared these acts unconstitutional and, therefore, null and void, and proclaimed that any attempt by the General Government to collect duties in the port of Charleston would be resisted by force of arms, and would produce the secession of South Carolina from the Union. Jackson had just been reëlected for a second term, while Martin Van Buren was chosen vice-president. The firmness of the president gave an effectual check to the incipient rebellion, and the affair was finally settled by a proposition brought forward in Congress by Henry Clay, the leading champion of the protective system, for the modification of the tariff by a gradual reduction of the obnoxious duties. Other events of Jackson's administration were the removal of the public funds from the United States bank, the extinction of the national bank and the beginning, toward the close of 1835, of a war with the Seminole Indians in Florida. In the presidential contest of 1836, Mr. Van Buren, who was supported by the Democrats, was elected. No candidate having been elected vice-president, Richard M. Johnson was chosen by the Senate. The new administration began under most untoward circumstances. Within two months after the inauguration the mercantile failures in the city of New York alone amounted to more than $100,000,000. The war with the Seminoles was not ended till 1842. At the election in 1840, Harrison and Tyler, the Whig candidates for president and vice-president, were chosen. General Harrison was inaugurated March 4, 1841, and died on April 4th. The presidential office devolved on John Tyler, who soon developed a policy in relation to a national bank much more in accordance with the views of the Democratic party than with those of the Whigs. A treaty was concluded in 1842 with Great Britain by Daniel Webster for the settlement of the northeastern boundary. The Texas question (see Texas) became the prominent issue in the presidential contest of 1844, the Democratic party supporting and the Whigs opposing annexation. The Democratic candidates, James K. Polk for president and George M. Dallas for vice-president, were elected over Henry Clay and Theodore Frelinghuysen. Joint resolutions for annexing Texas as one of the States of the Union were signed by President Tyler March 1, 1845, which led to a war with Mexico in 1846. General Zachary Taylor defeated the Mexicans at Palo Alto May 8th, at Resaca de la Palma May 9th, at Monterey in September, and at Buena Vista February 23, 1847. General Scott landed near Vera Cruz on March 9th with about 12,000 men, immediately besieged that city, which surrendered before the end of the month, and entered the city of Mexico on September 14th, after a series of hard-fought and uniformly successful battles. A treaty of peace was negotiated at Guadalupe Hidalgo, February 2, 1848, by which Mexico granted to the United States the line of the Rio Grande as a boundary, and ceded New Mexico and California. The Oregon dispute with Great Britain, which claimed the whole region, while the United States claimed as far north as latitude 54° 40′, was settled by the treaty of 1846, which adopted the boundary of the parallel of 49°, with a modification giving to Great Britain the whole of Vancouver Island.

In the Democratic National convention of 1848, Lewis Cass was nominated for president, and William O. Butler for vice-president. By the Whig convention Zachary Taylor and Millard Fillmore were nominated. The question of slavery had a powerful influence on the political combinations of this period. In 1846, during the Mexican War, a bill being before Congress authorizing the president to use $2,000,000 in negotiating a peace, David Wilmot, a Democratic representative from Pennsylvania, moved to add thereto a proviso prohibiting slavery in any territory acquired from Mexico. This proviso was adopted in the House, nearly all the members from the free States voting for it, but failed in the Senate from want of time. Several delegates seceded from both the Whig and Democratic conventions of 1848, on the failure of those bodies to pronounce in favor of the principle of the proviso. These, with the Liberty party, formed in 1840, organized a free-soil or free Democratic party, and Martin Van Buren was nominated for president and Charles Francis Adams for vice-president. Van Buren and Adams received at the election, in November, a popular vote of 291,263, but secured no electoral vote. Taylor and Fillmore were elected. The application in 1850 of California for admission as a State roused the slavery controversy, and the difficulty was complicated by the application of New Mexico for admission, and by a claim brought forward by Texas to a western line of boundary which would include a large portion of New Mexico. Finally, a compromise was proposed by Henry Clay in the Senate as a final settlement of the whole question of slavery, and after a long discussion the result aimed at was attained by separate acts, which provided for: (1) the admission of California as a free State; (2) Territorial Governments for New Mexico and Utah without excluding slavery, but leaving its exclusion or admission to the local population; (3) the settlement of the Texas boundary question; (4) the abolition of the slave trade in the District of Columbia; (5) the enactment of a stringent law for the arrest and return of fugitive slaves. President Taylor died July 9, 1850, and was succeeded by the vice-president, Millard Fillmore. The whole weight of his administration was given to the support of the compromise measures. The Democratic National Convention of 1852 nominated for president Franklin Pierce of New Hampshire, who was known to hold opinions satisfactory to the South on the subject of slavery, and William R. King of Alabama for vice-president. The Whig National Convention nominated for president General Winfield Scott, and for vice-president William A. Graham of North Carolina. The National Convention of the Free-soil party nominated John P. Hale for president, and George W. Julian for vice-president. Pierce and King were elected. The passage in 1854 of a bill for the organization of the Territories of Kansas and Nebraska, by which the Missouri Compromise Act of 1820 was repealed, roused great excitement and indignation in the free States. The struggle in Kansas between the anti-slavery and pro-slavery parties (see Kansas) and the assault by Brooks on Sumner (see Sumner, Charles) added to the feeling. Preparatory to the presidential canvass of 1856 the Republican party was formed, which absorbed the entire Free-soil party, the greater part of the Whig party, and considerable accessions from the Democratic. That portion of the Whig party opposed to anti-slavery measures was merged, especially at the South, in an organization called the American party, from its opposition to foreign influence, and particularly to Roman Catholic influence, in our political affairs, but popularly known as the "Know-Nothing Party" from the secrecy of its organization and the reticence of its members. This party nominated Millard Fillmore for president, and Andrew J. Donelson of Tennessee for vice-president. The Democratic National Convention nominated James Buchanan of Pennsylvania for president, and John C. Breckenridge of Kentucky for vice-president. The Republican National Convention nominated John C. Fremont of California for president, and William L. Dayton of New Jersey for vice-president. Buchanan and Breckenridge were elected. The chief interest of Mr. Buchanan's administration centered around the slavery controversy. A constitution for Kansas framed at Lecompton in 1857 was laid before Congress in the session of 1857-58, and its discussion resulted in a schism in the Democratic party, and eventually in its division into two bodies, one of which looked upon Stephen A. Douglas as its leader, while the other supported Breckenridge for the presidency. The Democratic National Convention met at Charleston, April 23, 1860, and a controversy on the subject of slavery immediately arose. A non-committal platform having been adopted, most of the Southern delegates withdrew and adopted a platform of their own, denying the right of Congress to interfere with, and asserting its duty to protect, slavery in the Territories. The convention adjourned May 3d, reassembled in Baltimore June 18th, and nominated Stephen A. Douglas of Illinois for president, and Benjamin Fitzpatrick of Alabama for vice-president. The latter afterward declined, and Herschel V. Johnson of Georgia was substituted. A convention called by the seceding delegates convened at Baltimore on June 23d, and nominated John C. Breckenridge for president, and Joseph Lane of Oregon for vice-president. The "Constitutional Union" party, composed mainly of the American party, nominated for president John Bell of Tennessee, and for vice-president Edward Everett of Massachusetts. The Republican National Convention assembled at Chicago on May 16th, and nominated for president Abraham Lincoln of Illinois, and for vice-president Hannibal Hamlin of Maine. In the election, November 6th, Mr. Lincoln received the electoral votes of all the free States (except three in New Jersey), 180, and was elected. Mr. Bell received the votes of Virginia, Kentucky, and Tennessee, 39; Mr. Douglas the 9 votes of Missouri and 3 from New Jersey; and the remaining Southern States cast their 72 electoral votes for Breckenridge. A convention was at once called in South Carolina, and on December 20th unanimously adopted an ordinance of secession from the Union. Before the end of May, 1861, eleven States had passed ordinances of secession (South Carolina, Missis-

sippi, Florida, Alabama, Georgia, Louisiana, Texas, Virginia, Arkansas, Tennessee, and North Carolina). On February 4th a Congress met at Montgomery Ala., and framed a constitution for the "Confederate States of America." Jefferson Davis of Mississippi was chosen president, and Alexander H. Stephens of Georgia vice-president. After governmental organization, the first warlike act was the bombardment by the Confederates of Fort Sumter, which surrendered April 13, 1861. On July 21st was fought the battle of Bull Run, near Manassas Junction, Va., the first of any magnitude during the war, in which the Union forces under General McDowell were defeated by the Confederates under General Beauregard, and fell back in disorder to Washington. Soon after General McClellan, who had cleared West Virginia of Confederate troops, was placed in command of the army of the Potomac. On August 10th, a battle was fought at Wilson's Creek, near Springfield, Mo., between the Confederates under General McCulloch and the Federals under General Lyon, who fell. This was followed by a varying and indecisive warfare in that State. On August 29th, Forts Hatteras and Clark, N. C., were taken by General Butler and Commodore Stringham; and on November 7th, Port Royal, S. C., by Commodore Du Pont and General T. W. Sherman. On October 21st, a portion of General Stone's command, having crossed the Potomac at Ball's Bluff, about midway between Harper's Ferry and Washington, was defeated by the Confederate General Evans, with a loss of 1,000 out of 1,900 men. On February 6, 1862, the Federal Commodore Foote, with a fleet of gunboats from Cairo, reduced Fort Henry on the east bank of the Tennessee River in Tennessee; and on the 16th Fort Donelson, on the west bank of the Cumberland, surrendered with about 13,000 men to General Grant. The Confederates under McCulloch and others, just driven out of Missouri, were defeated at Pea Ridge, Ark., March 7th-8th. In the night of April 7th, Island No. Ten in the Mississippi, a few miles above New Madrid, Mo., surrendered, after a series of operations by General Pope and Commodore Foote, lasting over a month. The Federal fleet was now enabled to proceed down the river as far as Vicksburg, Miss., receiving the surrender of Memphis, Tenn., June 6th. The battle of Shiloh, Miss., raged two days (April 6th and 7th), when the Confederates under Beauregard fell back to Corinth, leaving the field in the possession of the Union army under Generals Buell and Grant. Corinth was evacuated after some operations against it under General Halleck. An important event of the year was the capture of New Orleans toward the close of April by naval and land forces under Captain Farragut and General Butler. Early in the year Roanoke Island, New Berne, Beaufort, Washington, Plymouth, and other places on the coast of North Carolina were occupied by the Federals. On April 11th, Fort Pulaski, at the mouth of the Savannah River, was reduced. Toward the end of August the Confederate General Bragg started on an invasion of Kentucky from East Tennessee. He captured Richmond, Lexington, and Munfordsville, and on October 1st entered Frankfort. The Union forces under General Buell moving against him, he slowly retreated to Perryville, where, on the 8th, a severe battle was fought. During the succeeding night Bragg continued his retreat, and passed into East Tennessee. About the end of September the Confederates under Generals Price and Van Dorn advanced against Corinth, Miss., now defended by General Rosecrans. Their assaults (October 3d, 4th) were repulsed with great loss. General Rosecrans, having superseded Buell, moved into Tennessee, and marched upon Murfreesboro, where Bragg's forces were concentrated, reaching Stone River near that place on December 29 and 30th. Here bloody engagements occurred December 31, 1862, and January 2, 1863, which resulted in Bragg's retreat. Still greater operations took place on the eastern theater of the war. Brisk fighting occurred in the Shenandoah Valley (March–June), with decided advantage on the whole to the Confederate General Jackson over Banks, Fremont, and others. About April 1, 1862, General McClellan transferred his forces to Fortress Monroe, near which a remarkable naval duel had taken place (at Hampton Roads) and began a movement upon Richmond up the peninsula between the York and James Rivers, fighting at Yorktown, Williamsburg, Seven Pines, Fair Oaks, and Mechanicsville, and, during a retrograde movement to Harrison's Landing on the James, at Cold Harbor, Savage's Station, Frazier's Farm, and, finally (July 1st), at Malvern Hill. About the middle of August his army was transferred to the Potomac. The Confederate army, commanded by General Robert E. Lee, who had succeeded J. E. Johnston, had retired to Richmond, to assume the offensive against Washington. On August 9th an indecisive battle was fought by General Banks against Jackson at Cedar Mountain; and on August 29th and 30th occurred the second battle of Bull Run, between the Union army under Pope and the Confederate forces under Jackson and Longstreet, in which the latter had the advantage. Lee moved to the Potomac above Washington and crossed into Maryland. Jackson captured Harper's Ferry with 11,500 men. McClellan, advancing to meet Lee, found him on September 15th strongly posted across Antietam Creek near Sharpsburg, where, on the two following days, a bloody battle was fought. In the night of the 18th, Lee retreated into Virginia. McClellan crossed the Potomac about November 1st. On the 7th he was superseded by General Burnside, who moved down the Rappahannock to Fredericksburg. Lee had made a parallel movement down the south bank and strongly intrenched himself on the bluffs behind the town. On December 13th, Burnside crossed the river and made repeated attacks on the enemy's position, but was repulsed with great slaughter, and on the 15th returned to the north bank. On January 26, 1863, Burnside was superseded by General Joseph Hooker. About the close of April Hooker began to cross the Rappahannock, and concentrated his forces at Chancellorsville, where a bloody engagement ensued, May 2d–4th, in which the Union army was worsted by the forces under Lee, Hooker recrossing to the north side of the river. General Jackson was mortally

wounded. About the beginning of June, Lee again assumed the offensive. The main body of the Confederate army crossed the Potomac above Harper's Ferry, June 24th-25th, and marching across Maryland entered Pennsylvania. Hooker moved north, so as to cover Washington, and on the 26th crossed the Potomac about half way between Washington and Harper's Ferry. On the 28th he was succeeded by General Meade. The latter advanced into Pennsylvania, and on July 1st, 2d, and 3d the two armies met in the great battle of Gettysburg, which ended in the discomfiture of the Confederate army. On the 4th, Lee began his retreat, and on the 13th recrossed the Potomac. Meade crossed on the 18th, and reached Warrenton on the 25th, where he was soon confronted by Lee on the other side of the Rappahannock. In the west important operations had taken place under Generals Grant and Sherman against Vicksburg. Close pressed, on July 3d, General Pemberton surrendered that Confederate stronghold, with 27,000 men, to General Grant, who, on the 4th, occupied the city. The result of this campaign rent the Confederacy in twain, and decided its fate. Port Hudson, La., on the Mississippi, surrendered after a siege to General Banks, July 8th. Rosecrans remained quietly at Murfreesboro till June 23, 1863, when he advanced, forcing Bragg to retreat to Chattanooga, which was occupied by a detachment on September 9th, Bragg retiring into Georgia and posting his troops in the vicinity of Chickamauga Creek, east of Trenton. Here, September 19th and 20th, occurred a severe engagement, in which the Federals were worsted and fell back to Chattanooga, where they were besieged by Bragg. On October 23d, General Grant arrived and took command. A series of movements was at once initiated, which resulted in driving Bragg from Chattanooga (November 25th) and forcing him to retreat into Georgia. An army under General Burnside, which had occupied Knoxville, and was besieged there by Longstreet, was relieved at the beginning of December. All Tennessee was now recovered. In Arkansas, General Steele had captured Little Rock, September 10th. Fort Wagner, on Morris Island at the entrance of Charleston Harbor, after vigorously repelling a heavy assault, had about the same time been reduced by a regular siege under General Gillmore. On April 20, 1864, Plymouth, N. C., was compelled to surrender to a Confederate force under General Hoke, and as a consequence Washington, N. C., was evacuated by the Federals eight days later. On October 31st, Plymouth was retaken by the Federal fleet. On April 12th Fort Pillow, on the Mississippi about forty miles above Memphis, was taken by assault by the Confederates under General Forrest, and many of its colored defenders were killed after the capture. In August, Forts Gaines and Morgan, commanding the entrance to Mobile Bay, were reduced by a fleet under Admiral Farragut, aided by a land force under General Granger, and the Confederate fleet there was destroyed. West of the Mississippi, the most important movement in 1864 was Bank's disastrous Red River campaign in the early spring. In September and October, General Price with a considerable force made a raid through Missouri. In Virginia, General Grant, who had received the chief command of the Union armies, began on May 4th to cross the Rapidan and advance into the "Wilderness." Here (May 5th and 6th) and at Spottsylvania Court House near by (May 8th–21st) followed a series of sanguinary engagements, which baffled the direct advance. Grant then advanced by a succession of flank movements to the Chickahominy, where, on June 3d, he suffered a disastrous check in the second battle of Cold Harbor. On the 12th, having determined to attack Richmond from the south, he began to move, crossing the Chickahominy below Lee's position, and effecting the passage of the James, June 14th-15th. Lee thereupon retired within the intrenchments covering Richmond. On the 15th and 16th a part of the Union forces unsuccessfully assailed Petersburg, and on the 19th Grant began a regular siege. An invasion of Maryland under General Early in July, which threatened Washington, failed, and led to operations in the Shenandoah Valley, in which General Sheridan nearly destroyed Early's forces at Winchester. On May 5, 1864, General W. T. Sherman started from Chattanooga on his campaign against Atlanta, in which he was ably opposed by Johnston, and vainly assailed by his successor in command, General Hood. Atlanta was evacuated by the Confederates on September 1st. Near the middle of November he started for the coast. Marching through the heart of Georgia without opposition, he reached the vicinity of Savannah, capturing Fort McAllister December 13th, and occupying the city December 21st. On December 15th and 16th, Hood, who had marched north with his army, suffered a bloody repulse before Nashville by Thomas. An attempt in December, by a fleet under Admiral Porter and a land force under General Butler, to reduce Fort Fisher at the mouth of Cape Fear River, commanding the approach to Wilmington, N. C., failed; but on January 15, 1865, it was carried by an assault under General Terry, aided by the fleet. The Federal forces occupied Wilmington on February 22d. The siege of Petersburg and Richmond continued till April 3, 1865, when, after Lee's defeat at Five Forks (March 31st, April 1st), those places were occupied by the Federals, having been evacuated by Lee during the preceding night. Grant vigorously pursued the retreating army, and at Appomattox Court House, on the 9th, compelled Lee to surrender the remnant of his forces, about 27,000 in all, an event which virtually terminated the war. On February 1st, General Sherman started from Savannah on a northward movement through the Carolinas, and reached Columbia on the 17th. General Hardee, being thus taken in the rear, evacuated Charleston, which was occupied by a detachment of General Gillmore's forces on the 18th, and the same day the national flag was raised over Fort Sumter. Sherman reached Fayetteville, N. C., on March 12th. On the 19th the left wing under Slocum encountered the Confederate army under General Johnston at Bentonville, repelled several assaults, and on the 21st, being reinforced, compelled it to retreat

to Smithfield, covering Raleigh. Sherman then occupied Goldsboro, whence he advanced on April 10th. Johnston retreated through Raleigh, and on April 26th surrendered his entire army, then reduced to about 31,000 men. In the meantime, a cavalry force under General Wilson had swept through Alabama from the north, and passed into Georgia, occupying Selma on April 2d, Montgomery on the 12th, and Columbus, Ga., on the 16th. Mobile was taken on April 12th by General Canby, aided by a fleet under Admiral Thatcher. On May 4th, General Taylor surrendered the Confederate forces in Alabama to General Canby. The last fight of the war occurred May 13th, on the Rio Grande in Texas, between Colonel Barrett (Federal) and General Slaughter (Confederate), the latter being victorious. The trans-Mississippi army of the Confederates, the last in the field, was surrendered by Kirby Smith on May 26th. During the war Confederate cruisers, mostly built and fitted out in British ports, and manned by British sailors, scoured the ocean. Evading vessels of war, they destroyed hundreds of merchantmen, doing irreparable injury to the commerce of the Union. The chief of these were the "Alabama," "Chickamauga," "Florida," "Georgia," "Olustee," "Shenandoah," "Sumter," and "Tallahassee." The "Alabama," the most famous, commanded by Raphael Semmes, was sunk off Cherbourg, France, June 19, 1864, by the United States steamer "Kearsarge," commanded by Captain Winslow. After the fall of Richmond, President Davis of the Confederacy fled south, and was captured at Irwinville, Ga., by General Wilson's forces, May 10, 1865. He and some other prominent leaders were imprisoned for a time, but no man was punished for participation in the rebellion. The National Republican Convention assembled at Baltimore on June 7, 1864, and nominated President Lincoln for reëlection, and for vice-president Andrew Johnson of Tennessee. The platform pledged a vigorous prosecution of the war for the suppression of the rebellion, and favored an amendment to the Constitution abolishing slavery. The National Democratic Convention assembled at Chicago on August 29th, and nominated General George B. McClellan for president, and for vice-president George H. Pendleton of Ohio. The election took place on November 8th, the eleven seceded States not participating. McClellan and Pendleton received the electoral votes of New Jersey, Delaware, and Kentucky, 21; Lincoln and Johnson received those of all the other States, 212, and were elected. On March 4, 1865, Lincoln's second inauguration took place. On April 14th he was assassinated by John Wilkes Booth, and the Secretary of State, Mr. Seward, dangerously wounded by another conspirator; and on the following day Vice-President Johnson entered upon the duties of the presidency. The question of emancipation early attracted the attention of the administration and Congress. On April 16, 1862, an act was passed abolishing slavery in the District of Columbia, and on June 9th another act declared that slavery should not thereafter exist in the Territories. On January 1, 1863, Mr. Lincoln issued a proclamation declaring free all persons held as slaves within the States or portions of States then in rebellion. The 13th amendment to the Federal Constitution, declaring that slavery shall not exist within the United States or any place subject to their control, was declared adopted by the proclamation of the Secretary of State on December 18, 1865. The first step toward the reconstruction of loyal governments in the seceded States was the proclamation of President Lincoln of December 8, 1863. Under this scheme governments were organized in Louisiana and Arkansas in the early part of 1864, and in Tennessee early in 1865, but senators and representatives from those States were not admitted to Congress. After the close of the war President Johnson appointed provisional governors for several of the seceded States. But Congress did not approve this scheme of reconstruction, and senators and representatives from those States were not admitted. In June, 1866, a joint resolution adopted by Congress proposed the 14th amendment to the Constitution, extending the rights of citizenship to all classes of native and naturalized persons, guaranteeing the validity of the national debt, forbidding the payment of any part of the Confederate debt or of claims for the loss of slaves, etc. In July senators and representatives were admitted from Tennessee, that State having ratified the 14th amendment. On January 8, 1867, an act was passed over President Johnson's veto, conferring the right of suffrage on colored citizens of the District of Columbia, and on the 24th a similar act became a law for the Territories. The congressional plan of reconstruction was developed in the act of March 2d and the supplementary acts of March 23d and July 19th, each of which was passed over the President's veto. These acts declared that "no legal State Governments or adequate protection for life or property now exist in the rebel States of Virginia, North Carolina, South Carolina, Georgia, Alabama, Mississippi, Louisiana, Florida, Texas, and Arkansas," and divided them into five military districts. The district commanders were required to make a registration of voters, comprising male citizens of the United States 21 years old and upward, without regard to race, color, or previous condition, who had resided in the respective States one year, and were not excluded from holding office by the 14th amendment. Delegates were to be elected in the several States by the registered voters to conventions for framing new constitutions. Only when constitutions had been adopted conferring the right of suffrage on colored persons, and such constitutions had been approved by Congress, and when the 14th amendment had been ratified by the legislatures of the respective States, were senators and representatives to be admitted. The conditions of these acts were complied with in Alabama, Arkansas, Florida, Georgia, Louisiana, North Carolina, and South Carolina in 1868, and in Mississippi, Texas, and Virginia in 1870. But the subsequent action of the legislature of Georgia in excluding colored members led to further measures on the part of Congress, and delayed the final restoration of that State until 1870. The adoption of the

14th amendment was proclaimed July 28, 1868. In February, 1869, a joint resolution proposing the 15th amendment to the constitution, prohibiting the denial or abridgment by any state of the Union of the right to vote on account of color or previous condition of servitude, was passed. The difference between President Johnson and congress on the question of reconstruction led to his separation from the republican party, and to the passage March 2, 1867, over his veto, of the "tenure of office" act, which took from the president the power to remove, without the consent of the senate, such civil officers as are appointed by the president with the consent of the senate. His attempt to remove Mr. Stanton, secretary of war, led to his impeachment, a resolution to that effect passing the house of representatives February 24, 1868. He was tried before the senate and acquitted in May, there being a majority against him, but not the necessary two-thirds vote. In 1867, Alaska was purchased of Russia.

The national republican convention nominated General Ulysses S. Grant for president, and for vice-president Schuyler Colfax. The national democratic convention nominated Horatio Seymour and Francis P. Blair, Jr. The election took place November 3, Virginia, Mississippi, and Texas not voting. Grant and Colfax were elected. In May, 1872, a convention assembled at Cincinnati, composed of persons dissatisfied with President Grant. They styled themselves "liberal republicans." Horace Greeley was nominated for president, and Benjamin Gratz Brown for vice-president. The national republican convention nominated President Grant for reelection, and for vice-president Henry Wilson. The national democratic convention nominated the same candidates as the Cincinnati convention. The election, November 5th, resulted in the choice of Grant and Wilson. One of the prominent events of Grant's administration was the settlement by the treaty of Washington (May 8, 1871), and a subsequent arbitration at Geneva, Switzerland (1871-2), of outstanding disputes with Great Britian, of which the principal (the "Alabama claims" question) related to the charge that the British government had failed in its duties as a neutral in allowing the construction and fitting out of confederate cruisers in British ports. The verdict awarded to the United States an indemnity of $15,500,000 in gold.

In 1876 the republicans nominated Rutherford B. Hayes and William A. Wheeler. The democrats nominated Samuel J. Tilden and Thomas A. Hendricks. Hayes and Wheeler, although they received a minority of the popular vote, were declared by a special commission, whose report was adopted by congress in joint convention, to have been elected by a majority of one in the electoral colleges. In 1876, the centennial exposition was held in Philadelphia, in celebration of the one hundredth year of American independence. The exhibitors, from all parts of the world, numbered 30,865. At the following election (1880) the republicans elected General Garfield, who was shot by Charles J. Guiteau, July 2, 1881, at the Baltimore and Potomac depot, Washington, D.C., and died September 19, 1881. Vice-president Arthur became president.

In 1885, Grover Cleveland succeeded as president. The anti-polygamy bill, virtually disfranchising Mormons, became a law in 1886; also the inter-state commerce bill. A bill passed in 1879 prohibiting the immigration of Chinese as laborers, amended in 1882 making the restriction to last for twenty years, was further amended in 1888 by taking away from the Chinese now or heretofore in the country the privilege of return unless they had previously procured certificates. In 1889, Benjamin Harrison, elected by the republicans, became president, the issue of the campaign being free-trade vs. protection. In 1890 a protective tariff bill, known as the McKinley act, became a law. It increased duties on 115 articles, embracing farm products and manufactures, and decreased those on 190, i. e., manufactures established. It placed sugar on the free list. The coinage act of 1890 made it compulsory for the government to buy 54,000,000 ounces of silver yearly; instead of coining the same, to issue silver certificates therefor. On June 19, 1890, the report of the international American conference was presented, forming the basis of the policy of reciprocity by which treaties were entered into with Germany, France, Spain, Brazil, and the countries of Central and South America. An application of the "Monroe doctrine" in regard to the Samoan group of islands, which had been seized by Germany, resulted in a treaty which saved the absorption of the islands. The Bering sea question, long a diplomatic stumbling-block between the United States and Great Britian, was referred to a board of arbitration. The presidential election in 1892 resulted in the selection of Grover Cleveland. President Harrison retired from office, March 4, 1893. President William McKinley was inaugurated March 4, 1897, and a year later, after a number of attempts to allay the Cuban situation, came the war with Spain. A commission met in Paris to discuss the terms of peace between Spain and the United States, December 28, 1898, Spain ceded to the United States the Philippines, Porto Rico, and Guam, and agreed to retire from Cuba, accepting the offer of $20,000,000, the United States' proposition.

President McKinley was inaugurated for the second term, 1901. He was shot by an assassin on September 6, 1901, and died on the 14th, when he was succeeded by Vice-president Roosevelt, who, after the election of 1904, was inaugurated, 1905, for a full term.

President Roosevelt initiated reforms in railroads, corporations, and trust methods, and pushed forward the construction of the Panama canal. In 1906, a race war occurred at Brownsville, Texas, resulting in the colored troops stationed there being ordered out of the state, and in their subsequent expulsion from the United States army. In March, 1907, the president issued orders for the exclusion of Japanese laborers. This action opened the way for negotiations between the governments of Japan and the United States, which culminated, early in 1908, in the complete restraint of Japanese immigration to the United States.

In June, 1908, the republican national convention at Chicago nominated William H. Taft for president, and James S. Sherman as vice-

president, who were elected, defeating W. J. Bryan and J. W. Kern, the democratic nominees.

The chief features of the Taft administration were the creation of a commerce court and a tariff board, the establishment of postal savings banks and parcel post. The fisheries dispute with England was arbitrated successfully at The Hague. In 1912 arbitration treaties with France and with Great Britain were signed. In 1913 the 16th amendment, or income tax law, was adopted. The presidential election of 1912 resulted in the selection of Woodrow Wilson for president and Thomas R. Marshall for vice-president.

Noteworthy events of Wilson's first term were: ratification of the 17th amendment providing for the direct election of senators by the people; revision of the tariff, known as the Underwood-Simmons tariff law; establishment of federal reserve banks; workmen's compensation act; eight-hour railway wage law; child labor law; purchase of Danish islands.

In April, 1914, the port of Vera Cruz, Mexico, was seized by order of the President and held until September. Upon the outbreak of the European war in August, 1914, the President proclaimed neutrality.

The loss of more than 100 Americans on the British steamer "Lusitania," sunk by a German submarine, May 7, 1915, led to extended diplomatic correspondence with Germany. During 1915 the naval advisory board and the federal trade commission were established, and the government railway in Alaska was begun.

As a result of Villa's raid on Columbus, N. M., early in 1916, a military expedition was sent into Mexico. In midsummer the national guard was mobilized on the Mexican border and the largest appropriations for the army and navy ever made in time of peace were passed by Congress. Following the Mexican disorders and the disturbing actions of Germany with respect to American rights on the high seas, there ensued a nation-wide movement in favor of military and naval preparedness, accompanied by immense civic parades and other demonstrations. The National Defense act, signed June 3, authorized a regular army of 186,000 and a federalized national guard with an eventual peace strength of 425,000. During 1916 Congress erected a shipping board, a farm loan board, a tariff commission, and an employees' commission. A council of national defense was established, the Philippines act was passed, and also the Adamson bill adjusting railway wage problems.

In November, 1916, Woodrow Wilson was re-elected president, defeating Charles E. Hughes, the Republican candidate.

On Jan. 22, 1917, President Wilson stated to the Senate the general terms, embodied in fourteen articles, in accordance with which peace should be fixed at the termination of the war.

In consequence of Germany's declaration, Jan. 31, of unrestricted submarine warfare, President Wilson appeared before the Senate, Feb. 3, and announced the severance of diplomatic relations with Germany.

On Apr. 2, 1917, President Wilson delivered a remarkable address to Congress resulting, on Apr. 6, in a declaration of war against Germany by a vote of 82 to 6 in the Senate and 373 to 50 in the House. On Apr. 17 Congress voted an appropriation of $7,000,000,000 for war purposes. Additional war appropriations raised the total voted by the 65th Congress at its first session to more than $19,000,000,000, of which $640,000,000 was for the aviation service.

During the period of actual war, 1917-18, four government loans were floated, as follows:

First Liberty Loan, 3½ per cent, June, 1917, $2,000,000,000; subscriptions, $3,035,226,850; allotment, $2,000,000,000; 4,500,000 subscribers.

Second Liberty Loan, 4 per cent, October, 1917, $3,000,000,000; subscriptions $4,617,000,000; allotment, $3,808,766,150; 10,000,000 subscribers.

Third Liberty Loan, 4¼ per cent, April, 1918, $3,000,000,000; subscriptions $4,176,516,850; all allotted; 17,000,000 subscribers.

Fourth Liberty Loan, 4¼ per cent, October, 1918, $6,000,000,000; subscriptions $6,989,047,000; all allotted; 21,000,000 subscribers.

The total of the four loans, $16,954,400,000, was purchased by 52,500,000 subscribers. In addition, War Savings Stamps subscriptions to Nov. 20, 1918, amounted to $879,330,000.

Of the grand total of $17,833,730,000 realized from Liberty Loans and War Savings Stamps subscriptions, $8,171,776,666 had been advanced, Nov. 15, 1918, to allied nations, Great Britain receiving $3,945,000,000, France, $2,445,000,000, Italy, $1,210,000,000, Russia, $325,000,000, Belgium, $192,520,000, and the remainder to lesser countries, including Greece, Servia, Liberia, Cuba, and Czecho-Slovakia.

On May 18, 1917, selective conscription was enacted. On June 5 following, 9,587,000 men registered for military service, and on July 13 a call was issued for 678,000 drafted men. At the end of December 195,494 soldiers had been embarked overseas.

On Jan. 21, 1918, the government requisitioned for service all Dutch ships in American harbors. The price of wheat for 1918 was fixed by the President, Feb. 23, at $2.20 per bushel. March 30 daylight saving went into effect throughout the United States. July 2 Secretary Baker announced the arrival of a total of 1,019,115 United States troops in France. Final registration, Sept. 12, of man power, age 18 to 45, of 13,228,000 men, brought the total to 23, 700,000. The congressional elections, Nov. 5, resulted in a Republican majority in the house and the senate. On Nov. 11, an armistice was signed with Germany, and on Nov. 23 American troops entered Rhenish Prussia.

Jan. 18, 1919, the International Peace Conference opened at Versailles, France. President Wilson headed the American delegation. On Feb. 14 President Wilson read to the conference a draft of a constitution for a League of Nations. After prolonged negotiations, a treaty of peace with Germany, incorporating a League of Nations, was signed, June 28, by the American and other delegates at Versailles. Dissatisfaction with various provisions of the covenant of the League, resulted, Nov. 19, in the refusal of the Senate to approve the Treaty of Versailles.

On Jan. 16, 1920, the prohibition amendment, ratified one year previous, became effective. On March 19, the Treaty of Versailles again

failed of ratification by the Senate. The question of the approval of this treaty was then made a party issue. During the ensuing national campaign, the Democrats urged unconditional acceptance, while the Republicans insisted upon safeguarding reservations. At the polls in November the Republicans were victorious, electing W. G. Harding, of Ohio, President, by an immense popular majority and winning control of both houses of Congress.

A resolution declaring a state of peace with Germany, passed by Congress, was signed by the President July 2, 1921. On November 12 following, an Arms Conference of leading nations, assembled at Washington at the call of President Harding, to consider the reduction of naval armaments and other international problems. In January 1922, the Alaskan railway, from Seward to Fairbanks, 467 miles, constructed by the government, was completed.

Utah, which was acquired by the United States in 1848, by the treaty of Guadalupe Hidalgo, was settled by the Mormons in 1847. At first church officers ruled the government, but, with the coming of non-Mormons in 1849, the state of Deseret was organized, a constitution adopted, and an appeal made to congress for admission to statehood. Congress refused admission as a state but organized the territory of Utah, September 9, 1850. After forty-five years the territory was admitted as a state, January 4, 1896. The original constitution grants full suffrage to women.

Vermont. The first white settlement was made at Brattleboro, in 1724, as a military station, by the Massachusetts colonists. It served as a base of operations during the French wars. Immigration set in, and, in 1768, 124 townships had been granted by Governor Wentworth, of New Hampshire, by which colony the fee and jurisdiction of the soil were claimed. A counter-claim was made by New York in 1763, causing a bitter controversy between the two colonies. In 1777, the people of Vermont declared their independence, and, though admission to the confederacy of states was sought, it was refused, and Vermont remained outside of the Union till 1791. New York had surrendered its claims for a financial consideration in 1790. Vermont was the first state to join the original thirteen. Though not confederated with the other colonies against Great Britain, the "Green mountain boys" had signalized their valor and patriotism in a number of hard-fought battles and expeditions. Among these were the capture of Ticonderoga by Ethan Allen, the invasion of Canada, the battles on Lake Champlain, and the two battles near Bennington, which were the primary cause of Burgoyne's defeat at Saratoga.

Virginia. The name Virginia bestowed by Queen Elizabeth in 1584 on the region now known as North Carolina, discovered by Sir Walter Raleigh's expedition, was afterward applied to the whole country to 45° north. In 1606, James I. gave to the London company, which made the first permanent English settlement in America at Jamestown in 1607, the country from 34° to 38° north, extending 100 miles from the sea. The colony was saved from ruin by Captain John Smith two years later. Colonization increased rapidly, and in 1619 a legislative body was formed. In 1641, there were 15,000 English in the colony. In 1676 occurred Bacon's rebellion, brought on by the tyranny of Sir William Berkeley, the governor. The French war of 1754, of which Braddock's defeat was the most notable incident, first brought George Washington into notice. Virginia, under the leadership of Patrick Henry, was the first to protest against British oppression in 1764, and sent representatives to the continental congress in 1775. The most important military event of the Revolution in Virginia was the surrender of Cornwallis at Yorktown, October 19, 1781. Virginia passed an ordinance of secession, April 17, 1861, and in the war that followed became the bloodiest cock-pit of the whole contest. The most important battles were Bull Run, July 21, 1861; Winchester, May 25, 1862; the battles of the peninsular campaign in the summer of 1862; second battle of Bull Run, August 29, 1862; Fredericksburg, December 13, 1862; Chancellorsville, May 2-4, 1863; the battles of the Wilderness campaign in 1864, ending in the investment of Petersburg and Richmond; and the final surrender of General Lee at Appomattox court house, April 9, 1865. Statutory Prohibition was approved by popular vote, 1914.

Washington. The first record in history of the region which is now the state of Washington was the discovery, in 1592, of the strait of Juan de Fuca by a Greek pilot. In 1775 Captain Heceta, a Spanish navigator, discovered the mouth of the Columbia, but was unable to enter the river. In 1789 Captain Kendrick, an American, sailed through the strait of Fuca, through the gulf of Georgia and Queen Charlotte sound. On the 11th of May, 1792, Captain Gray, of the American ship "Columbia," entered the river to which he gave the name of his ship. This gave to the United States the priority of claim to the Oregon region, which then comprised the present states of Washington, Oregon, and Idaho. In October, 1792, an Englishman sailed up and examined the Columbia about 100 miles from the mouth. The coast soon became well-known, and the United States government fitted out expeditions to explore the interior. The most important was that under Lewis and Clark, who, ascending the Missouri, made the Clearwater river, thence entering the Columbia and reaching the Pacific in December, 1805. In 1846 a treaty fixed the boundary at the forty-ninth parallel. The territory of Oregon was formed in 1848, and in 1853 the territory of Washington was established from a part of the original country. Washington was admitted to statehood November 11, 1889. In 1910 the state granted suffrage to women and in 1914 enacted statutory Prohibition.

Waterloo, Battle of, an important battle won by the allied forces over Napoleon, near Waterloo, a Belgian village eleven miles south of Brussels, June 18, 1815. The preliminary battles had been at Ligny, June 16th (when Napoleon had defeated the Prussians under Blücher), and at Quatre-Bras, on the same day (when the allies under Wellington compelled the French Marshal Ney to retire). At Waterloo the French numbered about 72,000. The allies

(British, Dutch, and Germans), under Wellington, had about 67,000; the Prussians (about 50,000 more), under Blücher, came up in time to take part in the close of the battle, and in the pursuit. The battle began about 11.30 A. M. Briefly it may be said to have consisted of a series of brilliant but unsuccessful charges made by the French, and dogged resistance on the part of the British; in the evening the French Old Guard charged, but unavailingly, after which the allies advanced. The French lost about 35,000, and many prisoners; the allies about 22,000. Marshal Grouchy, though he defeated Blücher at Wavre, June 18th, failed to prevent him from joining Wellington, and himself failed to come to Napoleon's aid, though but a few miles distant. The rout of the French was complete, and the disaster final to Napoleon.

West Virginia. Immediately after the ordinance of secession, passed by Virginia in April, 1861, a mass-meeting of citizens convened at Clarksburg, and denounced the action of the convention, recommending the citizens of Northwest Virginia to meet in convention at Wheeling on May 13th. Other meetings sustained the movement, and delegates from twenty-five western counties met in convention, denounced the action of Virginia, and provided for a convention of all the counties of the state adhering to the Union. The latter convention repudiated the action of Virginia, and elected Francis H. Pierpont as governor of the reorganized state of Virginia. The ultimate result was the formation of the new state under the title of West Virginia, and in 1863 the state was admitted to the Union. Military operations in what is now known as West Virginia were mostly confined to 1861.

In 1912 constitutional Prohibition was adopted to take effect in 1914.

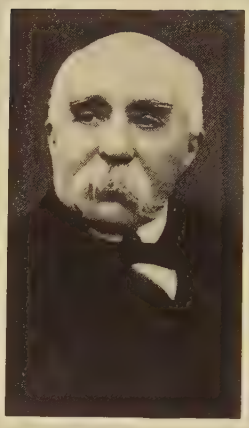
Wisconsin. The name is derived from the River Wisconsin (originally used with the French orthography, *Ouisconsin*), from an Indian word, meaning "wild, rushing channel." The first white people in Wisconsin were French explorers, Jean Nicolet and his followers, who entered the region in 1634. In 1658-59 two fur traders, Radisson and Groseilliers, visited the Mississippi and left a record of their travels. In 1665 a Jesuit mission at La Pointe was founded by Father Claude Allouez, and three years later he established the mission of St. Francis Xavier on the shores of Green bay. In 1673 Father Marquette, accompanying Louis Joliet, reached the Mississippi by passing through Wisconsin, and later Father Hennepin and La Salle traced other waterways within the territory. Trading posts were established soon after this, becoming dependencies of Mackinaw. About the middle of the eighteenth century a settlement was established at Green bay; at the close of the Revolution Prairie du Chien, at the mouth of the Wisconsin, grew into a settlement, and a few years later La Pointe and Portage became permanent trading posts.

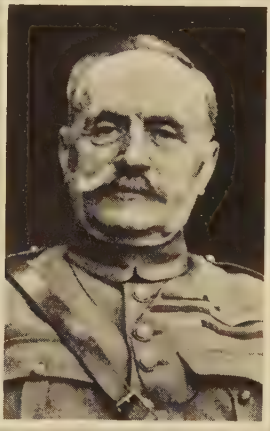
England retained Mackinaw after the treaty of 1783, and American dominion was not felt by the Wisconsin traders until after the war of 1812. By the ordinance of 1787 Wisconsin had been a part of the Northwest territory. In 1800 it was included in Indiana territory. In 1809 it passed to Illinois, and in 1818 to Michigan. In 1828 Fort Winnebago was erected at Portage. In 1832 occurred the Black Hawk war, which almost exterminated the Sacs. The territory of Wisconsin was formed in 1836 out of lands then comprised in the territory of Michigan. It embraced all the land now within the states of Iowa, Wisconsin, and Minnesota, and that part of Dakota which lies east of the Missouri and White Earth rivers. In 1838 all the territory west of the Mississippi, and of a line due north from the source of that river to the international boundary-line, was taken to form the territory of Iowa. Wisconsin became a state in 1848, the seventeenth admitted to the Union.

Woman Suffrage. The first state to grant suffrage to women was Wyoming, which incorporated it in its territorial statutes in 1869. Colorado granted suffrage to women, 1893; Utah and Idaho, 1896; Washington, 1910; California, 1911; Arizona, Kansas, and Oregon, 1912; Alaska, 1913; Montana and Nevada, 1914. In 1913 the women of Illinois were given extensive franchise privileges by state law. In 1917 New York, by a majority exceeding 100,000, voted full suffrage to women. In 1918 Michigan, Oklahoma and South Dakota granted women full suffrage. The House of Representatives, May 21, 1919, and the Senate, June 4, 1919, passed a resolution submitting to the states a proposed federal amendment extending full suffrage to women throughout the nation. On August 26, 1920 the requisite number of states having ratified it, Secretary of State Colby proclaimed the amendment adopted.

Wyoming was first visited by white men in 1742 and 1744, when Sieur de Verendrye, with a party from Canada, entered the territory and discovered the Rocky mountains. John Colter, of Lewis and Clark's expedition of 1806-10, explored the northern part of the section and discovered Yellowstone park. In 1807 Ezekiel Williams made extensive explorations in Wyoming, and in 1812 Robert Stuart's courier party discovered the route to the West known as the "overland trail." In 1834 Sublette and Campbell built Fort Williams, afterward called Fort Laramie, and established the first permanent post in the state. In 1834 the first emigrants to the Pacific coast passed along the overland trail, and in 1836 the first white women crossed the Rocky mountains.

Fort Bridger, the second permanent post, was built in 1842. Fort Laramie was garrisoned in 1849 and made a government post. Indian wars occurred, 1854-1876. In 1866 at the massacre of Fort Phil Kearny, Colonel Fetterman and eighty men were killed. The gold mines of Sweetwater were discovered in 1867, and the city of Cheyenne was founded in the same year. The first passenger train on the Union Pacific railroad arrived in Wyoming in 1867. In 1868 the territory of Wyoming was organized. Cheyenne was designated as the capital, and Laramie was founded. The first territorial legislature convened at Cheyenne in 1869. An act was approved that year giving women the right of suffrage. Coal was discovered in 1869. In 1890 Wyoming was admitted to statehood.





LEADERS IN THE WORLD WAR

Premier Lloyd George
Photo by P. Thompson

General Pershing
Photo by Press Ill. Service

General Diaz
Photo by Int. Film Service

President Wilson
Photo by Clinedinst

Marshal Foch
Photo by Int. Film Service

King Albert
Photo by Harris-Ewing

Premier Clemenceau
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Field Marshal Haig
Photo by Int. Film Service

Marshal Joffre
Photo by Brown Bros.

WORLD WAR

CAUSES OF THE CONFLICT

While there is now no question as to its chief causes, only the historian of the distant future will be in position to state with absolute completeness all of the causes of the recent international conflict which for more than four years ravaged mankind.

Magnitude of the War. The gigantic struggle involved every continent. It affected in some vital way every leading nation. It interfered in scarcely less degree with the peace or with the prosperity of each lesser state. In the end it embattled twenty-eight nations. These embraced more than nine-tenths of the population of the globe!

Its battle-lines flamed on arctic marshes, in snowy mountain passes, in African jungles, in Asian deserts, in Italian valleys, and in the fair fields of France. Its circling navies sped to every ocean. The blood of its combatants was commingled in the farthest seas. Its heroes fought in the sky, in moving forts, and in caverns of the earth. Under its banners were arrayed soldiers from every race, the white, the yellow, the red, and the black. In sheer magnitude it stands absolutely unapproached among all the wars of history. Truly the conflict could not be given a fitter name than that of the WORLD WAR.

Complexity of the Struggle. In the very nature of the case, the interplay of causes, motives, and issues involved was exceedingly complex. Further, those who have lived through this period of tremendous stress, whether as actors on its battlefields or as noncombatants in remote regions, have all been too close to local aspects of the struggle to judge with accuracy the comparative importance of what they have actually seen.

Only the carefully assembled, verified, and digested total of all these observed facts will yield final, correct conclusions. A long period of close study will be required in order to assign with exactness the relative rank of the various causes of the war. Locked archives of the nations will be opened. Secret treaties will be brought to light. The concealed compacts of emperors, kings, chancellors, and diplomats will be made known. In a generation or two, perhaps, a complete, authoritative history of the world war may be written on the basis of all these revealed, proved, and well-weighed facts.

The Inciting Incident. The assassination of the Austrian crown prince Franz Ferdinand at Serajevo, Bosnia, June 28, 1914, precipitated the most inexcusably criminal war of human record. But this unfortunate event was a mere incident. The murder of a Habsburg prince by a Jugo-Slav conspirator no more caused the ensuing conflict than a push-button under a finger-thrust causes an electric light. It merely turned on a death-dealing current already generated by the Habsburgs and Hohenzollerns of Vienna and Berlin.

The attack on Servia brought Russia into the war. The violation of Belgium brought Great Britain into it. Brutal defiance of national rights at sea brought the United States into it. Yet none of these events of themselves engendered the war or impelled the world to unite in arms against the Teutonic powers.

The Real Cause. The great actuating cause was the insensate ambition of Germany to impose its imperial autocratic rule upon the entire world. Behind it were the racial and national jealousies of Teuton and Slav, of German and Frenchman, of German and Britisher. All these antagonisms had been fostered and fanned well-nigh into flame by a half century of increasing Teutonic aggression. Behind it, too, were the German belief in and desire for war in order to fulfil German destiny and to promote German *Kultur*. Behind it also was the German will to conquer the Entente powers as a step to European supremacy and thence to world power.

Back of it, too, were fifty years of universal military training in Germany, of constant drill in the use of arms, of unceasing military and naval preparation, all conducted with scientific precision, with boasted thoroughness, and complete to the most minute detail.

Whatever the relative importance of the various contributing factors, the great outstanding fact, made clearer at each new stage of the conflict, is Germany's responsibility for causing and continuing the war and the inexpiable guilt of the Hohenzollerns for its shocking atrocities.

All diplomatic efforts to prevent the war at its beginning were thwarted by Germany's ominous opposition. All reasonable endeavors to end it afterwards were rendered futile by German presumptions of victory and of the right to dictate a conqueror's peace.

An Imperial Conspiracy. Leaving to future historians the selection of the exact term with which to denote it, there was, in essence, a criminal conspiracy between the Hohenzollerns of Germany and the Habsburgs of Austria to establish a world empire by force. Confident that they possessed the power, they determined to impose their rule regardless of treaties, national honor, or human rights. These worshippers of militarism resolved to stop at nothing, to respect no law of God or man, but to rob, pillage, desecrate, burn, starve, enslave, torture, outrage, and murder, — in short, to terrorize by every extreme of frightfulness all who dared to oppose them.

Germany expected to strike quickly and to win overwhelming military victory before the other powers were prepared to resist. By exacting staggering indemnities from conquered nations, she planned to transform war costs into handsome profits with which to extend still further her rule of blood and iron. To achieve this monstrous design Germany completed vast armaments and built more and more deadly instruments of destruction. With like premeditation and thoroughness Germany placed her secret agents in every country. By a most elaborate system of espionage she charted her campaigns in advance and rehearsed military attacks in detail years before they were actually delivered.

German Propaganda. By cunningly concealed propaganda, Germany systematically sought to lull peaceful democratic nations into a false sense of security. Pacifism and disarmament were covertly encouraged, sometimes to the point of financial support. Even England, under pacifist influences, actually reduced her already puny forces to the "contemptible little army" that the Kaiser later particularly requested his armed hordes to destroy.

Side by side with espionage and the secret encouragement of pacifism, a vigorous campaign was conducted to foster belief in the superiority of everything German. The whole world was to be steeped with the idea that the German is a superman, that German genius transcends all other genius, and that the German unapproachably excels in every field. According to this widely proclaimed view to emulate the German would be useless and to compete with him impossible.

Americans, especially, were induced to believe that German thoroughness and German efficiency surpassed that of every other nation. But above all else, the paid tools of the Hohenzollerns extolled German military invincibility. They affirmed that the German army could not be resisted and that to defeat it was beyond human power. They maintained that German military armaments, munitions, equipment, tactics, leadership, and morale were of a superior order, entirely beyond comparison with that of any other nation. Whole peoples, at times, were brought under the spell of this invincibility myth, though it was exploded whenever Belgians, French, British, or Americans met Germans on equal terms.

Germany's Allies. The foregoing facts show how deliberately and with what infinite pains the Hohenzollerns prepared to overthrow the other nations of the world. Yet to this overwhelming evidence must be added the character and the record of Germany's allies.

The foremost of these were the Habsburgs, a decaying medieval dynasty which, aided by a small minority of Teutons, ruled the dissimilar peoples of Austria-Hungary with iron repression. Habsburg monarchs for centuries plunged Europe into its most sanguinary wars, usually to settle some dynastic contention or to gratify some imperial whim. The terrible Thirty Years' war was brought on by the Habsburgs. A Habsburg emperor, after the French Revolution, sent armies to destroy the newly founded republic in France. The Habsburg rule long sought to keep Greece under the yoke of the Turk. It was a Habsburg prince, Maximilian, who tried to enthrone himself emperor of Mexico in outright defiance of the United States and the Monroe Doctrine.

Further, it was the Habsburgs who fought to prevent Italy from becoming a nation. Again, it was the Habsburgs of Austria who, in 1908, annexed Bosnia and Herzegovina in violation of a solemn treaty. By these same Habsburgs the Balkan states in 1913 were deprived of the fruits of their victories over the Turks. It was the Habsburgs who planned to crush Servia and to conquer a path to Asia through Slavic countries. Yet these are but a few fragments from the black record of this greedy, reactionary house. Such was the character of the feudal autocracy chosen by Germany as her chief copartner in the proposed subjection and despoilment of the nations.

The next in order among the accomplices of Germany was the unspeakable Turk, whose sultan was proclaimed the Kaiser's special friend and whose religion the Kaiser assumed to defend. The civilized world will never read the record of this partnership without a shudder of horror. With the Kaiser's implied consent, hundreds of thousands of Christians in Armenia were starved and slaughtered by the Turks. To aid further the spread of Hohenzollern *Kultur*, the sultan of Turkey, with encouragement from Berlin, proclaimed a "holy war," calling on Moslems throughout the entire world to rise and slay their Christian neighbors.

Last of all was the traitor czar of Bulgaria, the infamous Ferdinand who betrayed his own people and, at the behest of William II, set his armies at the throats of their fellow Slavs in the Balkans. This venal tyrant was the first to abandon his Hohenzollern master when the "invincible" German armies crumbled in "victorious" retreat.

Democracy vs. Autocracy. The consummating evidence of Hohenzollern guilt was found in their barbarous conduct of the war, in their brutal inhumanities on land and sea, and in their impudent hypocrisy in defending them as necessary punishments inflicted in "defense" of the fatherland.

As the conflict progressed, the issue became very clear. It was autocracy against democracy, — a life and death struggle between monarchical militarism and the free peoples of the world. How nearly the conspiring Hohenzollerns and their despotic allies succeeded in their sinister designs and how completely the liberty-loving nations overthrew them at last is shown in the following chronology of important events of the WORLD WAR.

NOTE: For governments and for geographical boundaries as they existed at the beginning of the war, see the sections on Geography, page 507, and Government, page 585. For changes in governments and rulers resulting from the war, consult the section on History, page 9, and also Rulers of the World, pages 146 and 605, in connection with the following Chronology of the World War.

SEVERANCE OF DIPLOMATIC RELATIONS

The nations that formally severed diplomatic relations, whether later declaring war or not, are as follows:

Austria against Japan,	Aug. 26, 1914
Austria against Portugal,	Mar. 16, 1916
Austria against Servia,	July 26, 1914
Austria against United States,	Apr. 8, 1917
Bolivia against Germany,	Apr. 14, 1917
Brazil against Germany,	Apr. 11, 1917
China against Germany,	Mar. 14, 1917
Costa Rica against Germany,	Sept. 21, 1917
Ecuador against Germany,	Dec. 7, 1917
Egypt against Germany,	Aug. 13, 1914
France against Austria,	Aug. 10, 1914
Greece against Austria,	July 2, 1917
Greece against Turkey,	July 2, 1917
Guatemala against Germany,	Apr. 27, 1917
Hayti against Germany,	June 17, 1917
Honduras against Germany,	May 17, 1917
Nicaragua against Germany,	May 18, 1917
Peru against Germany,	Oct. 6, 1917
Santo Domingo against Germany,	June 8, 1917
Turkey against United States,	Apr. 20, 1917
United States against Germany,	Feb. 3, 1917
Uruguay against Germany,	Oct. 7, 1917

DECLARATIONS OF WAR

According to the State Department's list, the nations involved in the conflict made declarations of war as follows:

Austria against Belgium,	Aug. 28, 1914
Austria against Japan,	Aug. 27, 1914
Austria against Montenegro,	Aug. 9, 1914
Austria against Russia,	Aug. 6, 1914
Austria against Servia,	July 28, 1914
Belgium against Germany,	Aug. 4, 1914
Brazil against Germany,	Oct. 26, 1917
Bulgaria against Servia,	Oct. 14, 1915
China against Austria,	Aug. 14, 1917
China against Germany,	Aug. 14, 1917
Costa Rica against Germany,	May 23, 1918
Cuba against Germany,	Apr. 7, 1917
Cuba against Austria-Hungary,	Dec. 16, 1917
France against Austria,	Aug. 13, 1914
France against Bulgaria,	Oct. 16, 1915
France against Germany,	Aug. 3, 1914
France against Turkey,	Nov. 5, 1914
Germany against Belgium,	Aug. 4, 1914
Germany against France,	Aug. 3, 1914
Germany against Portugal,	Mar. 9, 1916
Germany against Rumania,	Sept. 14, 1916
Germany against Russia,	Aug. 1, 1914
Great Britain against Austria,	Aug. 13, 1914
Great Britain against Bulgaria,	Oct. 15, 1915
Great Britain against Germany,	Aug. 4, 1914
Great Britain against Turkey,	Nov. 5, 1914
Greece (Prov.Gov.) against Bulgaria,	Nov. 28, 1916
Greece against Bulgaria,	July 2, 1917
Greece (Prov.Gov.) against Germany,	Nov. 28, 1916

Greece against Germany,	July 2, 1917
Guatemala against Austria-Hungary,	Apr. 22, 1918
Guatemala against Germany,	Apr. 22, 1918
Hayti against Germany,	July 15, 1918
Honduras against Germany,	July 19, 1918
Italy against Austria,	May 24, 1915
Italy against Bulgaria,	Oct. 19, 1915
Italy against Germany,	Aug. 28, 1916
Italy against Turkey,	Aug. 21, 1915
Japan against Germany,	Aug. 23, 1914
Liberia against Germany,	Aug. 4, 1917
Montenegro against Austria,	Aug. 8, 1914
Montenegro against Germany,	Aug. 9, 1914
Nicaragua against Germany,	May 24, 1918
Panama against Austria,	Dec. 10, 1917
Panama against Germany,	Apr. 7, 1917
Portugal against Germany, (authorizing intervention)	Nov. 23, 1914
Portugal against Germany, (granting military aid)	May 19, 1915
Rumania against Austria, (accepted by Austria's allies)	Aug. 27, 1916
Russia against Bulgaria,	Oct. 19, 1915
Russia against Germany,	Aug. 7, 1914
Russia against Turkey,	Nov. 3, 1914
San Marino against Austria,	May 24, 1915
Servia against Bulgaria,	Oct. 16, 1915
Servia against Germany,	Aug. 6, 1914
Servia against Turkey,	Dec. 2, 1914
Siam against Austria,	July 22, 1917
Siam against Germany,	July 22, 1917
Turkey against Allies,	Nov. 23, 1914
Turkey against Rumania,	Aug. 29, 1916
United States against Austria-Hungary,	Dec. 7, 1917
United States against Germany,	Apr. 6, 1917

CHRONOLOGY OF THE WORLD WAR

Events of 1914

JUNE—1914

28. Archduke Franz Ferdinand, crown prince of Austria-Hungary, and his wife, the Duchess of Hohenburg, while attending military maneuvers on the occasion of their first official visit to Serajevo, Bosnia, are assassinated by Gavrio Prinzip, a Servian student.

JULY—1914

23. Austria-Hungary sends an ultimatum to Servia, accusing the Servian government of complicity in murder of the crown prince, Franz Ferdinand, and making upon the Servian government demands which no state could fully meet without an actual surrender of its independence as a nation. The Austro-Hungarian note further stipulated that Servia must signify acceptance of these demands within 48 hours.

24. Russia, seconded by Great Britain and France, demands that Austria-Hungary prolong the term of her ultimatum to Servia. When urged by Great Britain and Russia to support this demand for delay, Germany refuses and the proposal is, likewise, flatly rejected by the Austro-Hungarian government

25. Servia replies to the Austro-Hungarian note in extremely conciliatory terms, agreeing to all demands not involving the surrender of her sovereignty, and proposes, in case her answer is not considered satisfactory, to refer the decision to the international tribunal at The Hague or to a council of the great powers.

26. Sir Edward Grey, British foreign secretary, suggests a conference of representatives of the four powers, England, France, Germany, and Italy, for the purpose of arriving at a plan to prevent complications between Austria and Russia. To this proposal France and Italy immediately agree but Germany refuses.

27. Answering an inquiry from the Prince Regent of Servia, Czar Nicholas II urges Servia to neglect "no step which might lead to a settlement" but promises that if, despite Russia's pacific endeavors, war should ensue, "Russia will in no case disinterest herself in the fate of Servia."

28. Evidently with full approval of Germany and in disregard of all proposals for mediation, the Austro-Hungarian government declares war against Servia at noon (Tuesday).

29. Russia decrees partial mobilization against Austria. Sir Edward Grey urges the German government to suggest any method whereby the influence of the four powers, Great Britain, France, Germany, and Italy, can be used together to prevent war between Austria and Russia. Serious complications between Germany and Russia begin to arise.

30. Germany pronounces objectionable Sazonov's proposal that Russia would desist from military preparation provided Austria should withdraw from her ultimatum such points as violate the sovereign rights of Servia.

31. While Austria-Hungary ostensibly was willing to satisfy Russia, relations between Germany and Russia become extremely critical. Austria proclaims general mobilization of her armies. Russia follows with a similar proclamation. At 7 P. M. Germany sends France an ultimatum demanding within 18 hours a declaration whether, in the event of a war between Germany and Russia, France would remain neutral. Upon being questioned by England, France explicitly agrees to respect the neutrality of Belgium but Germany declines to make such a promise. At midnight Germany sends a 12-hour ultimatum to Russia demanding that mobilization cease not only against Germany, but against Austria-Hungary.

AUGUST—1914

1. As demobilization would have rendered Russia defenseless against a combined German and Austrian attack, no reply was made to Germany's ultimatum. At 7:10 P. M. Germany declared war against Russia. France, as Russia's ally, sent a noncommittal reply to the German ultimatum which was followed at 5 P. M. by an order for the mobilization of the French army. Italy, though bound by treaty to the Triple Alliance, but regarding Germany and Austria-Hungary as aggressors, declares that she will remain neutral.

2. German troops, violating the neutrality of an independent state, invade Luxemburg. Germany presents a 12-hour ultimatum to Belgium demanding free passage of German armies through Belgium to attack France.

3. Belgium refuses to accede to the German demands, stating that France had already (July 31) pledged herself to respect Belgian neutrality. At 6:45 P. M. Germany declares war against France.

4. German military forces invade Belgian territory at Gemmenich. King Albert, telling the German emissaries that "Belgium is a nation, not a road," appeals to Great Britain, France, and Russia (who, with Germany, had by the treaty of 1839 solemnly guaranteed the neutrality of Belgium) for armed assistance in repelling the German invasion. Sir Edward Grey dispatches an ultimatum to Berlin demanding that Germany respect the neutrality of Belgium. Germany refuses on the ground of "military necessity," the German chancellor, Von Bethmann-Hollweg, angrily rebuking Great Britain for making war just for a "scrap of paper." At 11 P.M. Great Britain declares war against Germany.

5. German forces attack the forts of Liége, Belgium, and are repulsed with terrific loss.

6. Austria-Hungary declares war against Russia.
Servia declares war against Germany.

7. After reducing two of the Liége forts by heavy artillery, German forces enter the city.
Russia declares war against Germany.

8. French troops occupy Mulhouse.
First English forces land in France.
Montenegro declares war on Austria-Hungary.
9. Montenegro declares war on Germany.
Austria declares war on Montenegro.
12. German heavy artillery begins reduction of the remaining Liége forts.
13. France and Great Britain declare war on Austria.
16. Austrian forces cross the Save into Servia.
17. Belgian government is moved to Antwerp.
Last Liége fortresses fall.
18. Servians defeat Austrians at Jadar.
19. Canada authorizes expeditionary force.
Germans occupy Louvain.
20. Germans occupy Brussels.
French in Lorraine retreat across the frontier.
Joffre assumes command of the allied armies in France.
Russians defeat Germans at Gumbinnen.
21. Germans levy a war tax of $10,000,000 on Liége and $40,000,000 on Brussels.
22. Belgian fortress of Namur falls.
23. Japan declares war on Germany.
French forces, greatly outnumbered, are defeated at the battle of Charleroi, Belgium, compelling rapid retreat into France.
Von Kluck, with about 200,000 men, attacks Sir John French, with two British divisions, about 80,000 men, at Mons, Belgium.
24. Joffre orders general strategic withdrawal of the allied armies to the line of the Marne.
Gen. French leaves precarious positions at Mons and begins notable 6-day retreat.
26-27. Germans sack and burn Louvain.
British fight stubbornly around St. Quentin and Cambrai.
27. Austria-Hungary declares war against Japan.
28. Austria-Hungary declares war on Belgium.
British forces end retreat on the Noyon-Chauny-La Fère line, after losing 230 officers and 13,000 men and inflicting losses estimated three times as great upon Von Kluck's divisions.
British fleet under Sir David Beatty engages, in Helgoland Bight, a portion of the German fleet, sinking three armored cruisers and two destroyers.
29. Germans capture La Fère.
30. The French evacuate Amiens.
31. Name of Russian capital changed from St. Petersburg to Petrograd.
Paris prepares for siege.
Von Hindenburg defeats Russians at Tannenberg, capturing 70,000 prisoners.

SEPTEMBER—1914

1. Allied armies continue retreat.
Russians defeat Austrians in Galicia.
2. Russian armies capture Lemberg.
3. French government removed from Paris to Bordeaux.
4. German army under Von Kluck, upon reaching a point near Louvres, about 17 miles from Paris, the nearest approach made by German forces during the war, turns away from the capital and marches east to strike at the French center behind the Marne.
5. German army begins advance south of the Marne. Joffre disposes the allied forces for a great offensive, ordering his armies to attack and "to die rather than retreat."
6. Battle of the Marne begins, on a line extending from Ermenonville to Verdun. With upwards of 1,000,000 men, Joffre confronts German armies totaling 900,000.
7. General engagement continues on the entire line of the Marne with the Allies on the offensive.
Germans capture the fortress of Maubeuge.
8. Gen. Gallieni, the "savior of Paris," forms a new army, transports 80,000 men in automobiles eastward from the capital and attacks the rear of Von Kluck's army which is simultaneously attacked on flank by the English army.
9. Left wing of the Allies continues to advance, the British crossing the Marne.
Russian army of 1,500,000 overwhelmingly defeats 1,000,000 Austrians in Galicia.
Servia wins victory over Austrians on the Drina.
10. Battle of the Marne ends with German armies in full retreat to the Soissons-Rheims line, thus marking the failure of Germany's efforts to crush the French center and capture Paris.
11. Battle in France continues with Allies steadily forcing back the German armies.
13. The great German retreat ends on a previously prepared line from Soissons to the Argonne Forest. Battle of the Aisne begins.
14. French forces reoccupy Amiens.
15. The French reoccupy Rheims.
16. The Russian armies attack Przemysl.
21. Russians capture Jaroslav.
22. Servians defeat Austrians near Krupani.
24. The Allies occupy Péronne.
25. German forces penetrate to St. Mihiel and occupy Camp des Romains.
28. Rheims cathedral bombarded by Germans. Battle of the Aisne closes with both armies approaching a deadlock which remained practically unbroken for nearly four years.
Turkey closes the Dardanelles.
29. Germans begin siege of Antwerp.

OCTOBER—1914

1. British Indian troops arrive at Marseilles.
3. Russians severely defeat Germans in a great five days' battle near Augustowo.
9. Antwerp surrenders to the Germans.
13. Germans occupy Lille.
Allies stoutly resist German advance toward the Channel ports. British capture Ypres.
Belgian government removed to Havre.
14. German forces enter Bruges.
Canadian forces arrive at Plymouth.
15. Germans occupy Ostend.
20. Germans forced to retreat in Poland.
30. Belgians flood Yser valley, preventing German advance toward Calais.

NOVEMBER—1914

1. German squadron of five cruisers defeats British squadron of four vessels off Coronel, Chile, sinking the "Good Hope" and the "Monmouth."
3. Russia declares war against Turkey.
7. Tsingtao surrenders to the Japanese.
9. German cruiser "Emden," after sinking 25 merchant ships in the South Pacific, is driven ashore at Cocos Islands by Australian cruiser "Sydney."
10. Germans capture Dixmude and cross Yser canal.
11. Russians take Johannisburg, East Prussia.
20. British parliament authorizes an additional army of 1,000,000.
22. Germans heavily attack Ypres, held at great sacrifices by British.
27. Russians occupy Czernowitz.
30. Battle of Flanders for possession of the Channel ports, after six weeks of terrific struggle, ends with the Allies firmly holding their lines from the Lys to the sea. Under the eyes of the Kaiser, several hundred thousand picked German troops had been thrown against the Anglo-Belgian and French forces. The Belgians and the British sacrificed the greater part of their original armies, but, supported by the French under the direction of Gen. Foch, withstood all onslaughts, maintained control of Calais and Dunkirk, and inflicted upon the German army losses estimated at upwards of 200,000 men.

DECEMBER—1914

2. Austrian forces capture Belgrade.
6. Russians begin bombardment of Cracow.

8. British recapture Passchendaele.
Servians inflict crushing defeat on Austrian armies, recapturing Ushitza and Valievo.
Powerful British squadron under Vice-Admiral Sturdee, destroys German squadron of five cruisers off Falkland Islands, sinking the "Scharnhorst," "Gneisenau," "Nürnberg," and "Leipzig." The "Dresden" temporarily escaped.
12. Montenegrins inflict further defeat on retreating Austrians and occupy Vishegrad.
14. Servians recapture Belgrade and expel all Austrians from Servian soil.
16. German cruisers bombard Hartlepool, Scarborough, and Whitby on east coast of England.

Events of 1915

JANUARY—1915

6. Russians capture Kimpolung in southern Bukowina, near the Rumanian frontier.
14. British forces occupy Swakopmund, German Southwest Africa.
17. Russians capture Kirlibaba pass in the Carpathians.
24. Important naval battle off Dogger Bank, between German battle-cruiser squadron raiding coast of England and British squadron under Admiral Beatty, results in sinking of German battle-cruiser "Blücher" and the flight of the remaining German ships to protected waters.
29. German airships bombard Yarmouth, King's Lynn, and other towns in Norfolk, England.
30. Russians occupy Tabriz, Persia.

FEBRUARY—1915

1-4. Gen. von Mackensen, with 140,000 men, desperately attacks Russians on a 7-mile front at Bolimov, 40 miles west of Warsaw.
4. Germany proclaims the waters around the British Isles a "war zone" after Feb. 18th, declaring her intention to sink every enemy merchant ship found in the zone.
5-8. Russian reenforcements from Warsaw overwhelm the German advance and force Von Mackensen's whole army back to the Rawka.
7. Von Hindenburg, after concentrating 9 army corps against 4 Russian army corps in East Prussia, drives the invaders from German soil.
8. Russian warships attack Trebizond.
9. The French capture the heights of Les Eparges but fail to expel the Germans from St. Mihiel salient.
10. The United States government warns Germany that the German government will be held to a "strict accountability" if through its proposed policy of submarine warfare any American merchant ships are destroyed or citizens of the United States lose their lives.
12. German forces occupy Mariampol, Russia.
18. Austrians recapture Czernowitz.
20. In freeing East Prussia the Germans claim the capture of 75,000 prisoners and 300 guns.
24. Germans under Von Hindenburg capture Przasnysz and advance on Ostrolenka.
25. Allied fleet completes the reduction of the forts at entrance to the Dardanelles.
26. German advance against Russians checked near Przemysl.
27. Russian counter-stroke recovers Przasnysz, with 10,000 German prisoners, and forces Von Hindenburg to retreat to the Prussian frontier.

MARCH—1915

3. Austro-Germans, advancing into Galicia, are thrown back to Kolomea.
10. British attack German lines at Neuve Chapelle, capture the village but fail to gain the commanding ridge east of the town. The net result of this severe battle was an advance of about a mile on a 3-mile front, at a cost of 13,000 men.
12. British expedition under Gen. Jan Smuts wins important victory at Kitovo Hills, German East Africa.
14. German cruiser "Dresden" sunk by British.
18. Great Anglo-French naval attack on inner forts of Dardanelles fails; three battleships lost.
20. Germans bombard Soissons cathedral.
22. Russians capture the great Austrian fortress of Przemysl, after a siege of four months, taking 120,000 prisoners.
28. British steamer "Falaba" sunk with an American citizen, Leon C. Thrasher, on board.

APRIL—1915

4. Replying to Ambassador von Bernstorff's protest against the shipment of munitions to the Allies, President Wilson states that any change in the laws of neutrality during the progress of a war would be a departure from neutrality and that placing an embargo on munitions would constitute such a change.
7. Russians capture Smolnik and the Rostok pass in the Carpathians.
11-12. Turks in Mesopotamia defeated at Shaiba.
17. The British in Flanders capture Hill 60. This action marked the beginning of a series of terrific assaults and counter-assaults, continuing for six weeks, known as the Second Battle of Ypres.
22. German attack, using asphyxiating gas for the first time, crushes British positions near Ypres.
24. Allied line near Ypres further driven back by second attack of chlorine gas.
25. British begin landing troops at six points on Gallipoli peninsula.

MAY—1915

1. Von Falkenhayn completes preparation for great Austro-German campaign against Russia under Von Mackensen, assembling 26 army corps and over 4000 guns.
American steamer "Gulflight" attacked by German submarine; 3 American lives lost.
2. Austro-Germans begin a general offensive in Galicia. Von Mackensen inflicts disastrous defeat on Russians at Gorlice.
4. Italy renounces the Triple Alliance.
7. British passenger steamship "Lusitania" is sunk without warning by German submarine off Irish coast, with a loss of 1152 lives including 114 Americans, among them Elbert Hubbard, Albert G. Vanderbilt, Charles Frohman, and J. M. Forman.
8. Germans, invading Courland, enter Libau.
9. Gen. d'Urbal, assisted by Foch, Joffre, and later by Pétain, with seven army corps and 1100 guns, begins the great Battle of Artois.
10. Repeated attacks by Anzac forces fail to capture Turkish positions at Gallipoli.
Russian offensive gains against the Austrians.
11. French capture Notre Dame de Lorette and Carency, in the Artois sector.
13. President Wilson sends a note calling upon the German government to disavow the illegal sinking of the "Lusitania" and other ships.
15-17. Russians severely defeated on the San.
17. French capture the left bank of the Yser-Ypres canal virtually ending the Second Battle of Ypres which, despite local successes due to the use of poisonous gas, resulted in German defeat.
20. British end 12-day attempt to carry Aubers Ridge with the view of retaking Lille. The net result of the battles of Aubers Ridge and Festubert was an advance of 600 yards on a front of 4 miles.
23. Italy declares war on Austria-Hungary to take effect May 24.
24. San Marino declares war against Austria.
27. Italians cross the Isonzo river near Monfalcone and capture Pilcante and Ala.
Russians force Germans at Sieniawa to retreat across the San with heavy loss.

28. British and French capture important Turkish positions on Gallipoli peninsula.

Austrian aeroplanes bombard Venice.

Germany makes a noncommittal reply to President Wilson's demands concerning submarine warfare.

31. French capture Souchez, one of the last important actions in the Battle of Artois.

JUNE—1915

1. Austrians occupy Stryj.

3. Austro-Germans recapture Przemysl.

British on the Tigris occupy Amara.

5. Final actions of the Second Battle of Ypres close with Bixschoote and Lizerne again in allied hands, but with Hill 60, St. Julien, and Zonnebeke in German possession.

9. Russians resume offensive in Galicia.

The American government, "contending for nothing less high and sacred than the rights of humanity," renews its demands upon Germany.

11. The Italians capture Gradisca.

16. French capture Althof and Steinbruck.

17. Italians capture important heights in the Gorizia sector.

21. Gen. Pétain completes the capture of the "Labyrinth," bringing to a close the great Battle of Artois. While failing of its main object, namely, the capture of the important coal-field and railway center of Lens, the conflict proved that German positions of considerable depth could be carried by sufficient artillery and mining preparation. In this prolonged struggle each side is estimated to have lost 60,000 men.

22. Austro-Germans recapture Lemberg.

28. Austro-Germans launch gigantic offensive against whole Russian line, the concentration for Mackensen's campaign to expel Russians from Galicia aggregating 2,000,000 men and 1500 heavy guns.

JULY—1915

1-7. Russians administer severe check upon Austrian advance at battle of Krasnik.

6. The Italian government proclaims a blockade of the Adriatic.

8. Germany sends a second unsatisfactory answer to the American demand concerning unjustifiable methods of submarine warfare.

9. Entire German force in German Southwest Africa surrenders to Gen. Botha.

18. Russians begin evacuation of Warsaw.

21. The United States government sends a pointed note to the German government stating that "it cannot believe that the Imperial government will refrain from disavowing the wanton act of its naval commander."

23. French forces in Kamerun capture Moopa.

24. Italians destroy one of the forts at Plava.

30. Germans use flame projectors in capturing British trenches east of Ypres.

Austro-German forces reach Lublin, Poland.

German army crosses Vistula north of Ivangorod.

AUGUST—1915

1. Austria-Hungary protests to the United States against shipments of war supplies to the Entente Allies, asserting that such trade is a violation of neutrality.

4. Immense Russian fortress of Ivangorod captured by the Germans.

5. Germans capture Warsaw.

6. Allied reenforcements landed at Suvla Bay fail to effect the capture of Gallipoli.

9. Austro-Germans break through Russian line between Ostrolenka and Vilna.

10. Austro-Germans capture important Russian fortress of Lomza but are unable to disrupt the main Russian line.

11. Russians evacuate Van, Armenia.

12. President Wilson, answering the Austro-Hungarian protest concerning trade in war supplies, reiterates his earlier statements to Germany (*See* April 4), and points out that to prohibit such trade would make every nation an armed camp and greatly encourage militarism.

15. Germans pierce the Russian line between the Narew and the Bug.

Austrian aeroplanes bombard Venice.

17. Victorious German armies capture Kovno and break the strong Russian line on the Niemen, thereby compelling the abandonment of Brest-Litovsk and the further withdrawal of the Russians.

19. Russian fortress of Novo Georgievsk falls under fire of German heavy caliber guns.

The British liner "Arabic" is sunk by a German submarine; two American citizens drowned.

21. Failing to drive the Turks from their lines at Gallipoli, the British resort to trench work.

Italy declares war against Turkey.

23. Austro-Germans capture Kovel, compelling the Russians to evacuate important positions.

25. Austro-Germans occupy Brest-Litovsk.

SEPTEMBER—1915

1. Ambassador von Bernstorff assures Secretary of State Lansing that German submarines will not thereafter sink either belligerent or neutral passenger ships without warning.

1-2. Russians abandon the great fortress of Grodno and the entire Niemen-Bug line, leaving the Teutonic armies in full possession of Poland and its immense fortresses.

6. Czar Nicholas assumes command of the Russian armies, supplanting the Grand Duke Nicholas.

7. Austro-Germans capture Dubno.

8. Russian armies, striking back, defeat Austro-Germans at Tarnopol and Tremblowa.

18. Germans take Vilna.

23. Bulgaria orders general mobilization and concentrates troops on Servian border.

Italians capture heights of Monte Coston.

24. Anglo-French begin the Battle of Loos.

25. Loos village and Hill 70 captured by the English after a terrific struggle. By counter-attacks the Germans recover most of Hill 70.

French take Souchez cemetery but lose it in German counter-attack. In Champagne the French penetrate German lines on a 15-mile front.

Greece decrees general mobilization.

28. The French attack Vimy Ridge securing the western slopes and most of Givenchy Wood, ending the disastrous Battle of Loos. The failure of the Allies was due to lack of sufficient British reserves and an unfortunate delay in beginning the French advance. The British alone lost 50,000 men.

29. The British force the Turks to evacuate Kut-el-Amara and to retreat on Bagdad.

OCTOBER—1915

1. The Russians finally halt the great Austro-German drive commanded by Von Hindenburg. The battered Russian armies, though managing to maintain a united front, had suffered unparalleled reverses for five months, losing 300,000 killed and wounded and 1,100,000 prisoners.

4. French bring the great Battle of Champagne to a close after taking Massiges plateau and Tahure ridge, together with 23,000 prisoners, many guns, and much war material. The French staff officially estimates total German losses at 140,000.

5. Count von Bernstorff notifies the American government that Germany had given strict instructions to submarine commanders which would absolutely prevent any repetition of incidents similar to the "Arabic" case.

French and British troops are landed at Saloniki.

6. Austro-German forces estimated at 300,000 under command of Von Mackensen cross the Danube near Belgrade to cooperate with the Bulgarian armies in crushing Servia.

9. Austro-Germans occupy Belgrade.
11. Russians break Austrian line and cross the Stripa.
Bulgarians begin attacks on Servia at four points.
13. Edith Cavell, British nurse, is shot by Germans at Brussels.
English troops capture portions of the famous "Hohenzollern Redoubt."
14. Bulgaria declares war on Servia.
15. Great Britain declares war on Bulgaria.
16. France declares war on Bulgaria.
17. Great Britain offers Cyprus to Greece for fulfilment of Greek treaty obligations to Servia.
18. Servia protests to the United States against German extermination of civil population.
19. Italy declares war on Bulgaria.
Russia declares war on Bulgaria.
21. Italians begin general offensive from the Tyrol to the Adriatic.
22. Greece, declining to abandon her neutral policy, refuses to aid Servia in return for the cession of Cyprus.
31. Russian counter-offensive in Baltic stops German advance at Platokovna.

NOVEMBER—1915

5. Nish, Servian war capital, surrenders.
7. Italian forces under Garibaldi capture Col di Lana.
10. Russians, assisted by their fleet, beat back German attempts to capture Riga.
24. Servian government is removed to Scutari.
25. Gen. Townshend, in Mesopotamia, is compelled to fall back to Kut-el-Amara where, with about 15,000 men, he is besieged by the Turks.
29. The German government finally declares that all possible provisions should be made for the safety of persons on a vessel about to be sunk at sea. Apparently this constituted a signal diplomatic victory for the American contention for the safety of innocent persons on the high seas. But, as in case of the treaty guaranteeing the inviolability of Belgium and many time-honored provisions of international law, this agreement was later regarded by Germany as only a "scrap of paper."
30. Teutonic allies capture Prisrend, Servia, with 16,000 prisoners, also Monastir.
The German-Bulgarian campaign results in the complete subjection of Servia. Surviving Servian troops numbering less than 100,000 are driven into Montenegro and Albania; pursued by the Austrians.

DECEMBER—1915

6. First meeting of the joint war council of the Allies is held at Paris.
7. Allied forces in Servia retire before Bulgarians.
10. Bulgarians in Monastir tear down American flag from Red Cross hospital and seize stores.
15. Sir Douglas Haig is appointed commander-in-chief of British armies in France.

Events of 1916

JANUARY—1916

8. Complete evacuation of Gallipoli by the British and French.
11. Russian armies under the Grand Duke Nicholas march through the mountain passes into Turkish Armenia.
13. Austrian forces occupy Cettinje, the capital of Montenegro, and rapidly complete the conquest of the country.
16. At the end of three weeks' fighting the Russians abandon their attempt to recapture Czernowitz, after suffering losses of about 60,000 men. Though a costly military failure, this demonstration in Bukowina prevented the central powers from persuading Rumania to join them, and, by forcing the transfer of Mackensen with 250,000 men to the Russian front, relieved the hard-pressed Allies in the Balkans.
19. King Nicholas of Montenegro, following the complete defeat of his armies, flees to Italy.
23. The Austrians occupy Scutari, Albania.
24. The seat of the Montenegrin government is transferred to Bordeaux, France.
25. The Albanian port of San Giovanni di Medua captured by Austrian forces from Montenegro.
29. German Zeppelin bombards Paris.

FEBRUARY—1916

10. Germany announces armed merchant ships will be sunk without warning.
16. Russian forces under the Grand Duke Nicholas inflict crushing defeats upon the Turks in Armenia, capturing the strongly fortified city of Erzerum, with 13,000 prisoners and 300 guns, the total Turkish losses being estimated at 60,000 men.
21. The Crown Prince, having concentrated 14 German divisions against 3 French divisions on a 7-mile sector, from Brabant to Herbebois, where the front line defenses were about 8½ miles from Verdun, begins the most stupendous series of attacks on a fortified position known to military history. By a withering artillery fire of unparalleled volume in which hundreds of thousands of high explosive shells of all calibers from 4 to 14 inches were used, the French first line trenches on a three-mile front were demolished and occupied by German infantry on the evening of the first day.
22. Germans, attacking the Verdun defenses, carry Caures Wood with a part of Haumont Wood, and, after leveling Haumont village with a hurricane of shells, take it by storm, compelling the evacuation of Brabant, and crushing by sheer weight of numbers all French counter-attacks.
23. Furious bombardments supported by heavy columns of infantry enable the Germans, though suffering enormous losses, to reach Samogneux, Beaumont, and Ornes in their attack on Verdun.
24. At the end of four days of gigantic attack, after firing, it is estimated, not less than 2,000,000 high explosive shells against the French positions and sacrificing tens of thousands of lives in massed assaults, the Germans have battered their way through the French defenses, until they stand before Douaumont, the first of the permanent forts guarding Verdun. At night, under cover of blinding clouds of snow, the decimated and exhausted defenders of the outworks of Verdun retire to prepared positions of great strength on Côte du Poivre (Pepper Hill), 1140 feet high, and on the hill plateau of Douaumont, 1290 feet high.
Portugal, urged by England, fulfils her treaty obligations to her ally and requisitions 44 German and Austrian ships interned in Portuguese waters.
25. Gen. Pétain, bringing heavy reenforcements, arrives at Verdun and, with inspiring energy, reorganizes the demoralized defense. The Germans, massing 18 divisions, about 400,000 men, on a front of 4½ miles, from Pepper Hill to Hardaumont, throughout the day sent wave upon wave of massed infantry up the snow-covered slopes of the Douaumont plateau, only to be broken and destroyed in appalling numbers by the French machine-gun and artillery fire. Late in the day, by a final supreme assault, viewed from a distant hill by the Kaiser himself, a Brandenburg regiment stormed and took the old dismantled fort of Douaumont, but failed to secure command of the summit of the plateau.
26. Gen. Pétain orders a counter-attack which sweeps the Germans back down the hillside and cuts off the Brandenburgers in Fort Douaumont.
Austro-Bulgarian forces occupy Durazzo, Albania, following its evacuation by the Italians who had there safeguarded the escape of more than 100,000 Servians to Corfu, where they reorganized as a fighting force and later joined the allied armies at Saloniki.

29. At the end of four days of incessant battle the German attacks on Douaumont slacken. The initial impact of the German drive is broken. The arrival of heavy French reenforcements, transported in thousands of motor lorries, marks the passing of the crisis in the Verdun defense.

MARCH—1916

2. Germans begin artillery attacks on Verdun positions west of the Meuse.

5. German Zeppelins raid coast of England.

German cruiser "Moewe" reaches a home port after capturing 15 vessels in the South Atlantic.

6. The Germans, northwest of Verdun, capture Forges and Regnéville.

10. The Germans, northwest of Verdun, recapture Crow Wood.

14. The Germans capture lower portion of Le Mort Homme, or Dead Man's Hill, northwest of Verdun.

20. The Germans attack heavily west of the Meuse, near Verdun, and capture Avocourt Wood.

22. The Germans, northwest of Verdun, take Haucourt Hill.

French passenger steamer "Sussex" sunk without warning by German submarine, 50 lives lost; all American passengers saved.

27-28. First war council of the Entente Allies meets in Paris.

30. Russian hospital ship "Portugal" sunk by Turkish submarine.

APRIL—1916

1. At the end of a twelve-day battle for Hill 304, northwest of Verdun, the Germans gain Malancourt and Haucourt.

2. After desperate attacks continuing over three weeks, the Germans, northeast of Verdun, enter Caillette Wood and take the village of Vaux.

3. The French before Verdun recapture the village of Vaux and recover most of Caillette Wood.

8. The total German advance since March 7 at Verdun amounts to a mile on a 6-mile front.

9-11. The Crown Prince sacrifices nine infantry divisions in ferocious assaults on the French line northwest of Verdun in vain attempts to capture Hill 304 and Le Mort Homme.

18. The Russians occupy Trebizond.

After terrific bombardment of the French lines, twelve German regiments attacking Pepper Hill near Verdun are thrown back with great losses.

23. Strong Turkish forces occupy Quatia, Egypt, 25 miles east of the Suez canal.

29. British army of 9000 men under Gen. Townshend surrenders to Turks at Kut-el-Amara.

MAY—1916

15-June **18.** Great Austrian offensive against Italians in the Trentino.

Austrian attack penetrates Italian front between the Adige and the Astico.

15. The British capture portions of the crest of Vimy Ridge.

20. The Russians join the British on the Tigris.

Sixty German batteries, northwest of Verdun, concentrate their fire on Le Mort Homme. German infantry captures the French first-line positions.

22. The French, in front of Verdun, recapture Fort Douaumont.

24. The Germans again expel the French from Fort Douaumont.

29. Culmination of German attacks on Verdun positions west of the Meuse. Adding five fresh infantry divisions, the Germans gain Cumières, Caurettes Wood, and the summit of Le Mort Homme.

31-June **7.** After an eight days' battle the Germans northeast of Verdun capture Fort Vaux, opening, with the capture of Fort Douaumont, a breach in the permanent fortifications of Verdun only 4½ miles from the city.

31. Great naval engagement off the Danish coast, called the Battle of Jutland, or the battle of the Skager-rak. The British grand fleet under Admiral Jellicoe encountered the German high seas fleet under Admiral von Scheer off Jutland, about 200 miles from the German naval base at Wilhelmshaven and about 400 miles from the British base in the Orkney Islands. The action began when the scouting squadron of battle cruisers under Vice-admiral Sir David Beatty met the leading ships of the German column. At 3:48 P. M. the battle cruisers of each side became engaged at a range of 10½ miles. The engagement continued with the advance squadrons of British battle cruisers attacking, regardless of losses, the entire German fleet of battleships and battle cruisers. At 6 P. M. the main division of the British fleet under Admiral Jellicoe came upon the scene and swept the German fleet off the battle area. In the obscuring haze and mist which increased as evening came on, fighting continued intermittently for about two hours. The battle developed into a retreat and a pursuit, the British cruisers and destroyers inflicting heavy losses upon the German ships during the night. A few days after this severe engagement the British announced their losses to the world. The Germans, on the contrary, concealed and denied theirs, and the Kaiser proclaimed a stupendous "victory" for the German navy. However, the morning following the conflict found the British fleet patrolling the entire battle area. The alleged "victorious" German high seas fleet never again attempted to dispute the control of the North sea. Its next close approach to the British fleet was on the occasion of its surrender to Admiral Beatty, Nov. 21, 1918.

The British lost the battle cruisers "Queen Mary" (27,000 tons), "Indefatigable" (18,750 tons), "Invincible" (17,250 tons); the armored cruisers "Defence" (14,600 tons), "Warrior" (13,660 tons), "Black Prince" (13,660 tons); two flotilla leaders and six destroyers, ranging from 935 to 1850 tons, together with about 5700 officers and men, including rear-admirals Hood and Arbuthnot.

The German losses are not definitely known but the following were admitted by the German admiralty: battleship "Pommern," battle cruiser "Lutzow," four fast cruisers and five destroyers, and about 2500 officers and men.

JUNE—1916

4-30. Russian offensive in Volhynia and Bukowina.

5. British cruiser "Hampshire" destroyed by torpedo or mine near the Orkney Islands. Lord Kitchener, British field-marshal and secretary of state for war, his staff, and other prominent men en route to Russia on a secret mission lose their lives. Only 12 out of 670 persons on board survive.

6. The Russians recapture fortress of Lutsk.

10. The Russians capture Dubno and other fortresses, taking 35,000 prisoners.

15. Russians defeat Austrians on the Stripa, taking 14,000 prisoners.

17. Czernowitz taken by the Russians who occupy all Bukowina.

22. Arabian tribes in revolt against the Turks capture Mecca.

23-24. The Germans, northeast of Verdun, capture Thiaumont Redoubt and Fleury.

27. King Constantine of Greece decrees complete demobilization of the Greek army.

30. Russians capture Kolomea, in Galicia.

JULY—1916

1. French and British begin powerful offensive, known as the Battle of the Somme, which continues until November. This relieves the German pressure on Verdun but fails to break the German lines.

5. The French storm German second-line positions on the Somme, capturing Hem and Estrées.

14. The British, using cavalry for the first time since 1914, penetrate German second line north of the Somme on a 4-mile front.
17. The Russians repulse the Austrians southwest of Lutsk, taking 13,000 prisoners.
25. The British occupy Pozières captured from the Germans on the Somme front.
28. Capt. Charles Fryatt is executed by the Germans at Bruges, following his conviction by court-martial of attempting to ram a German submarine on March 28, 1915.

AUGUST—1916

1. British naval forces occupy the port of Sadani, German East Africa.
5. The British rout the Turks at Romani, near the Suez canal, capturing 3000 prisoners.
9. The Italians capture Gorizia, taking 10,000 prisoners.
16. The French advance around Maurepas on the Somme front.
19. The British advance at Thiepval and High Wood on the Somme front.
British cruisers "Nottingham" and "Falmouth" sunk by German submarines in the North sea.
27. Rumania declares war on Austria and strikes at the passes of the Transylvania Alps.
Italy declares war on Germany.
31. Turkey and Bulgaria declare war on Rumania.

SEPTEMBER—1916

2. Bulgarian and German forces enter Rumania on the Dobrudja frontier.
6. The Bulgarians and Germans capture Turtukai, taking 20,000 Rumanian prisoners.
12. Bulgarians and Germans occupy the Greek port of Kavala.
15. The British, using a new type of armored car, capture positions on the Somme front.
23. German Zeppelins raid England.
26. Combles, on the Somme front, captured by the Allies.
29. Rumanian forces severely defeated in Transylvania.

OCTOBER—1916

7. The Rumanians in Transylvania withdraw to the Carpathian frontier.
8. The German submarine U-53 sinks, off Nantucket, Mass., four British and two neutral steamers.
10. The Italians capture Novavilla, taking 6400 prisoners.
11. The Allies demand the surrender of the Greek fleet.
22. The Rumanians lose their important Black Sea port, Constanza, to the Germans.
24. The French under Gen. Mangin recapture Fort Douaumont, Fleury, Caillette Wood, Thiaumont, Damloup, and all the other important positions lost to the enemy during the siege of Verdun. In less than seven hours three French divisions recover the ground which the flower of the German armies had struggled in terrific daily battles for seven months to obtain, at a loss to the Germans estimated at 250,000 to 500,000 men, and to the French of nearly an equal number. In this final operation which marked the climax of the costly German failure, the French took 6000 prisoners with total casualties of less than 5000. The moral effect was a humiliating defeat to Germany while the French rejoiced that their battle-cry "Passeront pas!" (*They shall not pass*) had been proved true.

NOVEMBER—1916

1. The Italians advance east of Gorizia, capturing Bossvica and 5000 prisoners.
6. British liner "Arabia" sunk without warning in the Mediterranean.
7. The French take Ablaincourt and Pressoire.
13. The British advance on the Ancre, taking 3500 prisoners.
18. Austro-Germans in Rumania reach the Wallachian plain.
25. Austro-German forces continue the invasion of Rumania, capturing important towns.
28. The Rumanian capital is removed from Bucharest to Jassy.
The Greek provisional government under Venizelos declares war on Germany and Bulgaria.

DECEMBER—1916

1. The Allies land marines in Greece, seizing Piræus and Athens. King Constantine agrees to the demands of the Allies.
6. Bucharest captured by the Austro-Germans.
10. Lloyd George, made British prime minister following the resignation of Asquith, announces new war cabinet.
12. Gen. Nivelle appointed commander-in-chief of the French armies.
15. The French, attacking northeast of Verdun, penetrate the German lines, capturing important works, 11,000 prisoners, and 115 cannon.
18. President Wilson asks the belligerent nations to state their war aims.
26. Germany, replying to President Wilson's note, ignores his request for definite statement of peace terms and suggests a peace conference.

Events of 1917

JANUARY—1917

8. Germans capture Fokchany, taking 4000 prisoners, and Gabresska with 5400 prisoners, practically completing the conquest of Rumania.
10. The allied governments state their terms of peace.
17. Great Britain repeats to President Wilson the allied demand for the expulsion of the Turks from Europe and mentions specifically the return of Alsace-Lorraine to France and of Italia Irredenta to Italy.
24. German troops thrust back the Russian lines near Riga.
25. The Germans capture Russian positions on the Galician front.
31. Germany proclaims unrestricted submarine warfare, declaring her intention to sink without warning all merchant ships in the war zone, specifying that one American vessel a week will be permitted to sail on a prescribed route under certain limited conditions.

FEBRUARY—1917

1. Ten vessels are sunk with the loss of 8 lives on the first day of unrestricted submarine warfare.
3. The United States severs diplomatic relations with Germany. Count von Bernstorff is given his passports.
6. Fourteen ships, including the passenger steamer "Port Adelaide," are sunk by submarines in the war zone.
8. Brazil, Peru, Chile, Uruguay, Bolivia, Panama, Cuba, and Argentina refuse to recognize the German blockade.
10. Ambassador Gerard leaves Germany.
16. British troops in Mesopotamia force the Turks back on the Tigris.
22. Seven Dutch steamers torpedoed by a German submarine while sailing supposedly under a safe conduct from Germany.
24. Kut-el-Amara captured by British.
25. The British attacking German positions on the Ancre capture Serre.
26. President Wilson asks authority to arm merchant ships.

28. The U. S. government publishes a communication from Zimmermann, German foreign minister, to the German minister at Mexico City, suggesting an alliance against the United States whereby Mexico would be given opportunity to reconquer Texas, New Mexico, and Arizona.

MARCH—1917

1. Submarine warfare during February resulted in the sinking of 134 entente vessels and 54 neutral vessels, total tonnage, 465,770.

11. The British under Gen. Maude capture Bagdad.

12. The American steamship "Algonquin" sunk by a German submarine.

15. Revolution in Russia compels abdication of Czar Nicholas II.

17. Allied forces in France advance on a front of 45 miles. The British capture Bapaume, and the French take Roye and Lassigny.

17-19. Germans in France retire to Hindenburg line, evacuating 1300 square miles of territory on a front of 100 miles, from Arras to Soissons.

21. The American steamer "Healdton" torpedoed by German submarine, with loss of 21 lives.

22. German raider "Moewe" returns from a second cruise in the Atlantic during which 27 vessels are said to have been sunk.

24. The British announce retaking of 54 towns and 600 square miles of territory in districts evacuated by the Germans in their strategic retreat to the Cambrai-St.Quentin-Laon line.

26. The "St. Louis," first American armed ship defying German submarine blockade, arrives in a British port.

29. The British in Palestine defeat the Turks near Gaza.

APRIL—1917

1. The armed American steamer "Aztec" is torpedoed without warning by a German submarine off Brest, with the loss of 11 lives.

3. The Germans repulse the Russians in Volhynia.

6. The United States declares a state of war exists with Germany.

9. Canadian troops capture Vimy Ridge. Other British attacks near Arras make important gains.

13. The British advancing between the Scarpe and the Loos, capture Vimy, Givenchy, and other positions about Lens.

14. War credit of $7,000,000,000 voted by Congress; loans of $3,000,000,000 to the Allies authorized.

18. After a three days' battle between Soissons and Rheims, the French announce the capture of 17,000 prisoners.

23. Strong British attacks near Vimy, supported by tanks, gain at all points on 8-mile front.

British airplanes destroy 39 German machines with a loss of two.

30. The Russians in Armenia evacuate Mush.

MAY—1917

4. American naval squadron begins operations in European waters.

The French capture Craonne, near Rheims.

12. The British and French announce captures, in operations since April 9, of a total of 49,579 men, 444 field guns, and 943 machine guns.

14. The Italians begin an offensive from Tolmino to the sea, advancing their lines east of Gorizia and on the Carso.

15. Gen. Pétain succeeds Gen. Nivelle as commander-in-chief of the French armies, with Gen. Foch as chief of staff.

16. The British capture Bullecourt.

18. Selective Service act passed by Congress.

24. The Italians capture important positions near Jamiano, taking 10,000 prisoners.

30. The armed American steamer "Silver Shell" destroys an enemy submarine in the Mediterranean.

JUNE—1917

4. Austrian counter-attacks regain positions lost to Italians near Jamiano.

Gen. Brusilov succeeds Gen. Alexeieff as commander-in-chief of the Russian armies.

5. Registration in United States of 9,587,000 men of draft age.

7. The British, storming the German lines on a 9-mile front, capture the whole Messines-Wytschaete ridge, taking 6400 prisoners. Nineteen mines, burrowed for a year beneath the ridge, and filled with hundreds of tons of explosives, were exploded at the moment of attack, the shock being perceptible in London.

13. Gen. Pershing and his staff arrive in France.

25. The French win an important position on the Chemin des Dames.

26. The first American troops are landed in France.

JULY—1917

1. Russian army, led in person by Kerensky, begins offensive in Galicia, capturing 10,000 prisoners but ending later in a disastrous retreat (July 19–Aug. 3).

3. German attacks on the Chemin des Dames are repulsed.

American expeditionary force reported to have safely arrived in a French port after defeating two submarine attacks en route.

7. Twenty-two German airplanes bombard London and the Isle of Thanet, killing 59 people.

10. By sudden attack the Germans capture British positions east of the Yser, north of Nieuport.

20. Kerensky becomes premier of Russia.

The Austro-Germans in Galicia advance against the Russians on a 26-mile front, capturing important positions.

23. The Russians in Galicia retreat on a 155-mile front from the Sereth to the Carpathians.

31. The French and British in attacks near Dixmude capture many villages, including Verlorenhoek, St. Julien, and Bixschoote.

AUGUST—1917

2. The Kerensky government in Russia renews its pledge to the Allies to continue the war.

3. The Austro-Germans capture Czernowitz which changes hands for the tenth time during the war.

8. German troops under Mackensen reach the Susitza river; Russo-Rumanian forces retire in the Okna valley.

14. China declares war on Germany and Austria.

15. The Canadians, advancing near Loos, capture Hill 70, dominating Lens. The Germans burn St. Quentin cathedral.

19-22. The Italians resume the offensive on a 37-mile front, capture Selo, and take 13,000 prisoners.

20. The French capture important positions north of Verdun, including Dead Man's Hill.

29. The Austro-Germans in Rumania occupy important positions abandoned by mutinous Russian troops.

SEPTEMBER—1917

1. The Italians on the Isonzo report the capture of 14 fortified mountains and 27,000 prisoners.

3. The Germans occupy Riga, evacuated by the Russians.

8. United States department of state publishes text of messages of Count Luxburg, German chargé d'affaires at Buenos Ayres, to the German foreign office in Berlin. These were sent by the Swedish legation in Argentina to the Swedish foreign office in Stockholm as their own official messages. They contained the recommendation of Count Luxburg

that Argentine merchant ships should either be allowed to pass the blockade or else be "sunk without a trace" (*spurlos versenkt*).

14. The Italians capture Monte San Gabriele. Russia proclaimed a republic, with Kerensky premier.

21. The Germans on the Dvina capture Jacobstadt, and repulse the Russians on a 25-mile front.

26. The British, attacking the German lines near Ypres, capture Zonnebeke.

28. The British in Mesopotamia take Ramadie, capturing the Turkish army under Ahmed Bey.

29. The Italians take important heights on the edge of the Bainsizza plateau.

OCTOBER—1917

1. German airplanes raid London.

9. Franco-British attack near Ypres results in capture of Poelcappelle.

12. German navy lands forces in the Gulf of Riga.

17. The Russian fleet, defeated in the Gulf of Riga, is trapped in Moon Sound.

18. The Germans, attacking by land and sea, capture Moon Island. The Russians begin evacuation of Reval.

23. The French, near Soissons, take Malmaison fort and 8000 prisoners.

24. Austro-Germans inflict disastrous defeat upon the Italians at Caporetto, compelling their withdrawal on a wide front with heavy losses.

25. The French drive the Germans across the Oise-Aisne canal, taking 12,000 prisoners and 120 cannon.

26. The Austro-Germans reach the Italian frontier, increasing their captures to 60,000 prisoners and 300 guns.

Brazil declares war on Germany.

28. The Austro-Germans capture Gorizia. The Italian losses resulting from the Austro-German breach at Caporetto exceed 100,000 prisoners and 700 guns.

31. The Austro-Germans reach the line of the Tagliamento, capturing 60,000 prisoners and several hundred guns from the Italian rearguard.

NOVEMBER—1917

3. German raid on a front-line salient in France occupied by American troops repulsed with loss of Private Thomas F. Enright, of Pittsburgh, Corporal James B. Gresham, of Evansville, Ind., and Private Merle D. Hay, of Glidden, Iowa, the first Americans killed in action.

5. The Italians abandon their lines on the Tagliamento and begin to retreat on a 93-mile front.

7. Overthrow of Kerensky and provisional government of Russia by the Bolsheviki.

The Austro-Germans, outflanking the Italian rearguard on the Tagliamento, capture 17,000 prisoners.

8. Gen. Diaz appointed commander-in-chief of the Italian forces, succeeding Cadorna.

9. The Austro-Germans take Asiago and reach the line of the Piave which the Italians successfully defend.

16. Clemenceau made premier of France.

20-22. Battle of Cambrai. Successful surprise attacks delivered by British under Gen. Byng, between St. Quentin and the Scarpe, penetrate German positions west of Cambrai to a depth of five miles on a 10-mile front, tanks being employed to break down wire entanglements. Over 8000 prisoners and many guns were captured.

22. The Bolsheviki government in Russia announces demobilization of a part of the armies.

23. The Italians repulse powerful Austro-German attacks from the Asiago plateau to the Brenta.

27. Russian Bolshevik envoys enter German lines and arrange negotiations for an armistice.

30. German attacks south of Cambrai penetrate British line to a depth of two miles on a 7-mile front, taking 4000 prisoners.

DECEMBER—1917

1. First meeting of the Allies' supreme war council at Versailles.

2. Surprise counter-attack by Germans near Cambrai forces British to give up a fourth of the ground gained by Gen. Byng's advance of Nov. 20-22. Berlin claims the capture of 6000 British.

3. Bolshevik emissaries begin negotiations for an armistice with the Germans at Brest-Litovsk.

5. The British evacuate Bourlon Wood and other positions west of Cambrai.

6. Explosion of munitions vessel wrecks Halifax.

The Austro-Germans take Monte Sisemol on the Asiago plateau, capturing 4000 prisoners.

7. The United States declares a state of war exists with Austria-Hungary.

10. British forces under Gen. Allenby occupy Jerusalem.

11. Powerful Austrian attacks against the Italians between the Brenta and the Piave are repulsed.

14. Allied naval council formed.

23. Austro-German forces on the Asiago plateau storm Col del Rosso and Monte Valbella, cutting off 6000 Italians from the main army.

Events of 1918

JANUARY—1918

2. Germany demands of Russia Poland, Courland, Esthonia, and Lithuania.

8. President Wilson states to the Senate fourteen points or conditions in his view necessary for the establishment of peace.

18. Lloyd George declares to trades union conference: "We must either go on or go under."

20. British, in naval action at entrance to the Dardanelles, sink the Turkish cruiser "Midulla," formerly the German "Breslau," and disable the "Sultan Yawuz Selim," formerly the German "Goeben."

28-29. Italian forces capture Col del Rosso and Monte Valbella.

FEBRUARY—1918

6. Mackensen in ultimatum to Rumania demands that peace negotiations begin in four days.

9. Central Powers and Ukraine sign a treaty of peace.

11. Bolsheviki declare end of the war.

15. Germany renews war on Russia.

18. The Bolsheviki capture Kiev.

21. Germans advance in Russia, capturing Minsk and Rovno, with enormous food and war supplies.

23. The United States embassy leaves Petrograd for Vologda.

MARCH—1918

3. By treaty of peace with the four Central Powers, signed at Brest-Litovsk, the Bolshevik government pledges to evacuate Ukraine, Esthonia, Livonia, Finland, Erivan, Kars, Batum, and the Aland islands, also to pay a large indemnity.

9. Russian capital removed from Petrograd to Moscow.

13. German troops occupy Odessa.

18. Great Britain and the United States take over Dutch shipping in British and American ports.

21. Germans begin tremendous offensive on a 50-mile front from Arras to La Fère.

23. The Germans break the British front in the Cambrai-St. Quentin-La Fère sector, practically destroying Gen. Gough's army and taking Péronne and Ham. Berlin claims capture of 25,000 prisoners and 400 field guns. Paris bombarded by long-range guns placed at a distance of 75 miles.

24. The Germans continue to force back the British on the Somme front, capturing Bapaume, Nesle, Guiscard, and Chauny.

25. The Germans capture Barleux and Etalon. The French take over a portion of British front south of St. Quentin and around Noyon. Allies lose 45,000 men and 600 guns.

27. Lloyd George appeals to America for reenforcements.

28. Gen. Pershing places all American forces in France at the disposal of Gen. Foch.

29. Gen. Foch chosen commander-in-chief of all allied forces.

The German long-range gun kills 75 worshippers at Good Friday service in a church in Paris.

APRIL—1918

1. The Allies hold against all German attacks on the western front, inflicting enormous losses. The French estimate German casualties during 11-day offensive at about 300,000.

5. The Germans claim capture since March 21 of 90,000 prisoners and 1300 guns.

6. President Wilson states that Germany's challenge will be met with "force to the utmost."

10. British and Portuguese forced back six miles near Armentières and La Bassée canal.

12. Field-Marshal Haig issues his famous back-to-the-wall order: "All positions must be held to the last man." The Germans capture Armentières. German airplanes bombard London and Paris.

13. The British line holds against massed German attacks from Armentières to Hazebrouck.

16. Bolo Pasha executed in France for treason.

18. German attacks west of La Bassée and Givenchy fail to break the British line.

20. Americans repulse German raid at Seicheprey.

22. British naval raid blocks entrance to Zeebrugge, preventing exit of submarines.

24. German forces, attacking whole front south of the Somme, are held to slight local gains.

25. The Germans force back the French and British in the Lys salient.

26. The First Division of the American army goes into line on the Picardy front.

28. The Germans capture Kemmel Hill.

MAY—1918

1. Gavrio Prinzip, Servian assassin of the Austro-Hungarian archduke Franz Ferdinand, dies in an Austrian fortress.

6. Rumania signs treaty of peace with Central Powers.

14. Italian naval forces enter the harbor of Pola and sink an Austrian battleship.

19. Major Raoul Lufbery, American aviator, shot down near Toul.

Australian troops capture Ville-sur-Ancre.

25-June 14. German submarines sink 19 ships off the Atlantic coast of the United States.

27. The Germans capture the Chemin des Dames ridge, regarded as impregnable, and sweep forward toward Paris on a 40-mile front.

28. The great German "victory drive" reaches the Aisne. The American First Division wins the battle of Cantigny, capturing the town in a brilliant attack, the first American offensive.

29. The Germans take Soissons, with 25,000 prisoners. Allied retreat continues.

30. German counter-attacks on Cantigny repulsed by the Americans. The Fifth and Sixth regiments, United States Marines, ordered to the Marne battle front where the Germans are nearest Paris.

JUNE—1918

1. The great German drive, rolling forward 6 or 7 miles a day, reaches the heights of the Marne near Chateau Thierry, only 60 miles from Paris. Arriving at the battle front, American troops go into the fighting line at Chateau Thierry.

2. In the fierce battle of Chateau Thierry American soldiers block the German drive at the point of its nearest approach to Paris, hurling back the enemy's veteran battalions. This victorious stand electrifies France.

3. At Jaulgonne, German shock troops force the passage of the Marne but are driven back across the river by American counter-attacks.

6-7. American Marines, attacking strong positions in Belleau Wood, near Chateau Thierry, drive the Germans back more than 2 miles, capturing Bouresches and entering Torcy.

9. The Germans, compelled finally to notice the Americans, in a report referring to the attack of June 6-7 on Belleau Wood, say: "Americans who attempted to attack northwest of Chateau Thierry were driven back beyond their positions of departure with heavy losses."

The Germans begin a new drive between Montdidier and Noyon.

10-11. American troops attack, with bayonet and rifle, machine gun positions considered impregnable by the enemy and complete the capture of Belleau Wood, south of the Ourcq, putting out of action three crack German divisions and seriously damaging their morale. While in itself a minor engagement of the great war, this victory proved the fighting quality of the Americans and infused a new spirit of confidence into the Allies.

11. Allied counter-attacks regain much ground between Montdidier and Noyon. The Germans claim capture of 75,000 prisoners since May 27.

13. The German high command, regardless of losses, hurls specially selected divisions against the United States troops in Belleau Wood "in order to prevent at all costs the Americans being able to achieve success." Though depleted in numbers, the Americans not only withstand all attacks but continue to advance.

15. The Austrians launch a powerful offensive against the Italians on a 90-mile front but are everywhere held to unimportant gains.

19. The Germans, attacking Rheims from three sides with 40,000 men, are severely repulsed.

23. The Italians drive the Austrian armies across the Piave in full retreat from the Montello plateau to the Adriatic sea, inflicting losses estimated at 180,000 and ending German hopes of Austrian assistance on the Franco-Belgian front.

24. The American forces begin final series of attacks to clear the Germans from positions about Belleau Wood.

28. British surprise attack gains important positions between Pont Tournant and La Becque.

30. In honor of the bravery and sacrifice of the American Marines in capturing Bouresches and Belleau Wood, the French order the forest officially renamed *Bois de la Brigade de Marine,* or Marine Brigade Wood.

English and Japanese troops land at Vladivostok.

JULY—1918

1. The American Second Division captures Vaux.

4. Australian and American troops recapture Hamel and Vaire Wood, strengthening the allied positions near Amiens.

12. Former czar Nicholas II. of Russia reported slain by Bolsheviki.

14. Lieut. Quentin Roosevelt, son of Theodore Roosevelt, is killed in aerial flight on the French front.

15. The fifth great German drive of the year begins on a 50-mile front from Vaux to the Champagne. In this final offensive the Germans force the passage of the Marne but are soon outfought by the French, Americans, and Italians and held to narrow gains purchased at staggering cost while Foch makes ready for his counter-stroke.

At Dormans the Americans, after withdrawing

four miles, in a furious counter-attack drive the Germans back to the Marne, inflicting severe losses.

18. Gen. Foch begins the long series of increasingly effective attacks which finally crush Teutonic resistance on all fronts in the greatest offensive campaign in military history.

18-22. In the victorious allied thrust towards Soissons, made on a front of 25 miles in the Marne salient, the American First and Second Divisions are given the place of honor with picked French divisions. Without artillery preparation the infantry attacked at dawn everywhere forcing back the Germans from 3 to 6 miles during the first day. At the end of the fifth day of continuous advance, the First Division gained the heights above Soissons, while the Second had taken Vierzy. The two divisions captured 7000 prisoners and 100 field guns, greatly shattering the morale of the opposing German troops.

19. British troops capture Meteren.

20. The American troops, attacking on the Aisne-Marne front, have captured 17,000 prisoners and 560 guns. The defeated Germans withdraw completely from the south bank of the Marne.

20-29. British and French troops attacking on the Ardre, southwest of Rheims, advance 4 miles.

24. German losses since the beginning of Gen. Foch's counter-attack estimated at 180,000.

24-27. The Forty-second American division fights its way through the Forêt-de-Fère to the Ourcq.

28. Fère-en-Tardenois captured by French and Americans.

29. The First Australian division takes Merris.

AUGUST—1918

2. Soissons retaken by the French.

3. The Allies advance on a 30-mile front to the Aisne and the Vesle, regain 50 villages, and complete the capture of the Marne salient.

4. American troops capture Fismes.

5. Foch made marshal of France.

7. American troops cross the Vesle.

8-12. The British win the important battle of Amiens. Sixteen Canadian, Australian, and other British divisions, assisted by tanks and motor machine guns, heavily defeat twenty German divisions, forcing them back 12 miles, freeing the Paris-Amiens railway, and taking about 22,000 prisoners and over 400 guns. This victory added to the French-American success in the Marne salient greatly stimulates the confidence of the Allies.

8. The French, under Gen. Debeney, attacking in cooperation with the British in the Amiens sector capture Pierrepont, Plessier, and Fresnoy.

10. The French take Montdidier and advance to Chaulnes. Americans capture Chipilly and Fismette.

13. Estimates place the captures made by the allied armies in France since July 18 at 70,000 prisoners, 1000 guns, and 10,000 machine guns.

15. The Canadians capture Damery and Parvillers, near Roye.

17. American Fifth Division captures Frapelle.

19. The French reach Lassigny.

20. Gen. Foch begins successful attack on a 15-mile front between the Aisne and the Oise; 8000 prisoners captured.

Czecho-Slovak forces in western Siberia capture Shadrinsk.

21-31. The British under Gen. Byng win the hard-fought battle of Bapaume, overwhelming the Germans on a 33-mile front from Lihons to Mercatel. In this decisive action 23 British divisions, assisted by tanks, drove 35 picked German divisions entirely across the old Somme battle field, inflicting terrible losses, taking Bapaume and many other important positions, and capturing 34,000 prisoners and 270 field guns.

22. The British under Byng recapture Albert.

25. The British advance 10 miles on a 30-mile front, capture La Boisselle, Sapignies, and St. Leger, and take 17,000 prisoners.

26. Canadian troops attack on the Scarpe and recapture the stronghold of Monchy-le-Preux.

27. French troops capture Roye.

28. The French take Chaulnes and Nesle and 40 villages, reaching the Canal du Nord.

30. Gen. Pershing's army takes over the allied line from Port sur Seille, east of the Moselle, west through St. Mihiel to Verdun.

31. The British capture Kemmel Hill.

The French cross the Canal du Nord.

The Australians storm Mt. St. Quentin.

SEPTEMBER—1918

1. American forces advance beyond Juvigny. Péronne captured by the Australians. The British during August take 57,318 prisoners, 659 guns, and about 6000 machine guns.

2. The Canadians capture the powerful Drocourt-Quéant line of defenses, taking 8000 prisoners.

Republic of Czecho-Slovakia formally recognized by the United States.

3. The battle of the Scarpe ends with the Germans in a wide retreat to the Hindenburg line. Attacking with 10 divisions, the British overthrow 13 German divisions and take 16,000 prisoners.

5. The Allies advance on a 90-mile front.

6. The French occupy Ham and Chauny. The Germans withdraw from the Lys salient.

8. American troops capture Glennes.

10. The French forces close on the Hindenburg line near St. Quentin, La Fère, and St. Gobain.

12. Gen. Pershing, having concentrated 600,000 American troops on a 40-mile front, from Les Eparges to the Moselle, attacks and captures the supposedly impregnable St. Mihiel salient, taking 16,000 prisoners, 443 guns, and immense war stores. The success of this first independent offensive conducted by American troops greatly heartened the Allies and convinced the Germans at last that they had a formidable new army to fight.

New Zealand troops win the battle of Havrincourt, opening the way for operations against the Hindenburg line.

16. The British cross the St. Quentin canal.

18. The British win the desperate battle of Epéhy, breaking through elaborate defense systems on a 17-mile front from Holnon to Gouzeaucourt, further clearing the way for attacks on the Hindenburg line.

Franco-Servian forces advance 10 miles on a 20-mile front against the Bulgarians.

18-22. Gen. Allenby, commanding British forces in Palestine, routs the Turks at the battle of Samaria, eventually capturing 75,000 prisoners and vast war supplies, thereby destroying the military power of Turkey.

25. The Bulgarians in Macedonia retreat on a 130-mile front as a result of crushing defeat in the battle of Cerna-Vardar.

26. The American forces under Gen. Pershing begin the great Meuse-Argonne offensive, with the specific object of breaking through the Hindenburg line and the Argonne forest defenses in order to cut the vitally important railroad communications of the German armies through Mézières and Sedan. The accomplishment of this would not only endanger the entire German plan of retreat but might actually compel the surrender of the German armies. On the first day the Americans drove through the barbed-wire entanglements and mastered all the first line defenses.

27-28. Americans on the Meuse-Argonne front penetrate heavily fortified German lines to a depth of from 3 to 7 miles, capturing 10,000 prisoners.

27. British begin attacks between Cambrai and St. Quentin which result in the rupture of the Hindenburg defense system.

28. Gen. Haig's forces cut the Cambrai-Douai road. The French capture Fort Malmaison. Canadian troops take Raillencourt and Sailly.

29-Oct. 1. The 27th and 30th American divisions given place of honor with the Australian corps under British command in powerful attacks which break through the Hindenburg line along the St. Quentin canal near Gouy and Le Catelet.

29. An English division breaks through the Hindenburg line near Bellenglise tunnel.

French pierce Hindenburg line between St. Quentin and La Fère.

30. Bulgaria ceases hostilities under armistice terms equivalent to surrender.

The Belgians capture Roulers and take 300 guns.

OCTOBER—1918

1. Gen. Allenby captures Damascus.

2. The French enter St. Quentin.

3. The British enter Lens and Armentières.

King Ferdinand of Bulgaria abdicates.

4. The Americans renew attacks on entire Meuse-Argonne front, meeting with desperate resistance along the Aire.

6. The German chancellor asks President Wilson for an armistice.

7. British, French, and Americans, attacking between St. Quentin and Cambrai, advance on entire front, taking Beaugard and Prémont. Hindenburg line penetrated south of Cambrai.

8. Allies under British command crush the Cambrai-St. Quentin front, forcing the Germans to the rear of the Hindenburg line.

9. The British take Cambrai.

10. Americans capture Argonne Forest.

The British advance 12 miles beyond Cambrai, completely smashing the famous Hindenburg line and capturing Le Cateau.

12. Americans on the Meuse front gain 5 miles on a 40-mile front, defeating 7 German divisions and capturing 10,000 prisoners.

13. The French capture Laon and La Fère.

The 77th American division takes Grandpré.

14. American troops break the Kriemhilde line.

17. Allied armies capture Ostend, Bruges, Lille, and occupy Douai.

18. Allied forces take Zeebrugge, Thielt, Tourcoing, and Roubaix.

The Americans capture Bantheville.

19. German armies in full retreat from the North sea to the Sambre.

American Second Army Corps, at the end of two weeks' attacks against Hindenburg defense system, completes an advance of 13 miles, taking 6000 prisoners.

24. British armies defeat Germans on a 25-mile front between the Sambre and the Scheldt, taking 7000 prisoners and 100 field guns.

Allied armies under Gen. Diaz begin a tremendous offensive against entire Austrian line in Italy.

25. The Germans flood river valleys in the Argonne region in vain attempts to stop the American advance.

26. Ludendorff, failing to extricate the German armies from the ever tightening grip of Foch's forces, is compelled to resign the chief command.

28. Italian armies under Gen. Diaz drive Austrians back 5 miles on a 45-mile front.

30. The Italians advance 12 miles beyond the Piave on a 50-mile front.

Austria asks Italy for an armistice.

31. Turkey virtually surrenders to the Allies under the terms of an armistice.

NOVEMBER—1918

1. The Americans begin final advance on the Meuse-Argonne front.

2. Gen. Diaz, commanding 54 Italian and 4 allied divisions, routs the Austrian armies on a 125-mile front.

Paris report announces that, since July 15, the Allies on the western front have taken 362,355 prisoners, including 7990 officers, 6217 cannon, 3907 mine-throwers, and 38,622 machine guns.

3. Austria signs terms of truce amounting to full military surrender.

In defeating the Austrians in the great offensive begun Oct. 24, the Italians captured over 300,000 prisoners and 5000 guns.

4. The British capture Valenciennes, and advance 5 miles on a 30-mile front.

American armies arrive within 9 miles of Sedan.

5. Attacking between the Sambre and the Argonne, the French take 4000 prisoners.

6. Gen. Pershing's forces, in an advance of 25 miles since Nov. 1, arrive opposite Sedan and cut the main line of German communications, thereby winning the decisive battle of the Meuse. In desperate attempts to hold back 20 divisions of Americans on the Meuse-Argonne front, Sept. 26-Nov. 6, the Germans used, in all, 40 first class divisions, or more than a half million of their best troops.

7. The Americans enter Sedan and push toward the Briey iron mines.

The French armies advance 10 miles, gravely menacing German communications in the center.

On the Franco-Belgian border, the British drive the Germans practically out of France.

With their main communications with Lorraine cut, and the division of their forces into three inferior armies threatened, the once powerful German military machine, now hopelessly defeated, faces annihilation or surrender.

8. Germany's peace delegates meet Marshal Foch and receive the Allies' terms.

9. British forces capture Maubeuge.

French cavalry pursues German rearguard across Belgian border.

The retiring German chancellor, Prince Maximilian, announces that the Kaiser has decided to abdicate his throne. Friedrich Ebert assumes office as chancellor and proclaims that a new government at Berlin has taken charge to prevent war and famine.

10. Gen. Pershing begins movements to capture the iron fields of Briey and to isolate Metz.

The British reach the outskirts of Mons, where in 1914 the original "contemptibles" made their first stand against Von Kluck.

The former Kaiser flees to Amerongen, Holland.

11. German envoys sign armistice terms near Rethondes, about six miles east of Compiègne, at 5 A. M. Paris time, to take effect at 11 A. M.

Emperor Charles I of Austria abdicates.

16. Belgian troops enter Brussels.

19. Marshal Pétain, at head of French army, enters Metz.

21. German fleet under Admiral Meurer, manned by 14,000 officers and men, surrenders to the British fleet under Admiral Beatty.

22. King Albert, with Queen Elizabeth, enters Brussels, opens parliament with Gen. Pershing at his side, and reviews the allied troops.

24. Advance units of American army of occupation enter Rhenish Prussia.

25. Marshal Pétain, accompanied by Gen. Castelnau, makes formal entry into Strasbourg.

29. British army reaches the German frontier.

DECEMBER—1918

1. American troops occupy Treves.

3. The American army of occupation takes up a line 60 miles in length, centering around Coblenz.

4. President Wilson sails from New York, on the "George Washington," to attend the Peace Conference at Versailles.

6. British cavalry enters Cologne.

8. Belgian troops enter Düsseldorf.

10. The French army occupies Mainz.

Events of 1919

Jan. 18. The International Peace Conference, composed of delegates from the nations associated in the war against the Central Powers, formally opens at Versailles. The first sessions were held in the palace where, in 1871, during the siege of Paris, William VII of Prussia was proclaimed emperor of Germany.

The five members of the American delegation were President Wilson, Secretary of State Robert Lansing, General Tasker H. Bliss, Colonel Edward M. House, and former Ambassador Henry White.

Prominent delegates from other nations were Premier Clemenceau of France, Premier Lloyd George and Foreign Secretary Balfour of England, Premier Orlando and former premiers Sonnino and Salandra of Italy, Premier Venizelos of Greece, Premier Borden of Canada, and Premier Hughes of Australia.

Upon motion of President Wilson, seconded by Premier Lloyd George, Premier Clemenceau was chosen chief presiding officer.

Jan. 19. Parliamentary elections in Germany.

Feb. 7. Jugoslavia recognized by the United States.

Feb. 11. German Parliament adopts provisional constitution. Friedrich Ebert chosen president.

Feb. 14. President Wilson submits draft of League of Nations to Peace Conference.

Feb. 21. Supreme Council of Allies decides to recognize Polish government under Paderewski.

Mar. 13. President Wilson returns to Peace Conference after trip to United States.

Mar. 21. Italian delegation notifies Peace Conference that it will withdraw unless Fiume is assigned to Italy.

Apr. 22. Italian delegates withdraw from Peace Conference, as a protest against rejection of their demand for Fiume.

Apr. 23. President Wilson issues statement regarding Fiume, denying Italian demand.

May 6. Chinese Cabinet instructs delegates not to sign Peace Treaty awarding German rights in Shantung to Japan.

May 7. Peace Treaty delivered to German Delegation at Versailles. Italian delegates rejoin Peace Conference.

June 28. Peace Treaty with Germany signed at Versailles.

July 10. German National Assembly ratifies Peace Treaty.

July 20. Complete Peace Treaty delivered to Austrian Delegation at St. Germain.

July 31. Peace Treaty ratified by British Parliament.

Aug. 4. Rumanian forces, invading Hungary in violation of armistice terms, occupy Budapest.

Aug. 24. Kiev captured from Bolsheviki by the Ukranians.

Sept. 10. Peace Treaty with Austria signed at St. Germain.

Sept. 12. D'Annunzio, with a force of volunteer Italian soldiers, occupies Fiume in defiance of the Italian government and the decisions of the Peace Conference.

Oct. 7. Italy ratifies Peace Treaty.

Oct. 13. France ratifies Peace Treaty.

Oct. 30. Japan ratifies Peace Treaty.

Nov. 8. Czecho-Slovak National Assembly ratifies peace treaties with Germany and Austria.

Nov. 19. Peace Treaty refused ratification by the United States Senate.

Nov. 27. Peace Treaty with Bulgaria signed.

Dec. 5. Jugoslavia signs treaties with Austria and Bulgaria.

See LEAGUE OF NATIONS, PEACE CONFERENCE, and ARMS CONFERENCE, pages 127-129.

FINANCIAL COST OF THE WAR

According to bulletins issued by the Federal Reserve Board, the total cost of the war from the outset to the signing of the armistice can be estimated at between 170 and 180 billions of dollars. Other estimates vary from 150 billions to 250 billions. Estimates of the final total monetary costs to the leading nations involved have been made as follows:

Allies	
Great Britain,	$ 52,000,000,000
United States,	40,000,000,000
France,	32,000,000,000
Russia,	30,000,000,000
Italy,	12,000,000,000
Rumania,	3,000,000,000
Servia,	3,000,000,000
	$172,000,000,000

Central Powers	
Germany,	$ 45,000,000,000
Austria-Hungary,	25,000,000,000
Turkey,	5,000,000,000
Bulgaria,	2,000,000,000
	$ 77,000,000,000

Reckoning the dead and the permanently disabled through battle, disease, and famine at 15,000,000, and assuming the economic productive value of each at only $3,000, the world has been further impoverished by the war in the sum of 45 billions. The total cost is claimed by some to have exceeded that of all former wars of history combined.

GROWTH OF U. S. ARMY AND EXPEDITIONARY FORCES

According to the report of the Secretary of War, at the date of the signing of the armistice over 25 per cent of the entire male population of the country between the ages of 18 and 31 were in military service. This indicates a growth in the size of the army in 19 months of nearly twentyfold. The steps in this amazing growth are shown in the following table:

Date	In U. S. and Possessions	In the Am. Ex. Forces	Total
1917			
Apr. 1	190,000	.....	190,000
July 1	480,000	20,000	500,000
Aug. 1	516,000	35,000	551,000
Sept. 1	646,000	45,000	691,000
Oct. 1	883,000	65,000	948,000
Nov. 1	996,000	104,000	1,100,000
Dec. 1	1,060,000	129,000	1,189,000
1918			
Jan. 1	1,149,000	176,000	1,325,000
Feb. 1	1,257,000	225,000	1,482,000
Mar. 1	1,386,000	253,000	1,639,000
Apr. 1	1,476,000	320,000	1,796,000
May 1	1,529,000	424,000	1,953,000
June 1	1,390,000	722,000	2,112,000
July 1	1,384,000	996,000	2,380,000
Aug. 1	1,365,000	1,293,000	2,658,000
Sept. 1	1,425,000	1,576,000	3,001,000
Oct. 1	1,599,000	1,834,000	3,433,000
Nov. 1	1,672,000	1,993,000	3,665,000

The following table shows registrations and enlistments by states according to tabulations made by the War Department:

SELECTIVE SERVICE REGISTRATION AND ENLISTMENTS IN THE UNITED STATES, 1917-1918

With Alaska, Porto Rico, and Hawaii included, the grand total of registrations approximated 23,709,000. Slightly more than 2,800,000 registrants were inducted into service through local draft boards and through inductions of individuals. The column showing number of soldiers furnished by states includes voluntary enlistments by men who had registered but does not include soldiers previously in the army, or the marine corps, or other naval enlistments.

State	June 5, 1917	June 5, 1918	Aug. 24, 1918	Sept. 12, 1918	Total	Number of soldiers obtained
Alabama	182,499	15,358	3,914	235,753	437,524	67,000
Arizona	37,355	1,695	335	52,870	92,255	10,000
Arkansas	149,097	13,208	2,797	193,569	358,671	59,000
California	298,989	18,834	3,923	478,410	800,156	102,000
Colorado	84,125	6,923	1,356	122,244	214,648	31,000
Connecticut	160,037	10,380	2,205	197,426	370,048	44,000
Delaware	22,122	1,430	416	30,033	54,001	7,000
Dist. of Columbia	32,372	2,622	610	52,751	88,355	13,000
Florida	83,226	7,380	1,251	111,058	202,915	31,000
Georgia	232,537	16,715	3,691	285,475	538,418	79,000
Idaho	41,606	2,788	605	58,169	103,168	17,000
Illinois	645,037	44,842	9,696	852,131	1,551,706	232,000
Indiana	255,754	20,093	4,140	350,852	630,839	93,000
Iowa	215,939	18,032	3,737	280,303	518,011	92,000
Kansas	150,347	13,122	2,646	210,924	377,039	59,000
Kentucky	190,629	18,626	3,773	267,905	480,933	72,000
Louisiana	159,475	13,819	2,699	209,129	385,122	62,000
Maine	60,593	5,207	1,106	87,687	154,593	22,000
Maryland	121,598	10,428	2,188	177,098	311,312	43,000
Massachusetts	362,825	24,909	5,269	475,020	868,023	114,000
Michigan	374,317	25,799	5,178	452,771	858,065	123,000
Minnesota	222,698	21,029	3,747	286,243	533,717	86,000
Mississippi	139,321	12,071	2,660	185,105	339,157	58,000
Missouri	297,456	25,608	5,341	421,056	749,461	115,000
Montana	88,299	4,255	830	100,784	194,168	34,000
Nebraska	118,278	9,875	1,959	152,630	282,742	43,000
Nevada	12,090	561	107	17,039	29,797	5,000
New Hampshire	37,519	2,776	600	52,603	93,498	12,000
New Jersey	304,208	20,574	4,792	425,136	754,710	95,000
New Mexico	33,497	1,674	465	43,326	78,962	12,000
New York	1,009,345	69,529	15,115	1,357,044	2,451,033	328,000
North Carolina	197,481	16,743	3,833	251,644	469,701	71,000
North Dakota	65,963	5,086	1,177	85,728	157,954	25,000
Ohio	554,709	43,540	8,946	762,741	1,369,936	185,000
Oklahoma	170,956	16,315	3,407	238,748	429,426	76,000
Oregon	63,319	4,701	947	106,883	175,850	26,000
Pennsylvania	815,973	63,237	13,692	1,149,322	2,042,224	275,000
Rhode Island	53,589	3,849	785	73,503	131,726	16,000
South Carolina	128,019	10,776	2,532	157,877	299,204	49,000
South Dakota	57,899	5,197	1,087	78,471	142,654	28,000
Tennessee	188,946	18,153	3,810	257,609	468,518	70,000
Texas	409,743	34,256	7,334	521,474	972,807	155,000
Utah	44,158	3,051	630	53,224	101,063	16,000
Vermont	27,244	2,354	531	40,887	71,016	9,000
Virginia	181,526	15,788	3,335	251,053	451,702	67,000
Washington	110,167	7,705	1,688	192,573	312,133	39,000
West Virginia	125,846	11,522	2,583	179,085	319,036	52,000
Wisconsin	244,884	20,599	4,301	308,871	578,655	87,000
Wyoming	22,896	1,831	285	34,357	59,369	11,000
United States	9,586,508	744,865	158,054	12,966,594	23,456,021	3,417,000

MOBILIZED STRENGTH AND CASUALTY LOSSES OF THE WORLD WAR

Allied Nations	Mobilized	Dead	Wounded	Prisoners or Missing	Total Casualties
Belgium	267,000	20,000	60,000	10,000	90,000
British Empire	7,500,000	692,065	2,037,325	360,367	3,089,757
France	7,500,000	1,385,300	2,675,000	446,300	4,506,600
Greece	230,000	15,000	40,000	45,000	100,000
Italy	5,500,000	460,000	947,000	1,393,000	2,800,000
Japan	800,000	300	907	3	1,210
Montenegro	50,000	3,000	10,000	7,000	20,000
Portugal	100,000	4,000	5,000	200	10,000
Rumania	750,000	200,000	120,000	80,000	400,000
Russia	12,000,000	1,700,000	4,950,000	2,500,000	9,150,000
Servia	707,343	322,000	28,000	100,000	450,000
United States	4,272,521	67,813	192,483	14,363	274,659
Total	39,676,864	4,869,478	11,065,715	4,956,233	20,892,226
Central Powers					
Austria-Hungary	6,500,000	800,000	3,200,000	1,211,000	5,211,000
Bulgaria	400,000	101,224	152,399	10,825	264,448
Germany	11,000,000	1,611,104	3,683,143	772,522	6,066,769
Turkey	1,600,000	300,000	570,000	130,000	1,000,000
Total	19,500,000	2,812,328	7,605,542	2,124,347	12,542,217
Grand Total	59,176,864	7,681,806	18,671,257	7,080,580	33,434,443

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CHARLES WILLIAM ELIOT

LANGUAGE

It has been estimated that more than twelve hundred languages were spoken in the two Americas. These languages give evidence of no continuously progressive type of culture. The many tribes have changed their vocabularies; but the identical method of putting words together has survived without change. One striking characteristic is the frequency of long words. This is well illustrated by the Aztec word for letter-postage — *amatlocuilolitquitcatlaxtlahuilli*, the literal meaning of which is, "the payment received for carrying a paper on which something is written." By comparison and classification of the countless dialects and languages, they are reduced to a few great groups: the Tumĕh group covers the northern part of the Rocky Mountains; the Aztec group has its seat in Central Mexico and Central America; the Maya group has its seat in Central America and Yucatan; the Appalachian tribes include all those with which the English and the French first came into contact from the Atlantic to the basin of the Mississippi, and also the tribes of the northern part of South America; the Amazonian tribes occupy a large part of South America.

The Hamitic race belongs historically to the northern parts of Africa, the southern parts of Europe, and the western parts of Asia. The Hamitic people were called, by the historic Greeks, Pelasgic. Their civilization has been so overlaid by that of the Aryans as to be almost wholly obscured. The great Hamitic civilization was that of Egypt, long considered the earliest of all the civilizations.

HAMITIC TONGUES

Sidonian,

Egyptian, or Rotic | Koptic

Berber, or Libyan

Iberian, or Biscayan

Pelasgian, (probably)

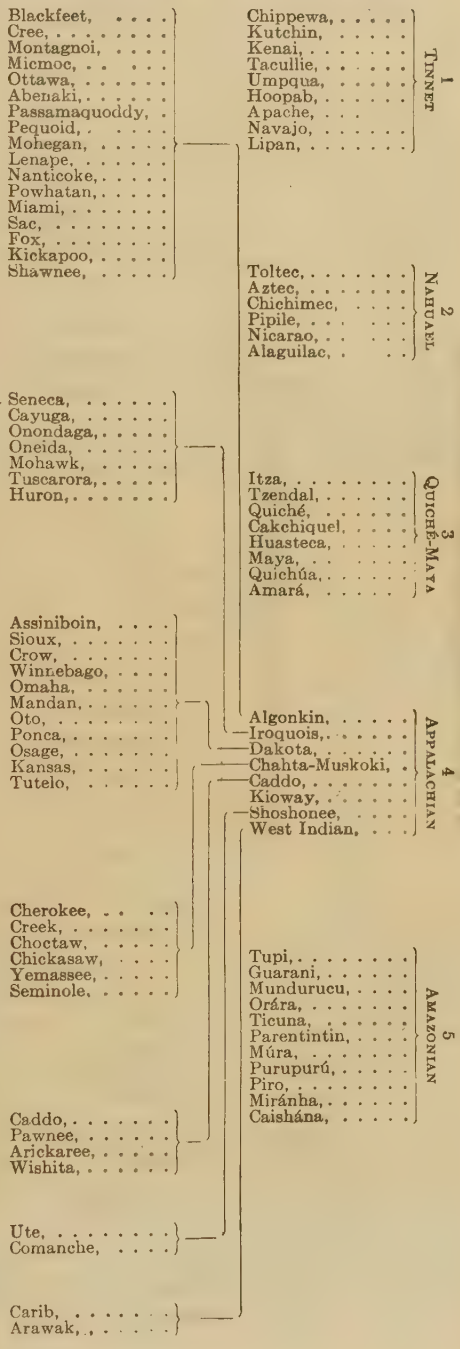
Minæan, (probably)

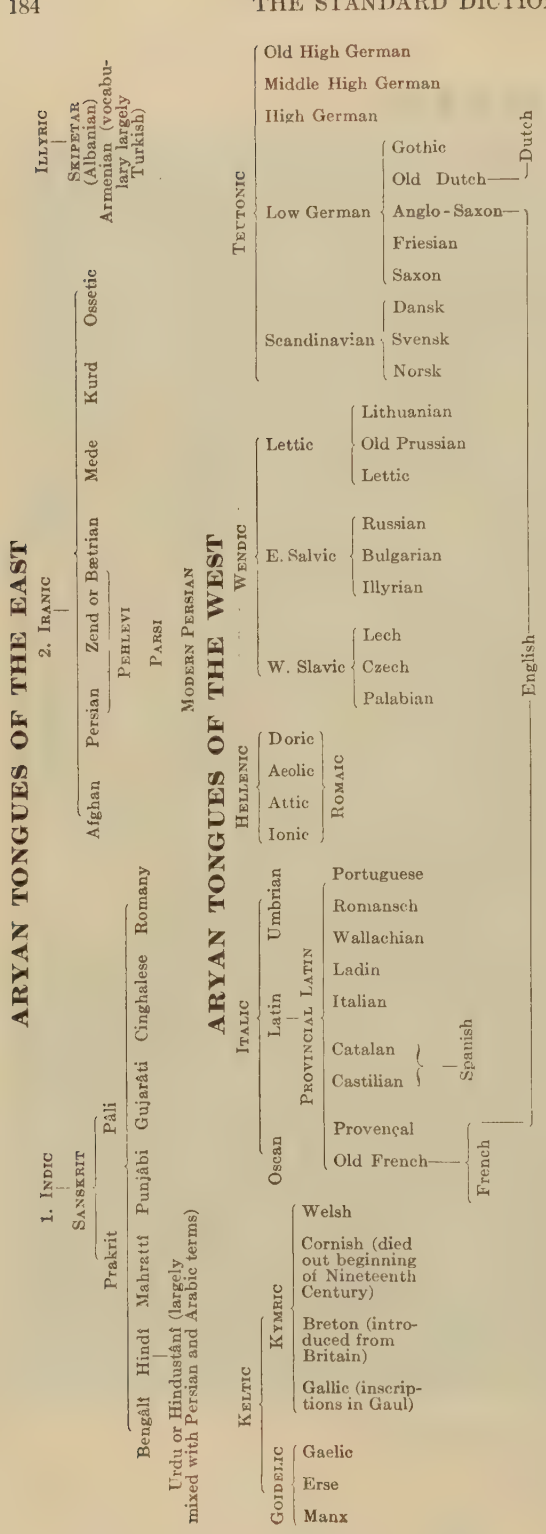
Galla (probably)

Before the Nineteenth Century we knew little more of Semitic literature than what was contained in the ancient Hebrew Scriptures and in that body of Arabic literature that grew up after the era of Mohammed. Our knowledge has been greatly added to by the numerous inscriptions which have been found and deciphered. The Semitic races first appear historically in the great desert region covering Arabia and extending to the border of the Mesopotamian River valleys. The Semitic tongues are different dialects, rather than different languages.

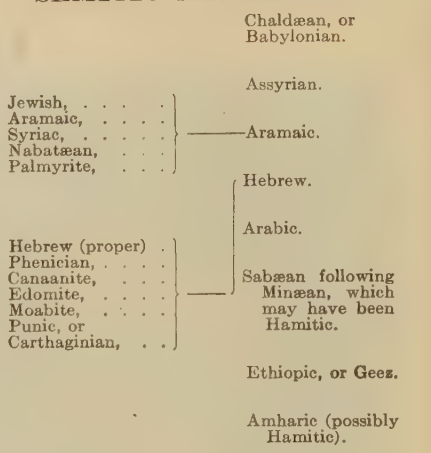
The Koran made the Arabic language sacred, as well as classic. About the Eleventh Century that treasure-house of tales, "The Thousand Nights and a Night," was produced. From the Canaanite family came our Hebrew Bible, a library of very varied literature.

AMERICAN LANGUAGES





SEMITIC LANGUAGES



Aryan (*Indo-European, Indo-Germanic*) **Family.** To this family belongs the first place. From the Aryans sprang both Persians and Greeks midway in its development; this family rules both Europe and America, the African coasts and Australia, as well as the north and south of Asia. Its literature, both in abundance and quality, is unsurpassed by those of any of the other world families of language. From the Aryans have come the great world literatures in politics, art, letters, science, and religious truth. From them came the Iliad and the Odyssey, the Vedas of India, and the Shâh-nâmeh of Persia, the Eddas of the Norsemen, the Gudrun, the Lay of the Nibelungs, the Beowulf, the Romaunt of Roland, the Arthurian Tales, and the Keltic Mabinogion.

One group of the Aryan family conquered and civilized India and Ceylon. Sanskrit was the language in their day of greatness. The group that traveled farthest west was the Kelts. These were soon followed by the Teutonic tribes. Then came the Slav, Serb, or Wend.

"The care of the national language I consider as at all times a sacred trust and a most important privilege of the higher orders of society. Every man of education should make it the object of his unceasing concern, to preserve his language pure and entire, to speak it, so far as is in his power, in all its beauty and perfection. * * * A nation whose language becomes rude and barbarous, must be on the brink of barbarism in regard to everything else. A nation which allows her language to go to ruin, is parting with the best half of her intellectual independence, and testifies her willingness to cease to exist."—*F. Schlegel.*

"It is with words as with sunbeams, the more they are condensed the deeper they burn."—*Southey.*

"Though our comparison might be bold,

it would be just as if we were to say that the English language is a conglomerate of Latin words bound together in a Saxon cement; the fragments of the Latin being partly portions introduced directly from the parent quarry, with all their sharp edges, and partly pebbles of the same material, obscured and shaped by long rolling in a Norman or some other channel."—*Whewell.*

The English language is a conglomerate. Whenever there is an invention made or a psychological truth discovered, or a new article of commerce is introduced, or contact or intercourse with a new nation or people is established, a new word or set of words is added to our vocabulary. Every new game or fashion creates new names. Our complex civilization is reflected in a complex vocabulary or language. It is important that we should familiarize ourselves with the sources of our language, and with the sources of its strength, and each do his share towards preserving it in its purity and beauty. We should have an intelligent interest in our mother tongue in order that we may use it intelligently. We must spend a little time in the study of the past of our language, because it is only in the light of that past that the present is intelligible. Few of us are conscious of the changes taking place now, yet these changes must be taking place, for ours is the same language used by Chaucer, yet how different. New words are coming in, and old ones becoming obsolete every year.

Slang is responsible for the introduction of many new words. When we first hear a slang phrase, we are surprised; but in this day of great surprises, we quickly grow accustomed to it, and soon adopt it as an integral part of our language. We use it as though it were not a thing of yesterday, but had existed as long as the language itself. If we were to examine some of these slang terms, we should find that many of them have been incorporated into the language, and are properly used in polite society and in serious composition.

Trench says, "If the English language were to be divided into a hundred parts, forty-five of these might be Anglo-Saxon, or Old English, as now some prefer to call them; forty-five Latin (including, of course, the Latin which has come to us through the French); five perhaps would be Greek. We should, in this way, have allotted ninety-five parts, leaving the other five to be divided among all the other languages, which have made their smaller contributions to the vocabulary of our English tongue." It will be interesting to find what classes of words come from the different sources.

The Anglo-Saxon is the basis of the English language; it is the warp while the Latin is the woof. The monosyllables in great part are Anglo-Saxon. The articles, conjunctions, pronouns, prepositions, numerals, and auxiliary verbs are Saxon. Verbs of action and words that relate to the primary action of the senses are Saxon, as think, feel, sing, see, talk, walk, run, and the like.

Ever since the English language began we have been filibusters; we have plundered every other tongue for words to make our meaning plain; we have raided where we would, and have never hesitated to put ourselves under obligation to all strangers coming to our shores, or whose shores we have visited. The history of the English language is, in fact, but the history of the English people, and of their doings.

The early British language was under debt to the Celts, first of all; and we find in our present-day vocabulary such words as apply to Celtic things, as, bard, shamrock, whiskey, clan, dirk, cromlech, kilt, etc. The Anglo-Saxons, while they eagerly discarded words of Celtic orgin, as did the French later, enriched their language from the Latin. The Roman occupation of Britain, from about A. D. 43 to A. D. 410, bequeathed to us five or six terms: *castra,* a camp, has been retained in Doncaster, Lancaster, Gloucester, Winchester, Bibchester, Exeter, formerly Excestre; *strata,* a paved road, in street, Park street, Stratford, Stretford, Streatham, Stradbroke; *colonia,* a colony, in Lincoln; *portus,* a harbor, in Portsmouth, Portchester, Portsea; *pons,* a bridge, in Pontefract; *fossa,* a ditch, in Fossway, Fossbridge; *vallum,* a rampart, in Wallbury.

The conversion of the British to Christianity is marked by another influx of Latin words and terms relating to the Church: abstinence, avarice, bounty, cardinal virtues, conscience, charity, chastity, confession, consistory, contemplation, contrition, indulgence, recreant, relic, reverence, sanctity, spirtual, unity, etc. Then the Danes lent a hand, giving us: to plough, to ask.

Nor is it without a strange irony that the lawless Vikings gave us our word "law." The early supremacy of the Dutch in agriculture, in horticulture, and in ship building is made evident by the fact that a large proportion of the English words, dealing with the farm, the garden, and the ship, are of Dutch origin, and were borrowed from the brave little republic when the English went to school to the Hollander, to learn what he had to teach. A few of the words they give us are: ahoy, aloof, ballast, bluff, blunderbuss, boom, brack, brackish, brandy, bruin, duck (a fabric), golf, growl, hoarding, knapsack, landscape, leaguer, loiter, manikin, measles, mope, mumps, pink, sheer, slim, sloop, swab, switch, uproar, wagon, yacht, dock, hull, skipper, fly boat.

During the First Century that followed the Conquest in 1066, the language of the native population was, as they were themselves, utterly crushed and trodden under foot. The Conquest revolutionized our language as it did our life. A foreign dynasty, speaking a foreign tongue, and supported by an army of foreigners, was on the throne of England; Norman ecclesiastics filled all the high places of the Church, and places of honor and emolument. This meant that French became the language of the court, of society, and even of the many Norman families who employed the Saxons as servants. But the masses of England still spoke their native tongue.

The better or richer families of the Anglo-Saxons began to adopt the French fashions and manners, and to speak the French language, as a mark of gentility. The many churches and castles, which the Normans built in different parts of England, meant that the French would

there be used, and add to the influence at work to make a new English language. The language of chivalry was exclusively French, and brought in such words as honor, glory, renown, host, champion, valiant, feat, achievement, courtesy, gentle, etc. With the lawyer, who was a great power during this time of transition, came such words as advocate, alliance, chattels, demise, devise, demurrer, domain, estate, fief, homage, liege, loyalty, manor, personality, pursuit, realty, treaty, voucher, etc.

The words which describe the pursuits of gentlefolk are mostly of French origin; and it is a curious comment on history that, as Wamba points out in "Ivanhoe," while live animals — ox, sheep, calf, swine, deer — retain their native names, they are described by French words — beef, mutton, veal, pork, venison — when they are brought to table. The "Saxon" serf had the care of the animals while they were alive, but when killed they were eaten by his "French" superiors. Abundant words relating to law, government, and property have their origin in the Conquest. Such are: custom, prime, court, assize, tax, county, city, judge, jury, justice, prison, goal, parliament, manor, money, rent, chattel, mortgage, council, bill, act, etc. The French had shown their greater genius for war, and so, very naturally, their military terms were accepted. Army, battle, fortress, cannonade, assault, siege, hauberk, ambuscade, brigadier, colonel, arms, armor, standard, banner, harness, glaive, tower, and lance are some of them.

From the fact that butcher, grocer, mason, carpenter, barber, chandler, cutter, draper, and tailor are of French extraction, we should conclude that the strangers were superior to the natives in the industrial occupations.

"It is owing to the coming of William," says Dr. Freeman in his "History of the Norman Conquest," "that we cannot trace the history of our native speech, that we cannot raise our wail of its corruption without borrowing largely from the store of foreign words which, but for his coming, would never have crossed the sea. So strong a hold have the intruders taken on our soil that we cannot tell the tale of their coming without their help."

Nearly all the scholarly writers of to-day have been classically educated, and they write for readers presumed to have more or less knowledge of Latin, hence they do not hesitate to use Latin derivatives, and often anglicize a Latin word rather than invent a native English compound. It is this tendency which has kept us from forming compound words, as do the Germans for each new idea. But recently the German Emperor put forth a strong plea for the use of the native words instead of the foreign words, which the people were adopting so readily. He even wanted them to use a native compound in place of the cosmopolitan word *telephone*.

The English tongue is fortunate in that it is an ingenious and partial compound of German and Latin. The German gives force, the Latin sonority to our verse and prose, while an interchanging of German and Latin gives a variety which every other language may seek in vain.

Most of our scientific nomenclature is from the Greek. Not only do we get our scientific terms from the Greek, but also the names for the new instruments and processes; as, lithography, photography, telephone, cinemotograph, etc.

Our musical vocabulary is largely from the Italian, as the following words bear witness: contralto, duet, opera, piano, quartet, solo, sonata, soprano, stanza, trio, trombone, allegro, adagio, baritone, cantata, canto, fugue, canzonet, etc.

The French give us terms of dress and cooking: flounce, jewel, pattern, plait, toilet, tonsure, vesture, trousseau, costume, model, peruke, drape, embroider, furbelow, jacket, apparel, apron, bracelet, brooch, buckle, fricassee, fritter, gem, jelly, juice, omelet, parboil, peel, pie, ragout, sauce, sausage, victuals, salad, etc.

The advent of the English in the New World is known by the adoption of tobacco, potato, tepee, wigwam, toboggan, moccasin, pemmican, etc.

Were it wise to use the space for it, illustrations of words taken from every language could be given. But enough has already been done to show the composite make-up of our mother tongue, and to show the sources of its strength.

Every American should speak English. If a foreign word has been adopted into the English language, why not let it take the English forms? Let the plural of syllabus be syllabuses; of cactus, cactuses; of focus, focuses; etc. Let others take on the English spelling; as, technic, not technique; grip, not grippe; conservatory, not conservatoire; exposure, not exposé, etc. Only a pedant will use serviette in place of napkin.

Let the student or would-be author not try to adorn his style with foreign words; let him use the most usual terms to produce the desired effect. Let him remember that, though English has borrowed a great deal of French, though it has lost a large stock of English words, though it has adopted many a French idiom, and has been influenced by French in endless indirect ways, it still remains English.

In former times "hard work made one sweat"; now-a-days excessive labor causes profuse perspiration. If a man, thus overheated, were to stand in a draught, he might catch his death of cold, get very sick, and even die. This reads well enough as an ordinary warning; but in a treatise on hygiene for popular use, the matter is now presented as follows: "If a person, whose system is excited by vigorous exertion, should suddenly expose himself to a current of air, he would probably check his perspiration and contract a disease which might involve the most serious and even fatal consequences." Which form of expression shall we cultivate? Which recommends itself to you?

Dr. Freeman says: "In almost every page I have found it easy to put some plain English word, about whose meaning there can be no doubt, instead of those needless French and Latin words which are thought to add dignity to style, but which in truth only add vagueness. I am in no way ashamed to find that I can write purer and clearer English now than I did fourteen and fifteen years back; and I think it well

to mention the fact for the encouragement of younger writers. The common temptation of beginners is to write in what they think a more elevated fashion. It needs some years of practice before a man fully takes in the truth that for real strength, and above all, for real clearness, there is nothing like the old English speech of our fathers."

CAPITALS

1. The first word of every full sentence should begin with a capital, unless a literal reprint of the writing of an illiterate person, who does not begin a sentence with a capital, is to be made.

Two lines of invasion were adopted. Montgomery descended Lake Champlain with 2,000 men, and after a campaign of two months captured Montreal.

2. Every line or verse of poetry should begin with a capital.

Morning, evening, noon, and night,
"Praise God!" sang Theocrite.
Then to his poor trade he turned,
Whereby the daily meal was earned.

The initial letter in the first word of a poetical quotation, though not beginning a line, should be capitalized.

But that's not enough:
Give my conviction a clinch!

3. The name of the Deity in every person, and in every synonym or attribute, should begin with a capital; as, God, Christ, Jesus, Son, Holy Ghost, Jehovah, Heaven, Creator, Providence, Infinite One, Supreme Being, etc.

When the attributes of the Deity or of the Saviour are expressed, not by adjectives, but in the Hebrew style, by nouns, they should begin with small letters, as Father of mercies, God of wisdom, Prince of peace.

Also write Son of man, Spirit of God, Lord of lords, King of kings, etc.

4. Pronouns referring to God and Christ should not begin with capitals, unless they are used emphatically without a noun.

Shepherd! with thy tenderest love,
Guide me to thy fold above;

* * * * * * * * * * * * * * * * *

Jesus said, I and my Father are One.

5. The pronoun I and the interjection O always take a capital letter. Oh does not unless it begins a sentence.

The heavens and earth, O Lord! proclaim thy boundless power.

6. The proper names of the days of the week and of the months of the year, and of days of feasts and fasts, festivals and holidays, both religious and civic, should begin with capitals; as, Monday, March, Arbor Day, New Years, Whitsunday, Decoration Day, Labor Day, Easter, Black Friday, etc.

The names of the seasons are not capitalized.

7. All proper nouns and adjectives derived from these nouns should begin with capitals; as, a Greek, a Roman, a Hebrew, a Christian, a Mohammedan, an Elizabethan.

Names of all geographical zones or sections of the world, when used as proper nouns, take a capital; as, the Occident, the Orient, the Levant, etc.

Names of political parties should be capitalized; as, Tory, Republican, Federalist, Free Soiler, etc.

Geographical, national, or personal qualities, when used as nouns or before nouns in common use that specify merchandise, do not need a capital; as, china, india ink, prussian blue, turkey red, majolica, delft, oriental rugs, castile soap, etc.

There are some verbs derived from proper nouns that have lost their reference to the noun, and so are printed with small letters; as, to hector, to philippize, to romance, to japan, to galvanize. But Judaize and Christianize are exceptions to this rule.

8. Capitalize the first word in all titles of books, periodicals, plays, and pictures, and also every other word in the titles except articles, prepositions, and conjunctions.

Fiske's The War of Independence.

This rule is contrary to the custom of the American Library Association's rules, used in cataloguing books. They capitalize only the first word and proper nouns and proper adjectives; as, Fiske's The war of independence.

9. The first word and all important words in the titles of corporations and societies, should begin with a capital letter; as, The Society for the Prevention of Cruelty to Animals, the Synod, the Government (when it stands in place of the title of the divisions of the government). In general, one should use a capital in the last illustrations when the definite article is used, and a small letter if the indefinite article is used.

10. Titles of office or honor should be capitalized if used before the name of the person; as, Mr. Smith, President Roosevelt, Messrs. A. K. Bidwell & Co., Brother George, Aunt Hannah.

If used after, they are better written with a small letter; as, Hon. James G. Blaine, ex-senator from Maine; James Brown, roundsman, Broadway squad.

When titles occur frequently on a page, and are used without any particular expression of honor, they should be written with small letters.

In official documents the titles of potentates are often capitalized, even though they follow the name of the ruler; as, Victoria, by the grace of God, Queen of Great Britain and Ireland, Empress of India, etc.

When sir, friend, boy, and the like words are used in the salutation of a letter, they should be capitalized; as, My dear Sir, My dear Boy.

A title used in place of the person's name should begin with a capital; as, Good morning, Captain; Mr. President, I call for the question.

Abbreviated titles of honor or respect should be capitalized: James Bryce, D. C. L.; Henry Northam, M. D., LL. D.; Gen., Hon., Dr., etc.

11. Words of primary importance, especially if they indicate some great event, or remarkable change in religion or government, are commenced with capital letters; as, The Reformation, effected by Luther, is one of the most wonderful events in modern times.

12. The names of the points of the compass when used to indicate direction should begin with small letters. When used to indicate a

section of the country, they should begin with capitals; as, I am going West; he is a representative man of the South; the river flows southwest.

13. Appellatives used either before or after geographical nouns are capitalized; as,

Erie Canal, Hudson River Railroad, Strait of Magellan, Coe Place, Shenandoah Valley, though many publishers omit the capital for the generic word, when it precedes the specific term; as, county of Winchester, state of New York, empire of Russia.

14. Abstract qualities, when personified, should be capitalized; as,

O Death! where is thy sting? Then Crime ran riot.

15. All quotations that are intended to be emphatic, or that consist of a complete sentence, should begin with a capital; as,

Coleridge said, "Friendship is a sheltering tree."

These two questions, "What are we?" and "Whither do we tend?" will at all times press painfully upon thoughtful minds.

When a quotation is introduced by that it should begin with a small letter; as,

"He said that this great patriot bequeathed to his heirs the sword which he had worn in the war for liberty, and charged them never to take it from the scabbard but in self defense, or in defense of their country and her freedom."

16. In writing resolutions, the word immediately following Resolved, should begin with a capital. See Punctuation, Comma, Rule 13.

Resolved, That the discovery of smokeless gunpowder has increased the horrors of war.

PUNCTUATION

Punctuation is the art of breaking up a sentence by means of points and stops, so as to convey to the reader's mind, as quickly and easily as possible, the writer's meaning. There are two systems of punctuation, the close and the open. The close system is used in legal documents, laws, ecclesiastical formularies, and in precise composition of every sort. Even the omission of a hyphen from a compound word may make a serious error. The insertion of a comma in place of a hyphen between "fruit" and "seeds" in an enactment of Congress cost the government thousands of dollars. The loose punctuation should be used in ordinary descriptive writing. Formerly too many marks were used; to-day the tendency is toward the use of too few marks. Punctuation can surely not be classed among the exact sciences. It is not even an established system, for many of the rules of the teachers differ, and the practice of their pupils differs still more. Points may be omitted or inserted in a catalogue in a way that would not be tolerated in a history.

However, there are some explicit directions that may be given that all writers should follow. The points should be used to show the grammatical relation of words, and never solely to indicate rhetorical pauses in reading.

The necessity for a knowledge of correct punctuation is well illustrated by this anecdote: "The following request is said to have been made at church: 'A sailor going to sea, his wife desires the prayers of the congregation for his safety.' But, by an unhappy transposition of the comma, the note was read thus: 'A sailor going to sea his wife, desires the prayers of the congregation for his safety.'"

The marks used for punctuation are the period [.], colon [:], semicolon [;], comma [,], interrogation point [?], exclamation point [!], dash [—], parentheses (), brackets [], hyphen [-], double quotation marks [" "], single quotation marks [' '], apostrophe ['].

Period. 1. All declarative and imperative sentences, and sentences that are interrogative in form, but to which an answer is not expected, should be followed by a period; as, He has gone. Go at once. Ah! whither now are fled those dreams of happiness. The Cyprians asked me why I wept.

2. All abbreviations, unless the ellipsis of intermediate letters in the words has been indicated by using the apostrophe, should be followed by the period; 7th, 9th, 3d, etc., are not followed by the period.

3. When capitals are used for numerals, it was customary formerly to follow them by a period; e. g., Henry VIII., John IV. 3. The latest usage seems to omit the period, especially in the possessive construction; as, Henry VIII's reign.

Comma. 1. All nouns of direct address should be set off by commas; as, John, come here. I say, Mary, can you go now? Sir, I cannot do it.

2. When there are three or more parts in the subject of a sentence, and the conjunction is used between the last two only, a comma should be used after each part except the last.

Mary Lee and Laura came yesterday. As the sentence stands, you may think that there are but two persons that came yesterday; viz., Mary Lee and Laura. If the sentence is written, Mary, Lee and Laura came yesterday, then Mary may be a noun of direct address, and the boy Lee and the girl Laura came; but if it is written, Mary, Lee, and Laura came, you know that three persons came. The comma before the *and* is frequently omitted by rapid writers; but it should not be omitted in this compound construction.

3. Parenthetical or additional expressions, that is, those expressions that break the directness of the statement, require to be cut off by commas; as, Christopher Columbus, an Italian by birth, discovered America. It is mind, after all, that does the work of the world. In this sentence, 'after all' does not modify 'does,' but shows a connection between this sentence and something gone before. Another illustration would be, It was not necessary, however, for you to go.

Some of the phrases in common use that are usually set off by commas are: in short, in fact, in reality, in brief, as it happens, no doubt, in a word, to be sure, to be brief, etc. Some of the words used parenthetically, which, according to the close punctuation should be set off by commas, and, according to the loose, should not be, are: therefore, then, however, perhaps, namely, indeed, too, moreover, etc.

Most of these words named last are capable of two constructions,— they may either belong to the proposition as a whole, or to a single word

in it. It is only when used in the former sense that they require to be set off by commas; e. g., On this assistance, then, you may rely. Then I believed you, now I do not.

4. Independent adverbs at the beginning of the sentence should be set off by a comma; as, Well, I will go. Why, you may if you want to.

NOTE.— Used in this way it would be better to omit them from all sentences.

5. The nominative, the infinitive, and the participle used absolutely should be set off by commas: The wind having gone down, we may go sailing. To tell the truth, I must remain here. Generally speaking, he is a good fellow.

6. Nouns in apposition are set off by commas: George, my brother, can do it for you. We, the people of the United States, do ordain and establish this constitution.

7. If the subordinate clause in a complex sentence comes first, it should be followed by a comma: If I go, you must remain. While he stays, you must stay.

8. A series of words used in the same construction should be separated by commas; as, Ulysses was wise, eloquent, cautious, and intrepid, as was requisite in a leader of men. He stood, walked, ran, and jumped.

If the words are used in pairs, only the pairs should be separated; as, Ulysses was wise and eloquent, cautious and intrepid, as was, etc.

9. When two statements, each with its own subject, verb, and object, are put in one sentence, the comma should be used to show their distinctiveness, even when the sentence is very short; as, You may go, and I will stay.

10. Use a comma between two words in the same construction when they are differently modified; as, He sold a horse, and wagon of wood. If the comma is omitted, the horse was of wood.

11. When the subject consists of two or more nouns not joined by a conjunction, use a comma before the predicate; as, Riches, pleasures, health, become evils to those, etc.

12. A comma is put before a relative clause, when it is explanatory of the antecedent, or presents an additional thought.

But the point is omitted before a relative clause which restricts the general notion of the antecedent to a particular sense.

To make clear the difference between an additional and a restrictive clause, let us use this sentence: Her entrance was unnoticed by the officer who sat gazing into the fire. We restrict when we wish to separate one object from other objects of the same sort. If there were several officers in the room, and you wish me to know that her entrance was unnoticed by but one of them, you wish to separate or distinguish him from the others. Then the clause is used restrictively and should not be set off by a comma. But if there was but one officer in the room, you use this same clause to tell an additional fact about him; then it is used additionally and should be set off by commas.

Much confusion arises in this sort of sentence because authors on punctuation say that a descriptive or additional clause should be set off by commas. A descriptive clause may be used to express either an additional or a restrictive thought. Bring me the dress that is made of red silk. This sentence requires no comma because there are several dresses there, and I want the red silk one. Bring me the dress, which is made of red silk. Here I have used the same descriptive clause, but the use of "which" and the comma shows that that is the only dress there.

NOTE: — In all *restrictive* relative clauses the pronoun "that" should be used; and in all *additional* relative clauses use "who" when referring to people and "which" when referring to animals or inanimate objects. If writers would bear this use of these pronouns in mind, the matter of the comma would be immaterial because the pronoun would sufficiently indicate the use of the clause.

13. One good authority says do not use a comma after Whereas, It appears, etc.; Resolved, That, etc.; Ordered, That, etc. He also says, Do not use a capital after these words. Write, Resolved that women, etc.

14. When a clause is used as the subject of a verb, it should not, even though long, be followed by a comma, unless it ends with a verb; as, That the governor of this great State of Illinois should make this unworthy appeal to the passions and prejudices of the foreign-born citizens of the nation must always be a cause of mortification to every lover of his country.

The second part of the rule is illustrated by, Whatever is, is right.

15. A comma is used before a short direct quotation: He said, "I will go."

NOTE.— A colon is used before a long direct quotation.

16. The comma shows the omission of words; as, Her address is 718 Norwood Ave., Rochester, N. Y., which means *in* Rochester, *in the State of* New York. Reading maketh a full man; writing, an exact man.

NOTE.— The latest authority says omit the comma in the last sentence because no misunderstanding can arise thereby; but custom still uses it.

Semicolon. This mark is used to separate such parts of a sentence as are somewhat less closely connected than those separated by a comma.

1. When two clauses are joined by *for*, *but*, *and*, or an equivalent word, the one clause perfect in itself, and the other added as a matter of inference, contrast, or explanation,— they are separated by a semicolon: Economy is no disgrace; for it is better to live on a little than to outlive a great deal.

2. When the parts of a compound sentence, even though they are short, are not closely connected in thought, they should be separated by a semicolon; as, I live to die; you dye to live.

3. Use the semicolon to separate the parts of a compound sentence, when one or both members contain commas: Men are not judged by their looks, habits, and appearances; but by the character of their lives and conversations, and by their works.

4. If a series of expressions depend on a commencing or concluding portion of the sentence, they should be separated by a semicolon: Philosophers assert, that nature is unlimited in her operations; that she has inexhaustible treasures in reserve; that, etc. Also in such a sentence

as. If we think of glory in the field; of wisdom in the cabinet; of the purest patriotism; of the highest integrity, public and private; of morals * * * the august figure of Washington presents itself as the personation of all these ideas.

5. All of the older authorities say use a semicolon before and comma after *as, viz., to wit, namely, i. e.*, or *that is*, when they precede an example or an illustration. The latest authority says use the comma in both places. This is but another illustration of the changes in punctuation that are coming in.

Colon. 1. When a sentence is long, and one or both of the parts contain semicolons, the greater division should be marked by a colon: Art has been to me its own exceeding great reward: it has soothed my afflictions; it has refined my enjoyments; it has endeared my solitude; and it has given me the habit of wishing to discover the good and the beautiful in all that surrounds me.

2. A colon should follow a clause that is complete in itself, but is followed, without a conjunction, by some remark, inference, or illustration: Nor was the religion of the Greek drama a mere form: it was full of truth, spirit, and power.

3. A colon should be used before a long direct quotation, or a list of articles formally introduced: She finished her helpful talk with the song from "Pippa Passes":

> "The year's at the spring
> The day's at the morn;
> Morning's at seven;"
> Etc.

Will you kindly send me the following articles:

> 2 lbs. of granulated sugar,
> 1 lb. of coffee,
> Etc.

4. The words *yes* and *no* should be followed by a colon, provided the words that follow are a continuation or repetition of the question: Can these words add vigor to your hearts? Yes: they can do it; they have often done it.

5. The colon is more often used than any other mark after the salutation in a letter: My dear Sirs:

Interrogation Point. 1. An interrogation mark is placed at the end of every direct question: Will you go? He asked me, "Will you go?"

2. The mark of interrogation should not be used when it is only affirmed that a question has been asked, and the expression denoting inquiry is put in any other form than that of a direct question: I was asked if I would go to Europe next summer.

NOTE.— It should be placed inside of the quotation marks if it belongs properly to the quotation, and outside in other cases:— He asked, "Will you return by nine o'clock?" What can be more interesting than "the passing crowd"?

Exclamation Point. This point is used after any expression of strong emotion, and after interjections: Friends, countrymen, and lovers! hear me for my cause, and be silent that you may hear. The heavens and earth, O Lord! proclaim Thy boundless power. Oh! nothing is further from my thoughts than to deceive you. Oh, that all classes of society were both enlightened and virtuous!

The Marks of Parentheses. If an expression is inserted in the body of a sentence, with which it has no connection in sense or construction, it should be enclosed by the marks of parentheses. The test is, can the words to be enclosed be omitted without injury to the sense? I have clearly seen charity (if charity it may be called) insult with an air of pity. She had managed this matter so well (oh, how artful a woman she was), that my father's heart was gone before I suspected it was in danger.

Notice the use of the mark of interrogation in this sentence: "While the Christian desires the approbation of his fellow-men (and why should he not desire it?), he disdains to receive their good-will by dishonorable means."

The Dash. 1. The dash is used to show an abrupt break in a sentence; to show a suspension in the thought; or an epigrammatic turn in sentiment. Closely following came — what do you suppose? The eye of the child — who can look unmoved into that "well undefiled," in which heaven itself seems to be reflected?

2. The dash is used where there is an ellipsis of such words as, *namely, that is*, etc. To separate adjectives in apposition but closely connected. These poets — Homer and Virgil — wrote epics.

Brackets. These marks, used for nearly the same purposes as the parentheses, are usually confined to expressions inserted in or appended to a quotation, and not belonging to it. They are intended to give an explanation, to rectify a mistake, or to supply an omission; as, He had the finest head [of hair] I ever saw; * * * because the people love the principles of the Constitution [long continued applause] and to-day, etc.

Hyphen. 1. The hyphen is used in forming compound words. When each of the words of which a compound is formed retains its original accent, they should be united by a hyphen: The all'-pow'erful God; In'cense-breath'ing morn. Everlasting, notwithstanding, and a few other words are exceptions to this rule.

2. If a prefix ends in a vowel, and the word to which it is joined begins with a vowel, the hyphen, or the diæresis over the second vowel is used: co-operate or coöperate.

3. The hyphen is used to show the division of words into syllables: hy-phen.

Double and Single Quotation Marks. 1. Every direct quotation should be enclosed in double quotation marks: To me he said, "I cannot believe it is true."

2. If the thought, but not the words of another are given, quotation marks are not used: He said that he could not believe it true.

3. You may use italics, or double, or single quotation marks if you are quoting a single word or short expression. "Petticoat" (literally 'little coat'), in itself a sufficiently inoffensive term, has shown a tendency to give way to "skirt." In this illustration "petticoat" and "skirt" may be italicized and the quotation marks omitted.

4. If a quotation occurs within a quotation, enclose the second one in single quotation marks: In his letter he wrote, "If the physi-

cian sees you eat anything that is not good for you, he says, 'It is poison!'"

5. When several paragraphs are quoted, use double marks at the beginning of each paragraph, and at the end of the last paragraph only.

Apostrophe. 1. The apostrophe is used to mark the possessive case: John's.

2. To show the contraction of words and omission of letters: I'll, you'd, etc.

3. To show the clipping of words in dialect: He wa' singin' to 'em.

4. To form plurals of letters, signs, and figures: There are twenty a's on this page. Count the 2's in this sum. Your x's or 0's were not well made.

The foregoing are the generally accepted rules. It should be kept in mind, however, that we are in a stage of transition in regard to capitalization and punctuation, there being a marked tendency toward simplification.

RIGHT USE OF SOME COMMON WORDS

A. Use the article before both nouns or both adjectives when they denote different objects. "*A* coat and *a* hat" not "*a* coat and hat." "*A* black and white dress" (one dress); "*a* black and *a* white dress" (two dresses).

Abortive. A ridiculous perversion of this word is creeping into use through the newspapers. "A lad was yesterday caught in the act of *abortively* appropriating a pair of shoes." That is *abortive* that is untimely in its birth; and, by figure of speech anything is abortive which is brought out before it is well matured. *Abortive* should not be used indiscriminately of failure.

Accept of. Never use the preposition after this verb. We *accept* invitations, presents, hospitality, and the like.

Accept and Except. *Accept* means to take when offered; *except* means to leave out, to exclude. I *accepted* the gift. All *except* two will go.

Accord. To *accord* means to render or bestow upon another, as honor: therefore one should never say, "The information he desired was *accorded* him."

Administer. The man died from blows *administered* by the policeman. Oaths, medicine, affairs of state are *administered*. Blows are *dealt*.

Adopt. This word is often used instead of *to decide upon* and *to take;* thus, "The measures *adopted* by Congress as the result of this inquiry will be productive of good." Better, "The measures *decided upon*, etc." Instead of "What course shall you *adopt* to get your pay?" say, "What course shall you *take*, etc.?" In the newspapers one may see "Wanted to *adopt* — A beautiful female infant." The advertisers meant to say that they wanted the child mentioned in their advertisement *adopted*. The word is correctly used in "The measures proposed by the senator were *adopted* at once."

Affect. See effect.

Aggravate. This word is often used when the speaker means to provoke, irritate, or anger. Thus, "It *aggravates* (provokes) me to be continually found fault with"; "He is easily *aggravated* (irritated)."

Agree. Do not use *agree* for *admit*. "That a flat brick façade pierced by a few windows does not make an inspiring picture, all will *agree*." Say, "all will *admit*."

Agriculturist is to be preferred to *agriculturalist*. The same is true of *conversationist*.

Ain't. This is not a contraction, and cannot take the place of *I'm not*.

Alike. This word should not be used with *both*, nor with *both just*, as in "These hats are both *alike*" or "*both just alike*"; say, "These hats are *alike*."

All of. The *of* is a superfluity. "I have them *all*," not "I have *all of* them"; "Take it *all*," not "Take *all of* it."

All Over. *All* should modify the noun, and not the prepositional phrase in "The disease spread *over all* the country," not "*all over* the country."

Allege. Do not use this word as a synonym for *say* or *tell*, as in "He *alleges* that the engine ran sixty miles an hour." Instead, "He *says* or *tells* us that, etc."

Allow. This word is frequently misused in the West and the South for *think; to be of opinion; to admit;* as, "He *allows* his horse can beat yours." Instead of this say, "He *thinks* or *is of the opinion* that, etc."

Almost — Nearly. These two adverbs should not be used indiscriminately. *Almost* regards the ending as an act; *nearly*, its beginning. A man that receives an injury so severe that he comes off with barely his life is *almost* killed; a man that escapes what would have killed him is *nearly* killed. These words are correctly used in "I am *almost* done with my work"; "I *nearly* ran over the child."

Alone — Only. That is *alone* that is unaccompanied; that is *only*, of which there is no other. "Virtue *only* makes us happy" means that nothing else can do it. If we say, "Virtue *alone* makes us happy," we mean that virtue unaided makes us happy. "This means of locomotion is used by man *only*."

Alternative. Do not use this word when more than two things are referred to. You may have the choice of three courses, not of three *alternatives*.

Always. Often used redundantly. "Whenever I see her, I think of mother," not "I *always* think of mother."

Ameliorated. "Her troubles are greatly *ameliorated*" should be "are *lessened*."

Among. "He was there *among* the rest" should be "*with* the rest."

Among One Another. "They exchanged votes *among one another*" should be "*with one another*."

Amount. "A surprising *amount* of perfection has been reached" should be "A surprising *degree* of perfection, etc."

And. Do not use *and* in place of the particle *to*. "Come *to* see me," not "Come *and* see me."

And should never introduce a relative clause unless it joins it to a coördinate relative clause. "I have a dress worn by my aunt, *and which* is forty-five years old." In this sentence leave out *and* and use *that* instead of *which*. (See Rule 12 for the comma, under Punctuation.)

Antecedents. This word used as a sub-

stantive means those persons or things which have preceded any person or thing of the same kind in a certain position. Thus the *antecedents* of General Sherman in the army of the United States are General Washington, General Scott, and General Grant. To call the course of a man's life until the present moment *his antecedents* is nearly as absurd a misuse of language as can be compassed. If, instead of "What do you know of his *antecedents?*" it is asked "What do you know of his *previous life?*" or better, "What do you know of *his past?*" there is sense instead of nonsense, and the purpose of the question is fully conveyed.

Anticipate. This word is often used in place of *expect*, or *foresee*. *Anticipate* means to go before, so as to preclude another; to get the start of, or to get ahead of; to enjoy, possess, or suffer, in expectation. It is therefore misused in "By this means it is *anticipated* that the time for Europe will be lessened two days"; and in "Her death is hourly *anticipated*." It is correctly used in "If not *anticipated*, I shall hereafter make an attempt at a magazine paper on the Philosophy of Point"; and in "Why should we *anticipate* our sorrows? 'Tis like those who die through fear of death." "Were Greeley's movements those that it was *anticipated* (*expected*) he would make?"

Anxious is often used where *desirous* would better express the meaning. *Anxious* means full of anxiety; suffering from suspense or uncertainty; concerned about the future. "I am not *anxious* to get to Canada" should be "I am not *desirous*, etc." "I am still more *anxious* to have you live in New York" should be "still more *desirous*."

Anyhow is permissible in conversation, though incompatible with dignified diction, in which such phrases as "*in any event*," "*be that as it may*," "*at any rate*," and the like are to be preferred.

Appeals is used in this sentence instead of *drafts:* "There are constant *appeals* upon the resources of the government."

Approach is sometimes improperly used in the sense of *address, petition, appeal to;* thus, "The teachers have *approached* the Educational Department in some matters that concern their interest."

Apt is often misused for *likely*, and sometimes for *liable*. "What is he *apt* (*likely*) to be doing?" "Where shall I be *apt* (*likely*) to find him?" "If you go there, you will be *apt* (*liable*) to get into trouble."

Aren't in colloquial use is admissible, but *are you not* is preferable. I'll, I'm, etc., are good form because they are contractions of the verb only.

As—as; So—as. Use the former in affirmative propositions, and the latter in negative propositions. He is *as* tall *as* you are. He was never *so* happy *as* now.

Aside is sometimes misused for *apart*. "Words have a potency of association *aside* (*apart*) from their significance as representative signs."

As Though is often used for *as if*. In the sentence, "The child looked *as though* her hair had never been combed," supply the elliptical clause, and you will see the need of using *if* in place of *though*. "The child looked *as* (she would look) *though* her hair, etc." "The woman looks *as* (she would look) *though* (*if*) she were tired."

At. "They do things differently *in* (not *at*) the South."

At all is superfluous in such sentences as, "She had no friends *at all*"; "I do not want any *at all*"; "If she had any desire *at all* to see, she would have waited."

At Best. At Worst. These phrases require the article or a possessive pronoun used in them. Always say, "I did *the* best I could," etc. "He was at *his* worst."

Audience is often used in place of *spectators*. The *audience* hears; the *spectators* see: therefore say, "The *spectators* at the ball game," not "the *audience*." "The *audience* at the concert, etc."

Avenge and Revenge. We *avenge* the wrong done to others, and *revenge* the wrong done to ourselves.

Avoid is often used in the place of *prevent* or *hinder;* as, "There shall be nothing lost if I can *avoid* it." It should be "if I can *prevent* it."

Awful is too frequently used as an intensive. Avoid this use of it; e. g., I was *awfully* glad to see you.

A While Since should be *a while ago*.

Bad Cold. Say a *slight* or a *severe* cold. Colds are never *good*.

Badly is inelegantly used for *very much*. "I shall miss you *very much*," not "I shall miss you *badly*."

Balance means the excess of one thing over another, and should be used in this sense only: hence it is improper to talk about the *balance* of the edition. In this case say *rest* or *remainder*. You may speak of the *balance* of the account.

Beastly. One may properly say "*beastly* drunk" but not "*beastly* weather."

Before is sometimes used in place of *rather than*. "War *before* peace at that price" should be "War *rather than* peace at that price."

Between in its literal sense applies to only two objects; as, "The candy was divided *between* the two boys, or *among* the four children." When used of more than two objects, it brings them severally and individually into the relation expressed; as, "a treaty *between* three powers."

When used to express contrast—"The three boys are brothers, but there is a great difference *between* them."

Black—Blacken. We *black* stoves and *blacken* reputations.

Blame it on is a vulgarism used in place of *accuses* or *suspects*. "He *blames it on* his brother" should be "He *suspects* or *accuses* his brother."

Both is often used in such sentences as "They are *both* alike"; "They *both* ran away from school," etc. Omit *both* from each sentence. It is incorrect in "He lost all his fruit — *both* plums, peaches, and pears."

Bound should not be made to do service for *doomed, determined, resolved, certain,* or *will be compelled*. "He is *bound* to do it" should be "He is *certain, resolved,* or *determined* to do it." "He is *bound* to fail" should be "He is *doomed, destined,* or *sure* to fail."

But is often misused. "I do not doubt *but*

he will be here" should read "doubt *that*." "I should not wonder *but* he will succeed" should read "wonder *if*." In "I have no doubt *but* that he will go" suppress *but*. Change *but* to *than* in "The mind no sooner entertains any proposition *but* it presently hastens, etc."

But is correctly used in "I have no fear *but* that she will succeed," which means a very different thing from "I have no fear that she will succeed."

By should be *with* in "The room was filled *by* ladies and children"; also in "The ball ended *by* a waltz." There is a difference of meaning in these two sentences: "I know a man *by* the name of Brown," and "I know a man *of* the name of Brown." Which do you mean?

Calamity means in an abstract sense source of misery or of loss, but it is often misused to mean *loss*. *Calamities* are causes, *losses* are results. "The fire caused a great *calamity*" should read "caused a great *loss*." It is correctly used in "The falling of the building, which caused the death of two firemen, was a great *calamity*."

Calculate is wrongly used in "He *calculates* to get off to-morrow." "The sentence should read "*expects, purposes,* or *intends* to get off."

Caliber is often misused for *order*, as in "His work is of a higher *caliber* than hers is."

Capable is often used in place of susceptible. "We need more articles *capable* of illustration" should read "*susceptible* of illustration."

Condone is sometimes misused for *compensate* and *atone for*. It means to pardon, to forgive. "The abolition of the income tax more than *condones* for the turmoil of an election" should read "*atones for*, etc."

Congregate Together. In "A large number of people *congregated together* in the hall," omit the word *together*, because to *congregate*, unaided, means to collect, or gather together.

Consequence is sometimes used instead of *importance* or *moment;* as, "They were all persons of more or less *consequence*" should be "of more or less *importance*." "It is a matter of no *consequence*" should be "of no *moment*."

Consider means to meditate, to deliberate, to reflect, to revolve in the mind; and yet it is made to do service for *think, suppose,* and *regard*. Thus: "I *consider* his course very unjustifiable" should read "*think* his course." "I have always *considered* it my duty, etc." should read "*thought* it my duty."

Conversationist. See Agriculturist.

Co-operate Together means *co-operate* or *operate together*, and can mean no more, which makes it plain that the *co* or the *together* serves no purpose — is a superfluity.

Creditable should not be used instead of *credible*. Say, "two *credible* witnesses," not "*creditable* witnesses." Say, "I am *credibly* informed," not "*creditably* informed."

Crushed out. The rebellion was finally *crushed out*. Out of what? We may crush the life out of a man, or crush a man to death, and crush — not *crush out* — a rebellion.

Dandy. This adjective belongs properly to the "gushers." It is their sole adjective. He is a *dandy* man; The refreshments were *dandy*; The sunset was *dandy*.

Dangerous is misused in the sentence "He is *dangerous*," when we mean "He is *sick*." Say, "He is not *in danger*," or "not *dangerously* ill."

Dearest. Do not begin a letter "My *dearest* John," unless he is the dearest of three or more Johns with whom you are acquainted.

Deceiving should not be used in place of *trying to deceive*. It is when we do not suspect deception that we are deceived. "He is *deceiving* me" should read "He is *trying to deceive* me."

Deprecate means to endeavor to avert by prayer, and so should not be used in the sense of *disapprove, censure,* or *condemn*. Do not say, "He *deprecates* the whole proceeding."

Desperately. Do not say, "He was *desperately* wounded," but "*badly* wounded."

Despite should not be, as it often is, preceded by *in*, and followed by *of*. Say, "*Despite* all our efforts," not "*In despite of* all our efforts."

Detect is often misused for *distinguish, recognize, discover, see*. "I did not *detect* anything wrong in his appearance" should be "I did not *discover* anything wrong in his appearance." "I could not *detect* any difference between them" should be "I could not *see* any difference between them."

Die with — from. Man and brute *die of*, and not *with* or *from*, fevers, old age, and so on.

Differ—Different. The prepositions *from* and *with* are both used with the verb *differ*, but the weight of authority is on the side of using *from*. *Different to* is sometimes used instead of *different from;* but it is incorrect. "She is *different than* you would expect her to be" should be "*different from* what you would expect her to be." The word *than* implies comparison and demands the comparative degree. Different is in no way a comparative. We say greater *than* but different *from*. We may differ *with* a person, but things differ *from* one another.

Dock—Wharf. A *dry dock* is a place where vessels are drawn out of the water for repairs. A *wet dock* is a place where vessels are kept afloat at a certain level, while they are being loaded or unloaded. A *wharf* is a sort of quay built by the side of the water. Vessels lie at *wharfs* and *piers*, not at *docks*.

Don't. This is the contraction for *do not*, and not for *does not*: therefore do not say, "He *don't* want it."

Each other is properly applied to two only; *one another* must be used when the number considered exceeds two. We say, "Great authors address themselves to *one another*," unless we refer to only two authors.

Effect — Affect. *Effect* means to bring about; as, "to *effect* a reform." *Affect* means to influence; as, "His ideas will *affect* the character of the reform."

Elegant. "This is a *fine* morning," not "This is an *elegant* morning."

Emigrant — Immigrant. These two words are not infrequently confounded. *Emigrants* are persons going out of the country; *immigrants* are persons coming into the country.

Ending of Sentences. Sentences ending with prepositions are always more terse, always quite as idiomatic, and always simpler,

than they would be if differently constructed. "The man I gave it *to*," not "The man to whom I gave it." "The verb it belongs *to*," not "The verb to which it belongs," etc.

Enjoy Bad Health. Does anyone *enjoy bad health?* Say, "He is in feeble or delicate health."

Equally as Well. *As well*, or *equally well*, expresses quite as much as *equally as well.*

Everlastingly means perpetually, eternally, forever. Do not say, "The horse was *everlastingly* running away."

Every. "*Every* one of us has this in common" should be "*All* of us have this in common."

Except. See Accept.

Excessively. Say, "The weather is very warm," not "*excessively* hot." "My friend was *exceedingly* popular," not "*excessively* popular."

Excise Laws. An *excise* is a tax levied on domestic products; it is an internal revenue tax. New York has *license* laws and *license* commissioners, and properly they should be so called. New York's *excise* laws, so called, are properly *license* laws.

Exercise—Exorcise. Do not use these words interchangeably. *Exercise* means a putting into use, action, or practice; *exorcise* to cast or drive out (an evil spirit), by religious or magical formulas or ceremonies.

Expect. We cannot *expect* backwards. "I *expect* you thought I would come to see you yesterday" should be "I *suppose*, etc." "I *expect* you know all about it" should be "I *suspect* you know, etc."

Experience. "We *experienced* great hardships" should read "We *suffered.*"

Extend. "They *showed* me every kindness" is better than "They *extended* every kindness to me."

Farther—Further. Use *farther* for all distances that can be measured either great or small. Use *further* in all other sentences.

Female applies to animals, as well as to women, and so should not be used in such sentences as, "With the dislike not unnatural to *females*, etc."

Fewer—Less. *Fewer* refers to number, and *less* to quantity. Instead of "There were not *less* than twenty scholars absent," we should say, "There were not *fewer* than twenty scholars absent." Instead of "There were not *less* than ten chapters in the book," we should say, "There were not *fewer* than ten chapters in the book."

Find. "I think the men *find* everything" should be "*supply* everything."

Fixed. This word is often misused for *arranged;* as, "I must *fix* the books." "Who *fixed* the dishes on the shelves?" It is vulgarly used thus: "I will *fix* him." "The jury was *fixed.*" "You must *fix up*, if you go." "Your affairs are in a bad *fix.*"

Former—Latter. The less the writer uses these words the better. In the interest of force and clearness their use should be studiously avoided. It is nearly always better to repeat the noun. This avoids the reader's going back to see which is *former* and which is *latter.*

Got—Have. If a man inherits a fortune, you say he *has* money; if he obtains money through his own effort, you say "He has *gotten* money." "He *has* books" means merely that he *possesses* them; "He has *gotten* his books" means that he has *obtained* them through effort. *Have* shows simple possession; *got* shows possession plus the effort to obtain the thing.

Had Ought. This expression is incorrect because *had* is used with the past participle of the principal verb to form the compound tense. *Ought* is a defective verb and has no participle: therefore *ought* cannot be used with *had.*

Hain't is a very objectionable vulgarism.

Handy should not be used in the sense, *near, near by, close at hand;* as, "The store is *handy.*" Say, "The store is *near.*"

Have to Have or Had to Have. Better than "I *have to have* my work done by three o'clock" is "I *should, must*, or *ought* to have my work, etc." *Got to get* is another unpleasant repetition.

Hence is superfluous in the sentence, "It will be many years *hence*, we apprehend, before he returns."

How. "I have heard *how*, in Italy, one is beset on all sides by beggars," should read "I have heard *that*, in Italy, etc."

However. Use *how*, not *however*, in such a sentence as, "*However* could you tell such a story!"

If. Use *whether* in place of *if* in these sentences: "I doubt *if* the book will suit you"; "I wonder *if* he has come."

Ill—Sick. Almost all British speakers and writers limit the meaning of sick to the expression of qualmishness, sickness at the stomach, nausea, and lay the proper burden of the adjective *sick* upon the word *ill.* They sneer at us for not joining in the robbery and the imposition. Richard Grant White says, "I was present once when a British merchant, receiving in his own house a Yankee youth at a little party, said, in a tone that attracted the attention of the whole room, 'Good evening! We haven't seen you for a long while. Have you been *seeck*' (the sneer prolonged the word), 'as you say in your country?' 'No, thank you,' said the other, frankly and promptly, 'I've been *hill*, as they say in yours.'"

In—Into. *In* is sometimes an adverb and sometimes a preposition. As an adverb it is correctly used in these sentences: "Come *in*"; "Go *in.*" As a preposition *in* should be used with verbs of rest and *into* with verbs of motion. These words are correctly used in: "He sat *in* his chair"; "He ran *into* the house."

Incite—Insight. Incite means to rouse to a particular action; as, "The mob was *incited* to set the house on fire." Insight is a noun and means the power or faculty of immediate and acute perception or understanding; as, "The strongest *insight* we obtain into nature is that which we receive, etc."

In Our Midst is not according to the genius of our language. It should be written *in the midst of us.* Also *in the midst of them*, and not *in their midst.*

Inaugurate should not be used in place of *begin* for the simple things of daily life. It is a big word misused.

Individual should not be used for *person.*

The word is used correctly in "Changes both in *individuals* and communities are often produced by trifles"; incorrectly in "That *individual* left here several hours ago."

Innumerable Number should not be used. Say instead *innumerable times* or *numberless times.*

In so far as. The *in* is superfluous in this phrase. "*In so far as* I know" should be "*So far as* I know."

Intend is often misused for *purpose.* "I *intend* to attend college this winter" should read "I *purpose* to attend college this winter." We *purpose* seriously; we *intend* vaguely.

Just Going to Go is better expressed by *just about to go. Just going to say* by *just about to say,* etc., or by *about to go.*

Just Next. Doesn't "He was *next* me" express as much as "He was *just next* me"?

Kids. It is better usage to speak of one's *gloves* than of one's *kids.* Silk gloves are not *silks.*

Kind of. "What *kind of* man is he?" is correct. "What kind of *a* man is he?" is incorrect.

Lady. Address a stranger as *madam,* and not as *lady.* People of culture and refinement will never say, "She is a fine *lady,*" a "clever *lady,*" etc. Ladies say, "The *women* of America," "*women's* apparel." In similar instances *men* should be used in place of *gentlemen.*

Lie—Lay. By a vulgar error these verbs have been so confounded as to deserve some notice. To *lie* is neuter, and designates a state: to *lay* is active, and denotes an action on an object; it is properly to cause to *lie.* "A thing *lies* on the table"; "Some one *lays* it on the table"; "He *lies* with his fathers"; "They *laid* him with his fathers." In the same manner, when used idiomatically, we say, "A thing *lies* by us until we bring it into use"; "We *lay* it by for some future purpose."

The confusion arises probably from the fact that *lay* appears in both verbs. The words are correctly used in the following sentences:

I *lay* myself upon the bed (action). I *lie* upon the bed (rest).

I *laid* myself upon the bed (action). I *lay* upon the bed (rest).

I *have laid* myself upon the bed (action). I *have lain* upon the bed (rest).

A hen *lays* an egg (action). A ship *lies* at the wharf (rest).

The murdered Lincoln *lay* in state (rest); The people *laid* the crime upon the rebels (action).

Learn—Teach. The uncultured often change these verbs. To *teach* is to give instruction; to *learn* is to take instruction. "I will *learn* if you will *teach* me" is correct.

Leave. The vulgar say, "*Leave* me be"; "*Leave* it alone"; "*Leave* me see it." Of course *let* is the verb to be used here.

Lend. Frequently confused with *loan. Lend* is a verb, *loan* a noun. A *loan* is the completed act of lending, or is the thing lent. "Friends, Romans, Countrymen, *lend* me your ears." "The Anglo-French *loan* was negotiated in New York."

Reference to best authorities invariably shows that *loan* as a verb is objectionable, and, though commonly used in the United States, is not approved except perhaps in financial terms.

Less. See fewer.

Like—Love. We *like* acquaintances, horses, flowers, pictures, etc. We *love* wives, sweethearts, kinsmen, truth, justice, and country.

Like—As. "He looks *like* you." This sentence may mean either "He looks as you look," or "He resembles you in his appearance." The sentence should read "He looks *as* you look," or "He is *like* you." *Like* is followed by an object only, and does not admit of a verb in the same construction. *As* must be followed by a verb expressed or understood.

Like is sometimes improperly used in the sense of *as though,* thus: "It looks *like* it was caused by fire."

Loan. See Lend.

Lot—Lots. Very inelegantly used for *a great many, a great deal:* "He had a *lot* of money left him"; "*Lots* of trouble came her way."

Luncheon is a more elegant form than *lunch,* especially in the sense of a formal repast.

Make a Visit. We do not *make* visits, we *pay* them.

May and *can* are often confused. *May* expresses permission or probability; *can* expresses power or ability. "*May* I go?" asks, for permission. "*Can* he do this?" questions his ability to do it. Similar distinction should be made between *might* and *could.*

Middling. This word is an adjective, not an adverb; hence we cannot say a thing is *middling* good, or that a thing was *middling* well done. "He resided in a town of *middling* size" is correct.

Mind is often misused for *obey.* To *mind* is to attend to a thing so it will not be forgotten. "Will you *obey* me?" not "Will you *mind* me?"

Mistaken. "If I *am not mistaken*" should be "If I *mistake not.*" You *are mistaken* is a correct form of expression; it means you have been led into error.

Most. This word should usually be omitted from conversation and writing. *Very* is the better word in almost every instance. "It would *most* (*very*) seriously affect us." This word is often misused for *almost.* "He comes here *most* every day" should be "He comes here *almost* every day."

Mutual. This word is often confounded with *common.* These words are correctly used in these sentences: "Our former correspondence was renewed, with the most hearty expression of *mutual* good will." "We have two friends in *common.*" "They met at the house of a *common* friend." "Their *mutual* dislike (not dislike *for each other*) was well known."

Myself. This pronoun should be used only where increased emphasis is aimed at, as in "I will do it *myself,*" etc. It is incorrect to say, "Mary and *myself* were satisfied."

Nicely. This word is frequently misused in the attempt to make it do service for *well,* in this wise: "How do you do?" "*Nicely.*" "How are you?" "*Nicely.*"

Numerous is often used in place of *large* or *many.* "We have *numerous* acquaintances," should be "We have *many* acquaintances."

Of All Others. "*Of all others* she is the last one you would expect." Is she one of the *others?* If not, why class her as such?

Of Any is often used in place of *all.* "She is the smallest *of any* I have known" should be "the smallest *of all,* etc."

Off of. The latter of these words should be omitted from the sentence. Say, "The pears fell *off* the tree," not "The pears fell *off of* the tree."

On to. "We get *on* a horse, *on* a chair," etc., not "*on to.*"

One should be followed by *one* and not by *he.* "Can *one* visit *his* friends there?" should be "Can *one* visit *one's* friends there?"

Only. This word is probably more often misplaced than any other word in the language. "He *only* sang for us." "He sang *only* for us." The first means that he *sang,* but did not *play* for us; the second one means he sang for *us* and *not for any one else.* A change in the position of *only* in almost any sentence will effect the meaning of the sentence the same as in this illustration.

Other. This word should not be omitted in sentences like the following: "He said that his wife was dressed better than any (*other*) woman there."

Ought—Should. *Ought* is the stronger term. "What we *ought* to do, we are morally bound to do." "We *ought* to be truthful and honest, and *should* be respectful to our elders."

Over. Do not use *over* in the sense of *more than.* "It is *over* a yard long" should read "*more than* a yard long."

Own is often misused in place of *confess.* "I *own* I saw her do it" should be "I *confess* I saw her do it."

Pair. "A new pair of shoes" should be "a pair of new shoes." The *shoes* are new, not the *pair.*

Pants is a vulgar abbreviation for pantaloons.

Party is often used by the ignorant where good taste would use the word *person.* Not "the *party* that I saw," but "the *person.*"

Past. This word is incorrectly used for *last* in such expressions as, "The *past* three days," "The *past* year."

Pell-mell means mixed or mingled together. It cannot properly be applied to an individual. "He rushed *pell-mell* into my arms" would be to say "He rushed into my arms mixed together."

Per. *Per* day, *per* man, *per* pound, etc., are better expressed by the plain English *a* day, *a* man, *a* pound, etc. Ten dollars *per* is the slang for ten dollars a week, a month, apiece, etc.

Perform. The short word *play* is to be preferred in "She *performs* on the piano beautifully." This sentence would be improved by using *well* or *admirably* in place of *beautifully.*

Peruse is often used when the word *read* would be in better taste.

Place is misused for *where* in "Let's go some *place.*" "I want to go some *place.*"

Polite should not be used for *kind* before the word invitation.

Posted is incorrectly used for *inform* in such expressions as, "The man *posted* me"; "If I had been better *posted.*"

Prejudice should not be used in a favorable sense. You cannot say "The man is *prejudiced* in his favor." We should say, "He is *prepossessed* in his favor."

Prepositions. If you are in doubt what preposition to use after any verb, or with any noun, always consult the dictionary.

Preventive and not **Preventative.** This adjective, in common with *subsequent, independent, relative, antecedent,* and possibly others, is often incorrectly used as an adverb. "*Previous* to our visit" should be "*previously* to our visit." "*Independent* of this reason" should be "*independently* of this reason."

Procure is often made to do the work of the Anglo-Saxon word *get.* "Where did you *procure* it?" should be "Where did you *get* it?"

Promise often does duty for *assure.* "I *promise* you I was agreeably surprised" should be "I *assure* you, etc."

Providing should be *provided* in such sentences as, "He offered to provide a stable and supply the necessities of the company *providing* the control of the board should be turned over to him."

Purchase—Buy. Use *purchase* in reference to great matters, as, "the Louisiana purchase"; use *buy* with reference to ordinary matters, as, "He bought a book, his dinner, etc."

Railroad Depot. A *depot* is properly a place where goods or stores of any kind are kept; and the places at which the trains of a railroad —or, better, railway— stop for passengers, or the points they start from or arrive at, are properly the *stations.*

Raise—Rear. We *rear* children and *raise* animals. *Raised* the rent is incorrectly used for *increased* the rent.

Real should not be used for *very* in such phrases as *real* pretty, *real* nice, *real* angry.

Resurrect is still marked colloquial in the recent dictionaries.

Retire. It is only the over nice that *retire* in the sense of *go to bed.*

Sunday is the first day of the week, and **Sabbath** is the last day of the week.

Saw is sometimes carelessly used for *have seen.* "I never *saw* anything like it before" should be "I *have* never *seen* anything like it until now." We say properly, "I never *saw* anything like it when I was in Paris."

Set—Sit. These verbs, like *lie* and *lay,* are often confounded in their use. To *set* is transitive; to *sit* is intransitive. "I *set* the hen, but she *sits* on her eggs." Incorrectly we speak of a *setting* hen, instead of a *sitting* hen. In Matthew, it was prophesied that Christ should come "*sitting* upon an ass" and, therefore, His disciples took a colt and "they *set* Him thereon." The verb is correctly used in these sentences: "My dress *sits* well"; "We will *sit* up," that is, will not go to bed; "Congress *sits.*" "We *set* down figures," but "We *sit* down on the ground."

An apparent contradiction is found in the sentence, "The sun *sets*"; but the verb *sets* in this sentence has a different origin from the verb *set* that we have been discussing. Long ago they used to say, "The sun *settles*"; but *settle* has been shortened to *set.*

Shall—Will. The radical signification of *will* is purpose, intention, determination; that of *shall* is obligation. I *will* do means I purpose doing — I am determined to do. I *shall* do means, radically, I ought to do; and as a man is supposed to do that which he ought to do, I *shall* do came to mean, I am about doing — to be, in fact, a mere announcement of future action, more or less remote. Always keep in mind that I *shall*, you *will*, and he *will*, are the forms of the future, and that I *will*, you *shall*, and he *shall*, imply volition on the part of the speaker. *Will* and *shall* in the first person are properly used in the following quotations from "The Absentee," one of Miss Edgeworth's novels: — "Gone! Forever gone from me," said Lord Colambre, as the carriage drove away. "Never *shall* I see her more — never *will* I see her more, till she is married."

"We *will* do our best to make you happy, and hope we *shall* succeed."

They are also used properly in "I *shall* be drowned"; "We *shall* have to go"; "Is the time coming when we *shall* desert Thackeray?"

These two words are coming more and more to be used interchangeably, so that one authority says there is no distinction to be made in their use; but this is not yet true. There is determination expressed in *shall* as well as in *will*. Suppose you had put a book upon the table, and had told me not to take it from the table, not to read it. I might say, "I *shall* go to the table; I *shall* take the book; and I *will* read it." *Shall* here indicates a future action with intention added to the thought; and *will* expresses determination. "I *will* go to the table for supper" indicates that you have been told not to go to the table, but that you will go in spite of this prohibition; while "I *shall* go to the table" indicates only futurity of action. Where there is nothing to rouse the will or to show a prohibition, *shall* is often used interchangeably with *will*, as in "*Will* you come to the table?" "Yes, I *will* come to the table," in which sentence *will* expresses futurity, and not determination.

You *shall* do it shows intention on the part of the speaker to make the other person do his will, and not his own will. "You *will* do it" usually shows simple futurity. Still, in the case of the child and its mother, the child says, "I *won't* do it!" and the mother puts her will into operation and says, "You *will* do it," meaning I *will* that you will to do it.

"He *shall* do it" and "He *will* do it" follow the same rules as the second person.

The words are incorrectly used in "*Will* I cut myself?" "I *will* drown, and nobody *shall* help me."

Will cannot be used interrogatively in the first person singular or plural, as can be seen by the sentence, "*Will* I put some more coal on the fire?"

To determine whether to use *would* or *should*, express your thought, whenever possible, in the present tense, and then use *would* for *will* and *should* for *shall*. These words are used correctly in the following sentences: "I *would* come to you if I could." "I *should* have been sorry if I had gone." "I *would* I were there." "I *should* go hunting to-day if the weather were good." "I *should* prefer to hear the music."

Sick — Ill. See Ill.

Since when should not be used for *since that time*, or *since what time*, according to the meaning.

Smell of. We *smell* the rose, not *smell of* it.

Splendid. *Splendid*, *awful*, and *dandy* seem to be about the only adjectives some of our superlative young women have in their vocabularies.

Standpoint. This idea is better expressed by *view point* or *point of view*.

Stop for *stay* is a Briticism. To *stop* is to arrest motion; to *stay* is to remain where motion is arrested. We may *stop* at a hotel; but how long we *stay* depends upon circumstances.

Storm. To a *storm* a violent commotion of the atmosphere is indispensable; so say *rains* or *snows*, unless it really *storms*.

Street. We live *in* not *on* a street. Things occur *in* not *on* a street.

Stricken is used when misfortune is implied; as, "He was *stricken* with death." *Struck* is used in all other cases; as, "He was *struck* by a stone."

Such. "I have never seen *such a small* man" should be "I have never seen *so small a* man," as may be seen by transposing the words of the first sentence which then becomes "I have never seen a man such small."

Such a Pretty, Such a Lovely, are incorrect, and should be *so* pretty, *so* lovely.

Sure. "He will *surely* be here," not "He will be here *sure*."

Sustain. We do not *sustain* injuries; we *receive* them.

Teach. See Learn.

That. This word is not an adverb, and so cannot modify an adjective; so, *that* good, *that* worthy, etc., should be *so* good, *so* worthy etc.

The, like *a*, should be used before both nouns or both adjectives when they denote different objects. "*The* fish and monkey" should be "*the* fish and *the* monkey"; "*the* secretary and treasurer" (if one man), "*the* secretary and *the* treasurer" (if two men).

The should be used before Reverend, Honorable, etc. *The* Reverend James Smith, D. D.

Thence. Do not use *thence* with the preposition *from*. "He came *thence*" is correct.

Think for. "He hears more than you *think for*" is wrong. Omit the *for*.

Those Kind. "*That* kind of shoes is good," not "*those* kind." "*This* sort of people (not *these* sort) will suit you."

To. Never say, "She was *to* my house yesterday." Use *at* in place of *to*.

Try. We *make* experiments, not *try* them.

Twice Over. The *over* serves no purpose in "He said it *twice over* in different ways."

Under the Circumstances. Better *in the circumstances*.

Universally — All. "He was *universally* praised by *all* who heard him" is better expressed by "He was *universally* praised," or "He was praised by *all* who heard him."

Upon — On. We call *on* persons, and speak *on* subjects, and stand *upon* the table.

Use to. *Use to* should be *used to.* "We *used to* live there" is correct.

Vocation — Avocation. A man's *vocation* is his profession, his calling, his business; and his *avocations* are the things that occupy him incidentally. Miss Brown's *vocation* is teaching; her *avocations* are embroidering and painting.

Ways. Wrongly used for *way;* as, "The house is a long *ways* off" should be "*way* off."

Well — Why. These two words are used by Americans in almost every sentence. Unless they are absolutely necessary in a sentence leave them out.

Wharf. See Dock.

What. "He would not think but *what* I said it" should be "but *that.*"

Whence. "*Whence* came ye?" not "*From whence* came ye?" *Whence* means from what place, source, or cause.

Whole of. "*All* of the school," not "the *whole* of the school."

Widow Woman. Are not *widows* always women? Another error of this sort is *brother men.*

Without is a preposition and should not take the place of the connective *unless;* as, "I shall not go *without* my father consents" should read "*unless* my father consents," or "*without* my father's consent." In this last expression *without* is a preposition.

Worst Kind. A vulgarism we sometimes hear used in the sense of *very much.* "I want to go the *worst kind.*"

Worst Way. This belongs in the same category with *worst kind.*

FORMS OF LANGUAGE COMPOSITION

The following table includes the principal forms of language composition:—

I. PROSE.
- (1) NARRATION.— Letters, journals, memoirs, biographies, history, travel, news, fiction.
- (2) DESCRIPTION.— Descriptions of external objects, of character and its development, of intellectual processes.
- (3) EXPOSITION.— Essays, treatises, editorials, reviews, criticism.
- (4) ARGUMENT.— Argumentative essays, debates, briefs, etc.
- (5) PERSUASION OR ORATORY.— Orations, addresses, lectures, sermons.

II. POETRY.
- (1) EPIC AND NARRATIVE POETRY.— The great epics, metrical romances, metrical tales, ballads, pastorals, idylls, etc.
- (2) DRAMATIC (including all narrative poetry which presents actors as speaking and acting for themselves).— Tragedy, comedy, farce, opera, melodrama, mask, interlude, etc.
- (3) LYRIC.— Odes, sacred and secular songs, elegy, sonnets, simple lyrics.
- (4) DIDACTIC.— Moral essays in verse, satiric poetry, etc.

It is the object of words to convey thought; but in order to present connected thought, words must be properly arranged with a definite end in view. Such an arrangement of words is called a language composition. There are two types of composition, prose and poetry. Prose is the plain language of every-day speech in distinction from the more emotional and artistic language of poetry.

The chief varieties of prose composition are: narration, description, exposition, argument, persuasion.

Narration presents events in sequence of time, it presents a story; description paints a picture; exposition defines a term or explains a proposition; argument establishes the truth or falsity of a statement; persuasion arouses the emotions, and influences the will. Narration presents events with special reference to time and place and persons, with their attendant motives and circumstances. It is the aim of narration to make the reader an eye-witness of the events related.

Under narration may be classed letters, journals, memoirs, biographies, history, travel, news, fiction, and that great body of literature comprehended under the term "stories."

The sequence of events in narration may be with or without plot. If it be simply a sequence of time, then the narration is said to be without plot, as in letters, diaries, news of the day, journals, memoirs, biographies; but if there be a subtle relation of cause and effect, which binds together the sequence of events, then we have a narrative with a plot, such as stories, and novels, and dramas. A plot has been defined as "any arrangement of the parts of a narrative so that the reader's interest is aroused concerning the result of the series of events detailed."

Letters, books of travel, memoirs, and biographies owe their interest to the charm with which they are told, and the real worth of the successive incidents treated. Letters of Thoreau to his friends, of Emerson, Hawthorne, Channing, Alcott, give us the charm of Concord life in the golden days of those philosophers, and also give us a model of letter-writing in their simple beauty of style, and the value of their subject matter.

Books of Travel have all the personal charm of letters, and added to that the deep interest of new scenes, visited by an appreciative narrator. Travels consist largely of description, which should be well selected and accurate. Stanley's "In Darkest Africa," Roberts's "Forty-one Years in India," Grey's "Travels in Australia," are interesting books of travel.

Memoirs relate chiefly to matters of memory, events that have come under the author's personal experience. Memoirs are related to history, but are less systematic and more conversational in style. "Yesterdays with Authors," by J. T. Fields, is a volume of memoirs of noted literary men he knew.

Biography is a history of an individual life, somewhat more extended than a memoir. An autobiography is the life history of the writer himself. Biographies form a very important branch of history. If one would know the history of a time he must know the men of that time. The Autobiography of Benjamin Franklin furnishes a much better picture of life in his times than pages of our best histories. American Men of Letters series, American Statesmen series, give a fine study of the development of the American nation.

History is a formal and connected account of the life of a nation. Historical narration ex-

plains the sequence of events, their cause and effect, and their bearing on civilization. The historian records truth for the instruction of mankind. It is, therefore, required of him that he make his records with impartiality and accuracy, and with the highest regard for morality. Gibbon's "Decline and Fall of the Roman Empire," Motley's "Rise of the Dutch Republic," are histories written with the charm of romance, because they are narrated with the vividness of an eye-witness and are aglow with human sympathies.

News forms a most important branch of letters. The editorial and the news columns influence more people to-day than any other form of literature. Thousands, who are utterly unacquainted with books, read with eagerness the daily news, so the newspaper of to-day has become a popular educator. It is the privilege of the newspaper to present a high standard of pure grammatical English, and of morality.

Clearness, brevity, accuracy, are the essential qualities in a news reporter. He must choose language that will convey his exact meaning, and give all essential details in as brief a manner as is consistent with accuracy and clearness. Daily news is read for the information it conveys, and not for beauty of style, yet it is desirable that the news writer cultivate ease and the charm of naturalness in writing up the simplest occurrences of the day, if he can do all this in quick and graphic sentences. News writing differs greatly from the writing of editorials or leaders. The news reporter simply gathers up the facts of the day and presents them without bias of opinion, whereas it is the business of the editor to discuss facts and give opinions. Editorials properly belong under exposition and persuasion, rather than under the division of prose narration.

Fiction, from the earliest dawn of literature, has been the favorite form of composition. The mind revels in the creations of the imagination, and myths and folk tales are the delight of all peoples. Modern fiction has had phenomenal development, and the growth of the short story has been without parallel.

Fiction includes stories, novels, and romances, both in prose and verse. The aim of fiction is principally to entertain. The general reader of fiction does not want instruction, he is seeking diversion. Incidentally, however, to the entertainment that is furnished by a modern novel, there is much instruction given by our best writers of historical novels, concerning customs and manners, and domestic and social life, and the history of the time in the midst of which the plot is set; but more valuable than these outer facts of life is the study of motives and behavior, and development of character, and the insight, which is given into human nature, and the conditions of human society which lie beyond our range of observation. If well selected, and not read to excess, novels form a valuable means of education, as well as of intellectual entertainment. The novels of Dickens, Victor Hugo, Tolstoi, have opened the eyes of the public to unsuspected social conditions. Bunyan, Goldsmith, Eliot, Hawthorne, have given us a deeper insight into human nature. We see how men and women behave under certain circumstances, and the relation of good and evil conduct.

The Short Story is not, as often claimed, a creation of recent date. Myths, legends, fables, folk-tales, are all forms of short stories, which were invented when language was young.

Myths are old-world fairy tales, and have for their heroes gods and goddesses, and for their agencies the forces of nature. Homer's "Odyssey," Virgil's "Æneid," Longfellow's "Hiawatha," are poems woven out of mythic fancies.

Fables are stories in which animals and inanimate things are represented as having the attributes of human beings. Æsop's fables have been translated into every language.

Parables are concrete examples of spiritual truths. They are frequently used in the Bible.

Allegories are concrete stories to illustrate abstract truths, but more extended than parables or fables. An allegory gives a detailed description of one thing under the image of another. Spenser's "Faërie Queene," Swift's "Tale of a Tub," are good types of allegories. Bunyan's "Pilgrim's Progress" is the best known allegory of modern times.

Legends and Folk-Tales are the stories of daily life and heroic adventure that are common among all people.

The field of the short-story writer has been greatly extended in modern times, and now includes every domain of fact and fancy. The short story of domestic life, or a brief chapter in personal history, may be said to characterize the modern short story, and is the favorite form of fiction. Newspapers and magazines contribute largely to this form of literature. It is to be greatly regretted that the popularity of the short story has led to its abuse, and that much that is unworthy both in plot and workmanship is found in active circulation. But literature has been enriched by the number of really worthy short-story writers, and American literature is especially rich in the number who have preserved for us tones of local coloring and contemporary characters. Bret Harte, Mark Twain, Frank Stockton, have contributed the riches of their humor, and Nathaniel Hawthorne, Richard Harding Davis, Sarah Orne Jewett, Robert Louis Stevenson, George W. Cable, have added the beauty of their most delicate touch to the creation of the modern short story. "A New England Nun" by Mary E. Wilkins, "Story-tell Lib" by Annie Trumbull Slosson, "The Blue Flower" by Henry Van Dyke, "Christmas Stories" by Charles Dickens, and incidents related in story by Maupassant are a few of the long list of excellent short stories.

Description follows narration and has already been included in narration. Every story must contain word pictures of persons or places or objects of interest. Description of external objects is simpler than the delineation of character. In a few strokes of the pen Sir Walter Scott places before us the person of Rebecca, but her thoughts, her feelings, her inner struggles, are revealed to us by a slower process of description. We are quickly introduced to Silas Marner and his home; but the real man

and his nobility of soul, we do not comprehend until he stands before Godfrey Cass and offers to give up to him his daughter. It is because George Eliot can describe such moments as this that she is ranked among the world's greatest novelists. Shakespere stands first of all writers in his power to describe soul experiences.

Exposition differs from narration or description in this that it does not deal with concrete things, but with ideas, either separately or in combination. Exposition presents definitions, doctrines, principles, or views, with the aim to instruct. Exposition is often introduced into the midst of narration or description for the purpose of explanation, to give a point of view, or to present a situation more fully.

An Essay is a composition which aims to set forth the author's views on a certain subject. It is less elaborate than a treatise, and varies in length from the brief school exercise to the elaborate essays of Macaulay, or Emerson, or Carlyle. Editorials, reviews, criticisms, are familiar forms of the essay.

An Editorial may be called a short essay, giving the views of the editor on some subject of the day. The editorial is very different from the news item which was classed under narration. The reporter simply records facts without personal comment, whereas it is the business of the editor to record facts and give opinions, explaining where necessary, and commending or condemning as occasion requires. Newspapers set forth social and political problems of a local or national character, and it is the aim of the editorial to shape public thought. Back of the editorial "we" is the personality of the writer; but sometimes the writer himself is lost in the political party or organization which the paper or magazine represents.

Reviews are more elaborate forms of editorials, they deal with the subject at greater length, and are more exhaustive in the discussions. Reviews often treat of literary subjects, as book reviews, music, art, lives of noted men, explorations, etc.

Criticisms are for the purpose of setting forth excellences and defects, and are designed to be constructive rather than destructive, as defects are pointed out that the true principles upon which the work is constructed may be better understood.

Argumentative Discourse is for the purpose of establishing the truth or falsity of a proposition. Its aim is to modify or induce belief. It is assumed that there is reasonable doubt in the minds of the hearers, and by reasonable argument they must be convinced. In the conduct of such a discourse the subject or proposition is first stated briefly and concisely, then follow the arguments drawn up in order and, finally, the conclusion, which consists of a restatement of the proposition reinforced by the strength of the arguments. In the presentation of a debate, both sides must agree on the preliminary statement or proposition, and then each side must furnish proof to establish the truth of the main proposition as presented affirmatively or negatively by that side.

Persuasion is the highest type of argumentative discourse, and includes addresses, lectures, sermons, orations. The aim of persuasion is so to move upon the feelings of the audience as to influence the will. In exposition and argumentation the appeal is to the will, but the end of oratory has a view to action. Mark Antony, over the dead body of Cæsar, aimed to excite the populace to violence.

Orations are elaborate compositions and are delivered on formal occasions, as Daniel Webster's Bunker Hill oration, Edward Everett's Gettysburg oration, the orations delivered by Burke, and Peel, and Fox. Clearness and force are strong qualities in an oration, but, in addition to these, all the beauties of composition are in place. As oratory is the highest form of prose composition, nothing trivial or low in language or thought should be allowed. The main idea should be developed by both language and gesture. Words must be made alive.

Addresses and Speeches are less formal than orations, yet they all admit of the three-fold structure into introduction or exordium, body or argument, and conclusion or peroration. The strength of the discourse depends upon the skill with which each part is handled. Ready and fluent speech are desirable qualities in all public speaking; but the ornate language of an oration would, on ordinary occasions, be out of place.

A Lecture is less formal than an oration, but it demands a scholarly presentation of a subject in a clear and logical manner. The subject presented should be of importance, not too familiar, and presented in such a way as to interest and instruct.

Sermons are the most familiar forms of discourse. They are founded usually upon some passage of Scripture, and are intended for instruction. Besides their expository character, sermons usually contain appeals to the listener, and admonitions. The theme of the sermon is presented in the Bible text; and, in addition to this, it is often necessary for the minister to make explanatory remarks before he begins the body of his argument. The introduction must contain a clear putting of the question, all necessary explanation must be made, and usually an outline is given of the plan to be followed in the body of the sermon. It is interesting to note the three kinds of arguments used in the body of a sermon.

First, there is the argument of fact. This is an argument which appeals directly to sense and reason, and not to prejudice. The audience is assumed to be impartial, and concrete questions are presented to their judgment.

Second, argument of principle is also addressed to the reason of the audience, and not to feelings or interests. Arguments of facts establish or disprove some concrete matter of human experience, whereas argument of theory or principles establishes the fundamental law upon which the judgment of those facts is based.

Third, argument of policy aims to persuade by appeals to motives of action. It aims to influence the will to act in harmony with the principles outlined in the previous arguments of fact and theory. What is right is presented as the expedient. The "I ought" becomes an obliga-

tion. It is through the medium of the feelings that most men are moved to action.

The conclusion of the sermon sums up the main points of the argument, clearly and concisely. It may at times be done in a single sentence; sometimes it is best done by the repetition of the opening text which has been established.

Poetry differs from prose in form and diction. The form of poetry is verse. It is arranged in lines of regularly recurring accented and unaccented syllables. The language of poetry differs from prose. Certain privileges are granted to the poet which are called "poetic licenses." Words are chosen for their beauty of sound or association. Figures of speech are more frequent in poetry than in prose, and inverted structure is frequently employed. The essential difference between prose and poetry is, however, in the writer's aim. The chief aim of prose is to instruct and to convince; the aim of poetry is to appeal to the emotions, to touch the heart of the reader, to play upon his sympathies.

Epic Poetry recites some great and heroic enterprise. Epic poetry is the longest and, except the drama, the most complex of all poetic composition. Its theme is noble, its underlying plot simple; it has one hero but many actors; supernatural agencies are often introduced. The treatment of the story is grave and dignified. There are but few great world epics. Homer's "Iliad" and "Odyssey," Virgil's "Æneid," Dante's "Divine Comedy," Tasso's "Jerusalem Delivered," Milton's "Paradise Lost," are the greatest, and their themes are of universal interest.

Metrical Romances and Narrative Poetry are inferior to the epic. They present plot and story, but with less complication of action, and with simpler theme. Spenser's "Faërie Queene," Scott's "Lay of the Last Minstrel," Longfellow's "Evangeline," Lowell's "Sir Launfal," Mrs. Browning's "Aurora Leigh," are examples of this kind of composition.

The Ballad and the Tale are the simplest forms of metrical romance. "Chevy Chase," "Robin Hood," Chaucer's "Canterbury Tales," Macaulay's "Lays of Ancient Rome," Coleridge's "Rime of the Ancient Mariner," are good illustrations.

Narrative poems of a mixed character have been variously classed under minor epics or pastoral poems: Tennyson's "Idylls of the King," Scott's "Lady of the Lake," Longfellow's "Tales of a Wayside Inn," Whittier's "Snowbound," William Morris's "Earthly Paradise." These classifications are not binding.

Dramatic poetry presents action, what men do and say, and, in our greater dramas, motives and the moral train of consequences. Passion is strong, incident exciting, thought vigorous. Scenery, costume, dialogue, aid in the presentation of the story. The drama lives its life upon the stage.

The main divisions of the drama are tragedy and comedy. Comedy itself has the subordinate divisions: farce, opera, melodrama, mask.

The Greek drama presents to us the highest form of dramatic art before the age of Shakespere. In the golden age of Pericles we have the tragedies of Æschylus, Euripides, Sophocles, and the comedies of Aristophanes, later we have the comic plays of Menander. Greek drama, like our own English drama, was written in poetic form.

Tragedy deals with grave topics, and stirs the deepest feelings. It presents the unusual struggle between good and evil. Some crime has been committed, and the consequences of this act are worked out upon the stage in a chain of events which involves many people. The plot becomes more or less complicated, yet in Shakespere's dramas the skill with which the leading characters and the central theme are presented, preserves for the audience unity of action throughout the play. King Lear, Othello, Macbeth, Hamlet, present the great drama of Good versus Evil, and will make a good beginning for the student who wishes to become acquainted with tragedy.

Comedy, unlike tragedy, has a happy ending. The passions of men, love, hate, jealousy, ambition, are still the hidden springs of action, but there is a happy turn in the current of events, and Good triumphs without violence or bloodshed. Browning's "Pippa Passes" presents Good and Evil, and the superior power of the good, but it is not for the stage — it is too analytic. Shakespere's plays again present to us the best study. "Merchant of Venice," "Midsummer Night's Dream," "As You Like It," "All's Well that Ends Well," "The Tempest," "Taming of the Shrew," "Merry Wives of Windsor," also Sheridan's "Rivals," Goldsmith's "She Stoops to Conquer," will repay many times reading. Shakespere's historic dramas may be classed among comedies or tragedies, according to the relation of good and evil working out of the theme. "King Henry, the Eighth," "King John," "Richard II," and "Richard III" should be studied.

The Farce is a minor comedy, which presents ridiculous and extravagant situations. It is familiar to the modern stage.

The Mask is usually a presentation of some pastoral scene, and introduces supernatural characters. The "Mask of Comus" by John Milton is our best example.

Opera and Melodrama are forms of comedy where music and action are combined. In an opera the parts are entirely sung, while in melodrama singing and speaking are combined. Wagner's operas are the noblest conception we have of the power of music combined with dramatic art.

Lyric Poetry, as the words suggest, is poetry set to music. Originally the voice of the singer was accompanied by some musical instrument, as the harp or lyre, hence lyric. Lyric poems express the personal feeling of the author, and are moved by some fervor of emotion that must sing itself out. Not only are all song poems, both religious and secular, classed as lyrics, but odes and sonnets belong to this group.

Odes express so wide a range of feeling that it is difficult to form an exact definition. The Greek odes of Pindar and Anacreon differ from our modern conception of the ode, which we regard as more stately and dignified. Examples of odes found in our own English are Milton's "Hymn on the Nativity," Wordsworth's "Intimations of Immortality," Shelley's "Ode to a

Nightingale," Collins's "Ode to the Passions," Dryden's "Ode in Honor of St. Cecilia's Day," Tennyson's "Ode to Memory."

Elegy is a reflective poem on some mournful subject, or, as in modern elegies, a eulogy over the dead. Milton's "Lycidas" belongs to this class, also Gray's "Elegy written in a Country Churchyard," Shelley's "Adonais," a tribute to Keats, and Tennyson's "In Memoriam," a tribute to his friend, Arthur Hallam.

A Sonnet is a complete poem of fourteen lines. The personal element is strong, and the themes are tenderness of emotion and beauty of thought and expression. The sonnet is the poet's poem. Shakespere, Spenser, Milton, Wordsworth, Tennyson, Browning, and other great poets have delighted in this form of verse. Read "What is a Sonnet?" by Richard Watson Gilder to understand its charm.

Didactic Poetry is the least poetic of all poetic forms. It aims to teach, while the higher aim of poetry is to reveal life and beauty and joy. Pope's "Essay on Man," Cowper's "Task," Dryden's "Absalom and Achitophel," are examples of poems which are so didactic that they are little read. Lyric poems like Shelley's "Cloud," Wordsworth's "Daffodils," Longfellow's "Rain in Summer," Burns's "To a Wee Mousie's Nest," Tennyson's "Crossing the Bar," Newman's "Lead, Kindly Light," will always remain popular, because they appeal to the emotions and the imagination, rather than to critical thought. The aim of poetry is to arouse the emotions and to give pleasure.

ABBREVIATIONS, CONTRACTIONS, AND DEGREES

A., a. Adjective.
A. Alto.
A., ans. Answer.
a., @. (Lat. *ad*), To; At.
ā, āā. The like quantity of each.
A. A. G. Assistant Adjutant General.
A. A. A. & L. American Academy of Arts and Letters.
A. A. A. S. American Association for the Advancement of Science.
A. & A. S. R. Ancient and Accepted Scottish Rite.
A. A. S. S. (*Lat. Academiæ Antiquarinæ Societatis Socius*), Member of the American Antiquarian Society.
A. A. U. Amateur Athletic Union.
A. B. (*Lat. artium baccalaureus*), Bachelor of Arts.
A. B. Able-bodied Seaman.
Abbr., Abbrev. Abbreviated, Abbreviation.
Abl., ablat. Ablative.
Abp. Archbishop.
A. B. S. American Bible Society.
A. C. (Lat. *ante Christum*), Before Christ; Analytical Chemist.
Acad. Academy.
A. C. A. American Congregational Association.
Acc., Accus. Accusative.
Acc., Acct. Account.
A. D. (Lat. *anno Domini*), In the year of our Lord.
A. D. C. Aide-de-camp.
Ad., advt. Advertisement.
Adj. Adjective.
Adjt. Adjutant.
Adjt. Gen. Adjutant General.
Ad lib., Ad libit. (Lat. *ad libitum*). At pleasure.
Adm. Admiral.
Admr. Administrator.
Admx. Administratrix.
Ads. Advertisements.
Adv. Adverb.
Æ., Æt. (Lat. *ætatis*), Of Age, Aged.
A. E. F. American Expeditionary Force.
A. G., Agt. Gen. Adjutant General.
Ag. (Lat. *argentum*), Silver.
Agl. Dept. Agricultural Department.
Agr., Agric. Agriculture, Agricultural.
Agt. Agent.
A. H. (Lat. *anno Hegiræ*), In the year of the Hegira, or flight of Mohammed.
A. H. C. American Hospital Corps.
A. H. M. S. American Home Mission Society.
A. H. S. (Lat. *anno humanæ salutis*), In the year of human salvation.
A. L. of H. American Legion of Honor.
Ala. Alabama.
Ald. Alderman.
Alex. Alexander.
Alf. Alfred.
Alg. Algebra.
A. M. (Lat. *anno mundi*). In the year of the world.
A. M. (Lat. *ante meridiem*), Before noon.
A. M. (Lat. *artium magister*), Master of Arts.
Am., Amer. America, American.
A. M. D. Army Medical Dept.
Amer. Phil. Soc. American Philosophical Society.
Amt. Amount.
A. N. Anglo-Norman.
an. (Lat. *anno*), In the year.
Anal. Analysis.
Anat. Anatomy, Anatomical.
Anc. Ancient.
Anon. Anonymous.
Ans. Answer.
A. N. S. Army Nursing Service.
A. N. S. S. Associate of the Normal School of Science.
Ant., Antiq. Antiquities, Antiquarian.
Anthrop. Anthropology, Anthropological.
A. O. H. Ancient Order of Hibernians.
A. O. U. American Ornithologists' Union.
A. O. U. W. Ancient Order of United Workmen.
Ap., App. Apostle, Apostles.
A. P. A. American Protestant Association; American Protective Association.
Apoc. Apocalypse, Apocrypha.
Apog. Apogee.
App. Appendix.
approx. Approximate, -ly.
Apr. April.
A. P. S. Associate of the Pharmaceutical Society.
Aq. (Lat. *aqua*), Water.
A. Q. M. Assistant Quartermaster.
A. Q. M. G. Assistant Quartermaster-General.
Ar., Arab. Arabic, Arabian.
Ar., Arr. Arrive, Arrives, Arrived, Arrival.
A. R. A. Associate of the Royal Academy.
Arab. Arabic, Arabian.
Aram. Aramaic.
Arch. Architecture.
Archæol. Archæology.
Archd. Archdeacon.
A. R. H. A. Associate of the Royal Hibernian Academy.
Arith. Arithmetic, Arithmetical.
Ariz. Arizona.
Ark. Arkansas.
Arm. Armorican, Armenian.
A. R. R. (Lat. *anno regni regis* or *reginæ*), In the year of the king's (or queen's) reign.
A. R. S. A. Associate of the Royal Scottish Academy.
A. R. S. M. Associate of the Royal School of Mines.
Art. Article.
A. S., A.-S. Anglo-Saxon.
Asst. Assistant.
A. S. S. U. American Sunday School Union.
Assyr. Assyrian.
Astrol. Astrology.
Astron. Astronomy, Astronomical.
A. T. S. American Tract Society.
Atty. Attorney.
Atty.-Gen. Attorney-General.
A. U. A. American Unitarian Association.
A. U. C. (Lat. *anno urbis conditæ*), In the year from the building of the city — Rome.
Aug. Augmentative.
Aug. Augustus; August.
Auxil. Auxiliary.
A. V. Authorized Version.
A. V. Artillery Volunteers.
Avoir. Avoirdupois.
B. Bass; Book.
B., Brit. British.
b. Born.
B. A. Bachelor of Arts. [*A. B.*]
Bal. Balance.
Balt., Balto. Baltimore.
Bank. Banking.
Bap., Bapt. Baptist.
Bar. Barrel, Barometer.
Bart., Bt. Baronet.
Bat., Batt. Battalion.
bbl., bbls. Barrel, Barrels.
B. C. Before Christ.
B. Ch. (Lat. *baccalaureus chirurgiæ*), Bachelor of Surgery.
B. C. L. (Lat. *baccalaureus civilis legis*), Bachelor of Civil Law.
B. D. (Lat. *baccalaureus divinitatis*), Bachelor of Divinity.
Bd. Bound.
Bdls. Bundles.
Bds. Bound in boards.
B. E. Bachelor of the Elements; Bachelor of Elocution.
Belg. Belgic, Belgian.
Ben., Benj. Benjamin.
Berks. Berkshire.
Bib. Bible, Biblical.
Biog. Biography, Biographical.
Biol. Biology, Biological.
B. L., B. L. L. (Lat. *baccalaureus legum*), Bachelor of Laws.
bls. Bales.
B. M. (Lat. *baccalaureus medicinæ*), Bachelor of Medicine.
B. M., B. Mus. (Lat. *baccalaureus musicæ*), Bachelor of Music.
B. O. Branch Office; Board of Ordnance.

B. O. Bachelor of Oratory.
Boh. Bohemian, or Czech.
Bost. Boston.
Bot. Botany, Botanical.
B. P. O. E. Benevolent and Protective Order of Elks.
Bp. Bishop.
Br., Bro. Brother.
Bret. Bas-Breton, or Celtic of Brittany.
Brig. Brigade.
Brig.-Gen. Brigadier-General.
Brit. Britain, Britannia, British.
B. S. Bachelor of Surgery; Bachelor of Science.
B. Sc. (Lat. *baccalaureus scientiæ*), Bachelor of Science.
B. S. L. Botanical Society, London.
Bt. Baronet.
bush. Bushel.
B. V. Blessed Virgin.
B. V. M. Blessed Virgin Mary.
bx., bxs. Box, Boxes.
C. Cent, Cents; Centigrade; Consul; Centime, Centimes; a hundred.
C., Cap. (Lat. *caput*), Chapter.
C. A. Chartered Accountant.
Cal. California; Calendar.
Cam., Camb. Cambridge.
Cant. Canticle.
Cant. [*Cantaur.*]
Cantab. (Lat. *Cantabrigiensis*), Of Cambridge.
Cantuar., Cant. (Mid. Lat. *Cantuaria*), Canterbury.
Cap. (Lat. *caput*), Capital; Chapter.
Caps. Capitals.
Capt. Captain.
Card. Cardinal.
Cath. Catharine; Catholic.
C. B. Companion of the Bath.
C. C. Catholic Clergyman, Catholic Curate.
C. D. V. Carte-de-Visite.
C. E. Civil Engineer.
Cel. Celsius.
Celt. Celtic.
Cent. (*centum*), A hundred; Centigrade.
Centig. Centigrade.
Cert., Certif. Certify; Certificate.
Cf. (Lat. *confer*), Compare.
C. ft. Cubic feet.
C. G. Coastguard; Commissary-General.
C. G. S. Centimetre-Gramme-Second.
C. H. Court House.
Ch. Church; Chapter.
Chal. Chaldron.
Chal., Chald. Chaldee.
Chan. Chancellor.
Chap. Chapter.
Chas. Charles.
Chem. Chemistry, Chemical.
Ch. Hist. Church History.
Chic. Chicago.
Chin. Chinese.
Chr. Christ; Christian; Christopher.
Chron. Chronology, Chronological.
C. I. Order of the Crown of India.
C. I. E. Companion of the Order of the Indian Empire.
Cin. Cincinnati.
Cit. Citation; Citizen.
Civ. Civil.
C. J. Chief Justice.
Cl. Clergyman.
Class. Classical.
Clk. Clerk.
cm. Centimetre.
C. M. Certificated Master; Common metre.
C. M. (Lat. *chirurgiæ magister*), Master in Surgery.
C. M. G. Companion of the Order of St. Michael and George.
C. M. Z. S. Corresponding Member of the Zoölogical Society.
Co. Company; County.
C. O. D. Cash on delivery; Collect (payment) on delivery.
Cogn. Cognate.
Col. Colonel; Colossians; Column.
Coll. College.
Colloq. Colloquial; Colloquialism; Colloquially.
Colo. Colorado.
Com. Commander; Commerce; Commissioner; Committee; Commodore; Common.
Comm. Commentary; Commerce.
Comp. Compare; Comparative; Compound, Compounded.
Compar. Comparative.
Compos. Composition.
Com. ver. Common Version.
Con., contra. (Lat.), Against.
Con. Cr. Contra Credit.
Cong. Congregation, Congregational, Congregationalist; Congress.
Conj. Conjunction.
Conn. Connecticut.
Con. Sec. Conic Sections.
Contr. Contracted, Contraction.
Cop., Copt. Coptic.
Cor. Corinthians.
Cor. Mem. Corresponding Member.
Corn. Cornwall; Cornish.
Corrup. Corruption, Corrupted.
Cor. Sec. Corresponding Secretary.
Cos. Cosine.
C. P. Clerk of the Peace; Common Pleas.
C. P. A. Certified Public Accountant.
C. P. C. Clerk of the Privy Council.
C. P. S. (Lat. *custos privati sigilli*), Keeper of the Privy Seal.
C. Q. D. Come quick — danger.
Cr. Credit, Creditor.
C. R. (Lat. *Civis Romanus*), Roman Citizen.
C. R. (Lat. *custos rotulorum*), Keeper of the Rolls.
Cres. Crescendo.
Crim. con. Criminal conversation, or adultery.
Crystall., Crystallog. Crystallography.
C. S. A. Confederate States of America.
C. S. Court of Sessions, Clerk to the Signet.
C. S. I. Companion of the Star of India.
Csks. Casks.
Ct. (Lat. *centum*), A hundred.
Ct. Court.
Ct., Conn. Connecticut.
C. T. Certified Teacher.
C. T. A. U. Catholic Total Abstinence Union.
Cu. (Lat. *cuprum*), Copper.
Cub., Cu. ft. Cubic, Cubic foot.
Cur., Curt. Current — this month.
Cwt. A hundredweight; Hundredweights.
Cyc. Cyclopædia.
D. Deputy.
d. (Lat. *denarius, denarii*), A penny, Pence.
d. Died.
Dan. Daniel; Danish.
Dat. Dative.
Dav. David.
D. C. (Ital. *da capo*), From the beginning.
D. C., Dist. Col. District of Columbia.
D. C. Doctor of Chiropractic.
D. C. L. Doctor of Civil (or Canon) Law.
D. D. (Lat. *divinitatis doctor*), Doctor of Divinity.
D. D. D. (Lat. *dat. dicat, dedicat*), He gives, devotes, and consecrates. (The formula by which anything was consecrated to the gods or to religious uses by the Romans.)
D. D. S. Doctor of Dental Surgery.
D. E. Dynamic Engineer.
D. Eng. Doctor of Engineering.
Dec. December.
decim. Decimetre.
Def. Definition.
Deft. Defendant.
Deg. Degree, Degrees.
Del. Delaware.
Del. (Lat. *delineavit*), He (or she) drew.
Dep., Dept. Department.
Dep. Deputy.
Der. Derived, Derivation.
Deut. Deuteronomy.
D. F. Dean of the Faculty; Defender of the Faith.
D. G. (Lat. *Dei gratia*), By the grace of God.
Dict. Dictionary.
Dim., Dimin. Diminutive.
Dis., Disct. Discount.
Dist. District.
Dist. Atty. District Attorney.
Div. Divide; Dividend; Division; Divisor.
D. Lit., D. Litt. Doctor of Literature.
D. L. O. Dead Letter Office.
D. M., D. Mus. Doctor of Music.
D. M. D. Doctor of Dental Medicine.
D. O. Doctor of Osteopathy; Doctor of Optics.
Do. (Ital. *ditto*), The same.
Dols. Dollars.
Dom. Econ. Domestic Economy.
Doz. Dozen.
Dpt. Deponent.
Dr. Debtor; Doctor; Dram, Drams.
Dram. Dramatic, Dramatically.
D. S. (Ital. *dal segno*), From the sign.
D. Sc. Doctor of Science.
D. T. (Lat. *doctor theologiæ*), Doctor of Theology.
Du., Dut. Dutch.
Dub. Dublin.
Duo. 12*mo.* Duodecimo (twelve folds).
D. V. (Lat. *Deo volente*), God willing.
D. V. M. Doctor of Veterinary Medicine.
D. V. S. Doctor of Veterinary Surgery.
Dwt. (Lat. *denarius*, and English *weight*), Pennyweight, Pennyweights.
Dynam. Dynamics.
E. East, Eastern; English; Edinburgh.
Ea. Each.
E. Aram. East Aramæan, generally called Chaldee.
Eben. Ebenezer.
E. C. Eastern Central; Established Church.
Eccl., Eccles. Ecclesiastical.
Eccles., Ecclesiol. Ecclesiology.
Econ. Economy.
Ed. Editor; Edition; Edinburgh.
Ed., Edm. Edmund.
Edin. Edinburgh.
E. D. S. English Dialect Society.
Edw. Edward.
E. E. Errors excepted.
E. E. Electrical Engineer.
e. g. (Lat. *exempli gratia*), For example.
E. I. East Indies, East Indian.
E. I. C., E. I. Co. East Indian Company.
E. I. C. S. East India Company's Service.
Elec., Elect. Electric, Electricity.
Eliz. Elizabeth, Elizabethan.
Emp. Emperor, Empress.
Ency., Encyclo. Encyclopædia.
E. N. E. East-northeast.
Eng. England, English.
Eng., Engin. Engineer, Engineering.
Eng. Dept. Department of Engineers.
Ent., Entom. Entomology, Entomological.
Env. Ext. Envoy extraordinary.
Eph. Ephesians; Ephraim.
Epiph. Epiphany.
Epis. Episcopal.
Epist. Epistle, epistolary.
Eq. Equal, equivalent.

Equiv. Equivalent.
Esd. Esdras.
E. S. E. East-southeast
Esp., Espec. Especial, especially.
Esq., Esqr. Esquire.
et al. (Lat. *et alibi*), And elsewhere.
et al. (Lat. *et alii, aliæ,* or *alia*), And others.
etc., &c. (Lat. *et cetæri, cæteræ,* or *cætera*), And others, and so forth.
Eth. Ethiopia, Ethiopian.
Ethnol. Ethnology, ethnological.
et seq. (Lat. *et sequentes,* or *sequentia*), And the following.
Etym. Etymology.
Ex. Example: Examined: Exception: Exodus.
Exc. Excellency: Except, excepted.
Exch. Exchange: Exchequer.
Exd. Examined.
Ex. Doc. Executive Document.
Exec. Executor.
Execx. Executrix.
Ex. Gr. (Lat. *exempli gratia*), For example.
Exod. Exodus.
Exon. (Lat. *Exonia*), Exeter.
Exor. Executor.
Ez. Ezra.
Ezek. Ezekiel.
E. & O. E. Errors and omissions excepted.
F. Fellow: Folio: Fahrenheit.
f. Farthing, farthings.
f., fem. Feminine.
f. Franc, francs.
ft. Foot, feet.
Fahr. Fahrenheit.
F. A. S. Fellow of the Society of Arts.
F. & A. M. Free and Accepted Masons.
F. A. S. E. Fellow of the Antiquarian Society, Edinburgh.
F. B. S. E. Fellow of the Botanical Society of Edinburgh.
F. C. Free Church of Scotland.
Fcp. Foolscap.
F. C. P. S. Fellow of the Philosophical Society, Cambridge.
F. C. S. Fellow of the Chemical Society.
F. D., Fid. Def. (Lat. *Fidei Defensor*), Defender of the Faith.
Feb. February.
Fec. (Lat. *fecit*), He or she did it.
F. E. I. S. Fellow of the Educational Institute of Scotland.
Fem. Feminine.
F. E. S. Fellow of the Entomological Society.
Feud. Feudal.
F. F. V. First Families of Virginia.
F. G. S. Fellow of the Geological Society.
F. I. A. Fellow of the Institute of Actuaries.
F. I. C. Fellow of the Chemical Institute.
fi. fa. Fieri facias.
Fig. Figure, figures, figurative, figuratively.
Finn. Finnish.
F. K. Q. C. P. I. Fellow of the Kings and Queen's College of Physicians, Ireland.
Fl. Flemish; Florin, florins; Flourished.
Fla. Florida.
Flem. Flemish.
F. L. S. Fellow of the Linnæan Society.
F. M. Field-marshal.
Fo., Fol. Folio.
F. O. Foreign Office; Field-officer.
F. O. B. Free on board.
For. Foreign.
Fort. Fortification.
F. P. Fire-plug.
F. P. S. Fellow of the Philological Society.
Fr. France; French; Francis; Francs.
fr. From.
F. R. A. S. Fellow of the Royal Astronomical Society.
F. R. C. P. Fellow of the Royal College of Physicians.
F. R. C. P. E. Fellow of the Royal College of Physicians, Edinburgh.
F. R. C. S. Fellow of the Royal College of Surgeons.
F. R. C. S. E. Fellow of the Royal College of Surgeons, Edinburgh.
F. R. C. S. I. Fellow of the Royal College of Surgeons, Ireland.
Fred. Frederick.
Freq. Frequentative.
F. R. G. S. Fellow of the Royal Geographical Society.
F. R. H. S. Fellow of the Royal Horticultural Society.
F. R. Hist. S. Fellow of the Royal Historical Society.
Fri. Friday.
Fries. Friesland.
Fris. Frisian.
F. R. Met. S. Fellow of the Royal Meteorological Society.
F. R. M. S. Fellow of the Royal Microscopical Society.
F. R. S. Fellow of the Royal Society.
F. R. S. E. Fellow of the Royal Society, Edinburgh.
F. R. S. L. Fellow of the Royal Society of Literature.
F. R. S. S. Fellow of the Royal Statistical Society.
F. S. A. Fellow of the Society of Arts, or of Antiquaries.
F. S. A. Scot. Fellow of the Society of Antiquaries of Scotland.
Ft. Foot, feet; Fort.
Fth. Fathom.
Fur. Furlong.
Fut. Future.
F. Z. S. Fellow of the Zoölogical Society.
G. Genitive; Guinea, guineas; Gulf.
Ga. Georgia.
G. A. General Assembly.
Gael. Gaelic; Gadhelic.
Gal. Galatians.
Gal., Gall. Gallon, gallons.
Galv. Galvanism, galvanic.
G. A. R. Grand Army of the Republic.
G. B. Great Britain.
G. B. & I. Great Britain and Ireland.
G. C. B. Grand Cross of the Bath.
G. C. G. H. Grand Cross of the Guelphs of Hanover.
G. C. L. H. Grand Cross of the Legion of Honor.
G. C. M. G. Grand Cross SS. Michael and George.
G. C. S. I. Grand Commander of the Star of India.
G. D. Grand Duke, Grand Duchess.
Gen., Genl. General.
Gen. Genesis; Genitive.
Gend. Gender.
Genit. Genitive.
Gent., Gentn. Gentleman, gentlemen.
Geo. George; Georgia.
Geog. Geography, geographical.
Geol. Geology, geological.
Geom. Geometry, geometrical.
Ger., Germ. German.
Gi. Gill, gills.
G. L. Grand Lodge.
Gm. Grammes.
G. M. Grand Master.
Go., Goth. Gothic.
G. O. P. Grand old party (applied to republican party).
Gov. Governor.
Gov.-gen. Governor-general.
Govt. Government.
G. P. O. General Post-Office.
Gr. Grain, grains; Great; Greek; Gross.
Gram. Grammar, grammatical.
Gro. Gross.
G. T. Good Templars; Grand Tyler.
Gtt. (Lat. *guttæ*), Drops.
Gun. Gunnery.
H. Hour, hours.
Hab. Habakkuk.
Hag. Haggai.
Hants. Hampshire.
H. B. C. Hudson Bay Company.
H. B. M. His (or Her) Britannic Majesty.
H. C. Heralds' College; House of Commons.
H. C. M. His (or Her) Catholic Majesty.
h. e. (Lat. *hoc est, hic est*), This or That is, here is.
Heb., Hebr. Hebrew, Hebrews.
Her. Heraldry, heraldic.
Hf.-bd. Half-bound.
H. G. Horse Guards.
H. H. His (or Her) Highness; His Holiness (the Pope).
Hhd. Hogshead, hogsheads.
H. I. H. His (or Her) Imperial Highness.
Hind. Hindu, Hindustan, Hindustani.
Hist. History, Historical.
H. J., H. J. S. (Lat. *hic jacet, hic jacet sepultus*), Here lies, here lies buried.
H. M. His (or Her) Majesty.
H. M. P. (Lat. *hoc monumentum posuit*), Erected this monument.
H. M. S. His (or Her) Majesty's Service, Ship, or Steamer.
Hon., Honble. Honorable.
Hond. Honored.
Hor., Horol. Horology, horological.
Hort., Hortic. Horticulture, horticultural.
Hos. Hosea.
H. P. Half-pay; High-priest; Horse power.
H. R. House of Representatives.
H. R. E. Holy Roman Empire, or Emperor.
H. R. H. His (or Her) Royal Highness.
H. R. I. P. (Lat. *hic requiescit in pace*), Here rests in peace.
H. S. (Lat. *hic situs*), Here lies.
H. S. H. His (or Her) Serene Highness.
Hum., Humb. Humble.
Hun., Hung. Hungary, Hungarian.
Hund. Hundred.
Hyd., Hydros. Hydrostatics.
Hydraul. Hydraulics.
Hydros. [Hyd.]
Hypoth. Hypothesis, hypothetical.
I. Island.
Ia. Iowa.
Ib., Ibid. (Lat. *ibidem*), In the same place.
Icel. Icelandic.
Ich., Ichthy. Ichthyology.
Id. (Lat. *idem*), The same.
Ida. Idaho.
i. e. (Lat. *id est*), That is.
I. H. S. (Lat. *Jesus Salvator Hominum*), Jesus, the Saviour of Men.
Ill. Illinois.
Imp. (Lat. *imperator*), Emperor; Imperial; impersonal.
Imp., Impf. Imperfect.
Imper. Imperative.
In. Inch, inches.
Incog. (Ital. *incognito, incognita*), Unknown.
Ind. India, Indian; Indiana.
Indic. Indicative.
Ind. Ter. Indian Territory.
Inf., Infin. Infinitive.
In lim. (Lat. *in limine*), At the outset.
In loc. (Lat. *in loco*), In its place.
I. N. R. I. (Lat. *Jesus Nazarenus Rex Iudæorum*), Jesus of Nazareth, King of the Jews.
Ins. Insurance.
Ins. Gen. Inspector General.
Inst. Instant, the present month; Institute, institution.
Int. Interest.

Int. Dept. Department of the Interior.
Intens. Intensive; Intensative.
Interj. Interjection.
Intrans. Intransitive.
In trans. (Lat. *in transitu*), On the passage.
Int. Rev. Internal Revenue.
Introd. Introduction.
Io. Iowa.
I. O. F. Independent Order of Foresters.
I. O. G. T. Independent Order of Good Templars.
I. O. O. F. Independent Order of Oddfellows.
I. O. R. M. Improved Order of Red Men.
I. O. S. M. Independent Order of Sons of Malta.
I. O. U. I owe you.
i. q. (Lat. *idem quod*), The same as.
Ir. Ireland, Irish.
Irreg. Irregular.
Is., Isa. Isaiah.
I. S. Irish Society.
Isl. Island.
I. S. M. Jesus Salvator Mundi.
It., Ital. Italy; Italic; Italian.
Itin. Itinerary.
J. Judge; Justice.
J. A. Judge-advocate.
Jac. Jacob, Jacobus (= James).
Jan. January.
J. A. G. Judge Advocate General.
Jav. Javanese.
J. C. Jesus Christ.
J. C. D. (Lat. *juris civilis doctor*), Doctor of Civil Law.
J. D. (Lat. *jurum doctor*), Doctor of Laws.
Jer. Jeremiah.
J. G. W. Junior Grand Warden.
J. H. S. [*I. H. S.*].
Jno. John.
Jour. Journey.
Jon., Jona. Jonathan.
Jos. Joseph.
Josh. Joshua.
Jour. Journal.
J. P. Justice of the Peace.
Jr. Juror; Junior.
J. U. D. (Lat. *Juris utriusque doctor*), Doctor of both laws (*i. e.*, of civil and canon law).
Jud. Judith.
Judg. Judges.
Jul. July; Julius; Julian.
Jul. Per. Julian Period.
Jun. June.
Jun., Junr. Junior.
Juris. Jurisprudence.
K. King; Knight.
Kan., Ks. Kansas.
K. B. Knight of the Bath.
K. B. King's Bench.
K. C. King's Counsel; Knights of Columbus.
K. C. B. Knight Commander of the Bath.
K. C. H. Knight Commander of the Guelphs of Hanover.
K. C. M. G. Knight Commander of St. Michael and St. George.
K. C. S. I. Knight Commander of the Star of India.
K. E. Knight of the Eagle.
Ken., Ky. Kentucky.
K. G. Knight of the Garter.
K. G. E. Knight of the Golden Eagle.
K. G. C. Knight of the Grand Cross.
K. G. C. B. Knight of the Grand Cross of the Bath.
K. G. F. Knight of the Golden Fleece.
K. G. H. Knight of the Guelphs of Hanover.
Ki. Kings.
Kilog. Kilogramme.
Kilom., Kilo. Kilometre.
Kingd. Kingdom.
K. I. B. Knight of Leopold of Belgium.
K. L. H. Knight of the Legion of Honor.
K. M. Knight of Malta.
Kn. N. S. Knight of the Loyal Northern Star (Sweden).
Knick. Knickerbocker.
Knt. Knight.
K. P. Knight of St. Patrick.
K. of P. Knights of Pythias.
Ks. Kansas.
K. S. Knight of the Sword (Sweden).
Kt. Knight.
K. T. Knight of the Thistle; Knight Templar.
K. T. S. Knight of Tower and Sword (Portugal).
Ky. Kentucky.
L. Latin; Lake; Lord; Lady.
L., l., £. (Lat. *libra*), Pound, pounds (sterling).
L., lb., lb. (Lat. *libra*), Pound, pounds (weight).
La. Louisiana.
L. A. Law Agent; Literate in Arts.
Lam. Lamentations.
Lat. Latin; Latitude.
lb. Pound, pounds (weight).
L. c. Lower case (in printing).
L. c., loc. cit. (Lat. *loco citato*), In the place cited.
L. C. Lord Chamberlain; Lord Chancellor.
L. C. J. Lord Chief-justice.
L. C. P. Licentiate of the College of Preceptors.
Ld. Lord.
Ldp. Lordship.
L. D. S. Licentiate of Dental Surgery.
Leg., Legis. Legislature, legislative.
Leip. Leipsic.
Lev. Leviticus.
Lex. Lexicon.
Lexicog. Lexicography, lexicographer, lexicographical.
L. G. Life Guards.
L. Ger. Low German or Platt Deutsch.
L. H. D. Doctor of Humanities.
L. I. Light Infantry; Long Island.
Lib. (Lat. *liber*), Book.
Lib. Library, librarian.
Lieut., Lt. Lieutenant.
Lieut.-col. Lieutenant-colonel.
Lieut.-gen. Lieutenant-general.
Lieut.-gov. Lieutenant-governor.
lin. Lineal, or right-line measures; *e. g.*, lin. yd.; lin. ft., etc.
Linn. Linnæus, Linné, Linnæan.
Liq. Liquor, liquid.
Lit. Literally, literature, literary.
Lit. D., Litt. D. (Lat. *literarum doctor*), Doctor of Literature.
Lith. Lithography.
Liv. Livre.
LL. B. (Lat. *legum baccalaureus*), Bachelor of Laws.
LL. D. (Lat. *legum doctor*), Doctor of Laws.
LL. I. Lord-Lieutenant of Ireland.
LL. M. Master of Laws.
L. M. Long metre.
Lon., Lond. London.
Lon., Long. Longitude.
Loq. (Lat. *loquitur*), He (or she) speaks.
Lou. Louisiana.
Lp. Lordship.
L. P. Lord Provost.
L. S. (Lat. *locus sigilli*), Place of the seal.
L. s. d. (Lat. *libræ, solidi, denarii*), Pounds, shillings, pence.
Lt. Lieutenant.
Lt. Inf. Light Infantry.
Luth. Lutheran.
m. Married; Masculine; Mètre, mètres; Mile, miles; Minute, minutes.
M. Marquis; Middle; Monday; Morning; Monsieur.
M. (Lat. *mille*), Thousand.
M. (Lat. *meridies*), Meridian, Noon.
M. A. (Master of Arts.) [*A. M.*]
Mac., Macc. Maccabees.
Mach., Machin. Machine, machinery.
Mad., Madm. Madam.
Mag. Magyar; Magazine.
Maj. Major.
Maj.-gen. Major-general.
Mal. Malachi; Malay, Malayan.
Manuf. Manufactures, manufacturing.
Mar. March; Maritime.
Marq. Marquis.
Mas., Masc. Masculine.
Mass. Massachusetts.
M. Ast. S. Member of the Astronomical Society.
Math. Mathematics, mathematician, mathematical.
Matt. Matthew.
M. B. (Lat. *medicinæ baccalaureus*), Bachelor of Medicine.
M. B. (Lat. *musicæ baccalaureus*), Bachelor of Music.
M. C. Member of Congress; Master of Ceremonies
Mch. March.
M. C. P. Member of the College of Preceptors.
M. D. (Lat. *medicinæ doctor*), Doctor of Medicine.
Md. Maryland.
Mdlle. (Fr. *mademoiselle*), Miss.
Mdse. Merchandise.
M. E. Most Excellent; Military Engineer; Mining Engineer; Mechanical Engineer.
M. E. Methodist Episcopal.
Me. Maine.
Meas. Measure.
Mech. Mechanics, mechanical.
Med. Medicine, medical; Mediæval.
Med. Lat., Mediæv. Lat. Mediæval Latin.
Mem. Memorandum, memoranda.
Mess. & Docs. Messages and Documents.
Messrs. (Fr. *messieurs*), Gentlemen.
Met. Metaphysics, metaphysical.
Metall. Metallurgy.
Metaph. Metaphysics; Metaphorically.
Meteor. Meteorology, meteorological.
Meth. Methodist.
Meton. Metonymy.
Mex. Mexico.
Mfd., Mfs. Manufactured, manufactures.
Mfg. Manufacturing.
M. F. H. Master of Foxhounds.
M. H. Most Honorable.
M. H. Ger. Middle High German.
M. I. C. E. Member of the Institute of Civil Engineers.
Mich. Michaelmas; Michigan.
Mid. Middle; Midshipman.
Mid. Lat. Latin of the Middle Ages.
Mil., Milit. Military,
M. I. M. E. Member of the Institute of Mining Engineers.
Min. Mineralogy, mineralogical: Minute, minutes.
Minn. Minnesota.
Min. Plen. Minister Plenipotentiary.
Miss. Mississippi.
Mlle. (Fr. *mademoiselle*), Miss.
M. L. S. B. Member of the London School Board.
MM. Their Majesties.
MM. (Fr. *messieurs*), Gentlemen.
mm. Millemetres; Micrometres.
Mme. (Fr. *madame*), Madam.
M. P. P. Member of Provincial Parliament.
M. N. A. S. Member of the National Academy of Sciences.
M. N. S. Member of the Numismatical Society.
Mo. Missouri; Month.
Mod. Modern.
Mod. (Ital. *moderato*), Moderately.
Mon. Monday.
Mons. (Fr. *monsieur*), Sir, Mr.
Mont. Montana.

M. P. Member of Parliament.
M. P. S. Member of the Pharmaceutical Society; Member of the Philological Society.
Mr. Master, Mister.
M. R. A. S. Member of the Royal Asiatic Society.
M. R. C. P. Member of the Royal College of Physicians.
M. R. C. S. Member of the Royal College of Surgeons.
M. R. C. V. S. Member of the Royal College of Veterinary Surgeons.
M. R. G. S. Member of the Royal Geographical Society.
M. R. I. Member of the Royal Institution.
M. R. I. A. Member of the Royal Irish Academy.
Mrs. Mistress (usually abbreviated to mis'sis).
M. S. Master of Surgery.
M. S. Master of Science.
M. S. (Lat. *memoriæ sacrum*), Sacred to the memory of.
MS. Manuscript.
MSS. Manuscripts.
mo., mth. Month.
Mt., Mts. Mount, mountains.
Mus. Museum; Music, musical.
Mus. B. (Lat. *musicæ baccalaureus*), Bachelor of Music.
Mus. D., Mus. Doc., Mus. Doct. (Lat. *musicæ doctor*), Doctor of Music.
M. W. G. M. Most Worthy Grand Master.
Myth. Mythology, mythological.
N. Noon; North; Noun; Number; New; Neuter.
N. A. North America, North American.
Nah. Nahum.
Nap. Napoleon.
Nat. Natural; National.
Nat. Hist. Natural History.
Nat. ord. Natural order.
Nat. Phil. Natural Philosophy.
Naut. Nautical.
N. B. New Brunswick; North Britain (= Scotland).
N. B. (Lat. *nota bene*), Note well, take notice.
N. C. North Carolina.
N. D., N. Dak. North Dakota.
N. E. New England; Northeast.
Neb. Nebraska.
Neg. Negative, negatively.
Neh. Nehemiah.
Nem. con. (Lat. *nemine contradicente*), No one contradicting; unanimously.
Nem. diss. (Lat. *nemine dissentiente*), No one dissenting; unanimously.
Neth. Netherlands.
Neut. Neuter.
Nev. Nevada.
New Test., N. T. New Testament.
N. F. Newfoundland.
N. H. New Hampshire.
N. H. Ger. New High German.
N. J. New Jersey.
N. L., N. Lat. North Latitude.
N. M. New Mexico.
N. N. E. North-northeast.
N. N. W. North-northwest.
N. O. New Orleans.
No. (Lat. *numero*), Number.
nol. pros. (*nolens prosequi*), I am unwilling to prosecute.
Nom., Nomin. Nominative.
Non con. Non-content, dissentient. (The formula in which Members of the House of Lords vote.)
Non obst. (Lat. *non obstante*), Notwithstanding.
Non pros. (Lat. *non prosequitur*), He does not prosecute.
Non seq. (Lat. *non sequitur*), It does not follow (as a consequence).
n. o. p. Not otherwise provided for.
Nor., Norm. Norman.
Nor. Fr., Norm. Fr. Norman French.
Norm. [Nor.]
Norw. Norway, Norwegian, Norse.
Nos. Numbers.
Nov. November.
N. P. Notary public.
N. S. New style; Nova Scotia.
n. s. Not specified.
N. S. J. C. (Fr. *Notre Seigneur Jesus Christ*), Our Lord Jesus Christ.
N. T. [New Test.]
Num., Numb. Numbers.
Numis. Numismatic, numismatology.
N. V. M. Nativity of the Virgin Mary.
N. W. Northwest.
N. W. T. Northwest Territory.
N. Y. New York.
N. Z. New Zealand.
O. Ohio; Old.
ob. (Lat. *obiit*), He (or she) died.
Obad. Obadiah.
Obdt., Obt. Obedient.
Obj. Objective.
Obs. Obsolete.
Oct. October.
Oct., 8vo. Octavo.
O. F. Odd Fellows.
O. H. Ger. Old High German.
O. H. M. S. On Her Majesty's Service.
O. K. "All correct."
Okl. Oklahoma.
Old Test., O. T. Old Testament.
Olym. Olympiad.
O. M. Old Measurement.
O. M. I. Oblate of Mary Immaculate.
Op. Opposite, opposition.
Opt. Optative; Optics, optical.
Or. Oregon.
Ordn. Ordnance.
Orig. Original, originally.
Ornith. Ornithology, ornithological.
O. S. Old Style; Old Saxon.
O. S. A. Order of St. Augustine.
O. S. B. Order of St. Benedict.
O. S. F. Order of St. Francis.
O. T. [Old Test.]
O. U. A. M. Order of United American Mechanics.
Oxf. Oxford.
Oxon. (Lat. *Oxonia, Oxoniensis*), Oxford; of Oxford.
Oxonien. (Lat. *Oxoniensis*), Of Oxford.
Oz. Ounce. [The *z* in this contraction and in *viz.*, represents an old symbol (ȝ), used to mark a terminal contraction.]
P. Page; Participle; Past; Pole; Port.
Pa. Pennsylvania.
Pa. a., par. a. Participial adjective.
Paint. Painting.
Pal., Palæont. Palæontology, palæontological.
Palæobo. Palæobotany.
Pa. part. Past participle.
Par. Paragraph; Participle.
Parl. Parliament, parliamentary.
Part. Participle.
Particip. Participial.
Pass. Passive.
Pat. Patrick.
Pathol. Pathological.
Payt. Payment.
P. C. (Lat. *patres conscripti*), Conscript Fathers.
P. C. Police-constable; Privy Council; Privy Councillor.
P. C. S. Principal Clerk of Session.
Pd. Paid.
Pd. D. Doctor of Pedagogy.
P. E. Protestant Episcopal.
P. E. I. Prince Edward's Island.
Penn. Pennsylvania.
Pent. Pentecost.
Per., Pers. Persian; Person, personal.
Per. an. (Lat. *per annum*), Yearly.
Per cent., per ct. (Lat. *per centum*), By the hundred.
Perf. Perfect.
Peri. Perigee.
Pers., Persp. Perspective.
Peruv. Peruvian.
Pet. Peter.
P. G. M. Past Grand Master.
Phar., Pharm. Pharmacy.
Ph. B. (Lat. *philosophiæ baccalaureus*), Bachelor of Philosophy.
Ph. D. (Lat. *philosophiæ doctor*), Doctor of Philosophy.
Phil. Philip; Philippians; Philosophy, philosophical.
Phil. Trans. Transactions of the Philosophical Society.
Phil., Phila. Philadelphia.
Philem. Philemon.
Philol. Philology.
Philos. Philosophy, philosophical.
Ph. M. Master of Philosophy.
Phenic. Phenician.
Photog. Photography, photographic, photographer.
Phren., phrenol. Phrenology, phrenological.
Phys. Physics, physical; Physiology, physiological.
Physiol. Physiology, physiological.
Pinx., Pxt. (Lat. *pinxit*), He (or she) painted it.
Pk. Peck.
Pl. Place; Plate; Plural.
P. L. Poet Laureate.
Plff., Pltff. Plaintiff.
Plu. Plural.
Plup. Pluperfect.
Plur. Plural.
P. M. (Lat. *post meridiem*), Afternoon.
P. M. Past Master; Peculiar metre; Postmaster.
P. M. G. Postmaster-General.
P. O. Post-office.
P. & O. Co. Peninsular and Oriental Steam Navigation Company.
Poet. Poetry, poetical.
Pol. Polish.
Polit. Econ. Political Economy.
P. O. O. Post-office order.
Pop. Population.
Port. Portugal, Portuguese.
Poss. Possessive.
Pp. Pages.
P. p. Past participle.
P. P. (Lat. *pater patriæ*), Father of his country.
P. P. Parish priest.
P. P. C. (Fr. *pour prendre congé*), To take leave. [T. T. L.]
Pph. Pamphlet.
Pr. Present; Priest; Prince.
Pr. par. Present participle.
P. R. (Lat. *Populus Romanus*), The Roman people.
P. R. Prize Ring.
P. R. A. President of the Royal Academy.
P. R. C. (Lat. *post Romam conditam*), After the building of Rome. [A. U. C.]
Preb. Prebend.
Pref. Prefix; Preface.
Prep. Preposition.
Pres. President; Present.
Pret. Preterite.
Prim. Primary.
Prin. Principal.
Print. Printing.
Priv. Privative.
Prob. Problem; Probable, probably.
Prof. Professor.
Pron., Pro. Pronoun; Pronounced; Pronunciation.
Pron. a. Pronominal adjective.
Prop. Proposition.
Pros. Prosody.
Pro tem. (Lat. *pro tempore*), For the time being.
Prov. Proverbs, proverbial, proverbially; Provincial, provincially; Provost.

Provinc. Provincial.
Prox. (Lat. *proximo*), Next of or of the next month.
Prs. Pairs.
P. R. S. President of the Royal Society.
P. R. S. A. President of the Royal Scottish Academy.
Prus. Prussia, Prussian.
P. S. (Lat. *post scriptum*), Postscript.
P. S. Privy Seal.
Ps., Psa. Psalm, psalms.
Psychol. Psychology.
Pt. Part; Payment; Point; Port.
P. T. Post-town; Pupil teacher.
Pub. Public; Published, publisher.
Pub. Doc. Public Documents.
P. V. Post-village.
Pwt. Pennyweight.
Pxt. [PINX.]
Pyro., Pyrotech. Pyrotechnics.
Q., Qu. Query; Question.
Q. C. Queen's College.
Q. d. (Lat. *quasi dicat*), As if he should say.
Q. e. (Lat. *quod est*), Which is.
Q. E. D. (Lat. *quod erat demonstrandum*), Which was to be proved.
Q. E. F. (Lat. *quod erat faciendum*), Which was to be done.
Q. E. I. (Lat. *quod erat inveniendum*), Which was to be found out.
Q. l. (Lat. *quantum libel*), As much as you please.
Q. M. Quartermaster.
Q. M. Gen. Quartermaster-General.
Qr. Quarterly; Quire.
Q. S. Quarter Sessions.
Q. s. (Lat. *quantum sufficit*), A sufficient quantity.
Qt. Quart.
Qu. Queen; Query; Question.
Quar., quart. Quarterly.
Quar., 4to. Quarto.
Ques. Question.
Q. v. (Lat. *quod vide*), Which see.
Qy. Query.
R. Railway; Réaumur; River.
R. (Lat. *rex*), King; (Lat. *regina*), Queen.
R. (Lat. *recipe*), Take.
R. A. Royal Academy, Royal Academician; Rear-Admiral; Royal Arch; Royal Artillery.
Rabb. Rabbinical.
Rad. (Lat. *radix*), Root.
R. A. M. Royal Academy of Music.
R. A. S. Royal Agricultural Society.
R. C. Roman Catholic.
R. D. Rural Dean.
R. E. Royal Engineers; Royal Exchange.
R. E. Reformed Episcopal.
Réaum. Réaumur.
Rec. Recipe.
Recd. Received.
Recpt. Receipt.
Ref. Reference.
Ref. Ch. Reformed Church.
Ref. Pres. Reformed Presbyterian.
Reg. Regular.
Reg., Regr. Registrar.
Reg., Regt. Regiment, regimental.
Rel. Religion, religious.
Rel. Pron. Relative Pronoun.
Rem. Remark, remarks.
Rep. Report; Representative.
Rep. Repub. Republic; Republican.
Res. Resolution.
Retd. Returned.
Rev. Revelation; Revenues; Reverend; Review; Revise.
Revd. Reverend.
Revs. Reverends.
Rev. Stat. Revised Statutes.
R. F. D. Rural Free Delivery.
Rhet. Rhetoric, Rhetorical.
R. H. S. Royal Humane Society.
R. I. Rhode Island.
R. I. P. (Lat. *requiescat in pace*), May he (or she) rest in peace.
Riv. River.
R. M. Royal Mail; Royal Marines.
R. M. A. Royal Marine Artillery; Royal Military Asylum.
R. M. L. I. Royal Marine Light Infantry.
R. M. S. Royal Mail Steamer; Royal Mail Service.
R. N. Royal Navy.
R. N. R. Royal Naval Reserve.
R. O. Receiving Office.
Robt. Robert.
Rom. Roman, Romans.
Rom. Cath. Roman Catholic.
R. P. Regius Professor.
R. R. Right Reverend.
R. R. Railroad.
R. S. A. Royal Scottish Academy.
R. S. P. C. A. Royal Society for the Prevention of Cruelty to Animals.
R. S. E. Royal Society of Edinburgh.
R. S. L. Royal Society of London.
R. S. V. P. (Fr. *Répondez s'il vous plait*), Please reply.
Rt. Right.
Rt. Hon. Right Honorable.
Rt. Rev. Right Reverend.
R. T. S. Religious Tract Society.
Rt. Wpful. Right Worshipful.
Russ. Russia, Russian.
R. V. Revised Version; Rifle Volunteers.
R. W. Right Worshipful; Right Worthy.
R. W. D. G. M. Right Worshipful Deputy Grand Master.
R. W. G. M. Right Worshipful Grand Master.
R. W. G. R. Right Worthy Grand Representative.
R. W. G. S. Right Worthy Grand Secretary.
R. W. G. T. Right Worthy Grand Treasurer; Right Worthy Grand Templar.
R. W. G. W. Right Worshipful Grand Warden.
R. W. J. G. W. Right Worshipful Junior Grand Warden.
R. W. S. G. W. Right Worshipful Senior Grand Warden.
Ry. Railway.
S. Saint; Saturday; Section; Shilling; Sign; Signor; Solo; Soprano; South; Sun; Sunday; Sabbath.
s. Second, seconds; See; Singular; Son; Succeeded.
S. A. South Africa; South America.
S. A. (Lat. *secundem artem*), According to the rules of art.
Sab. Sabbath.
Sam., Saml. Samuel.
Sam., Samar. Samaritan.
Sans., Sansc., Sansk. Sanscrit, Sanskrit.
S. A. S. (Lat. *Societatis Antiquariorum Socius*), Fellow of the Society of Antiquaries.
Sat. Saturday.
Sax. Saxon, Saxony.
S. B. South Britain (England and Wales). [N. B.]
S. C. South Carolina.
S. C. (Lat. *senatus consultum*), A decree of the senate.
Sc. [SCIL, SCULL.]
Scan. mag. (Lat. *scandalum magnatum*), Defamatory expressions to the injury of persons of high rank or dignity.
S. caps., Sm. caps. Small capitals. (In printing.)
Sc. B. (Lat. *scientiæ baccalaureus*), Bachelor of Science.
Sc. D. (Lat. *scientiæ doctor*), Doctor of Science.
Sch. (Lat. *scholium*), A note.
Sch. Schooner.
Sci. Science.
Sci. fa. *Scire facias.*
Scil. Sc. (Lat. *scilicet*), Namely; to wit.
S. C. L. Student in Civil Law.
Sclav. Sclavonic.
Scot. Scotland, Scotch, Scottish.
Scr. Scruple, scruples.
Scrip., Script. Scripture, scriptural.
Sculp. Sculpture.
Sculp., Sculpt., Sc. (Lat. *sculpsit*), He (or she) engraved it.
S. D. Doctor of Science.
S. D., S. Dak. South Dakota.
S. D. U. K. Society for the Diffusion of Useful Knowledge.
S. E. South-east.
Sec. Second.
Sec., Sect. Section.
Sec., Secy. Secretary.
Sec. Leg. Secretary of Legation.
Sen. Senate, senator.
Sen. Doc. Senate Document.
Sep., Sept. September.
Seq. (Lat. *sequentes, sequentia*), The following or the next.
Serg., Sergt. Sergeant.
Serg. Maj. Sergeant-Major.
Serj., Serjt. Serjeant.
Serv. Servian.
Sess. Session.
S. G. Solicitor-general.
s g. [SP. GR.]
Sh. Shilling, shillings.
Sing. Singular.
S. J. Society of Jesus.
S. J. C. Supreme Judicial Court.
Skr. Sanskrit.
Slav. Slavonic.
Sld. Sailed.
S. M. Sergeant-major.
S. M. Lond. Soc. (Lat. *Societatis Medicæ Londinensis Socius*). Member of the London Medical Society.
S. N. (Lat. *secundum naturam*), According to nature, naturally.
Soc., Socy. Society.
Sol.-gen. Solicitor-general.
S. O. S. Suspend other Service.
Sp. Spain, Spanish; Spirit.
s. p. (Lat. *sine prole*), Without issue.
S. P. C. A. Society for the Prevention of Cruelty to Animals.
S. P. C. C. Society for the Prevention of Cruelty to Children.
S. P. C. K. Society for the Promotion of Christian Knowledge.
Spec. Special, specially.
S. P. G. Society for the Propagation of the Gospel.
sp. gr., s. g. Specific gravity.
S. P. Q. R. (Lat. *Senatus Populusque Romanus*), The Senate and the People of Rome.
sq. Square; *sq. ft.* Square foot, feet; *sq. in.* Square inch, inches; *sq. m.* Square mile, miles; *sq. yd.* Square yard; *sq. rd.* Square rod.
Sr. Senior; sir.
S. R. I. (Lat. *Sacrum Romanum Imperium*), The Holy Roman Empire.
S. R. S. (Lat. *Societatis Regiæ Socius*), Fellow of the Royal Society.
SS. Saints.
S. S. Sunday School.
S. S. C. Solicitor before the Supreme Court.
S. S. E. South-south-east.
S. S. W. South-south-west.
St. Saint; Stone; Strait; Street.
st. (Lat. *stet*), Let it stand (in printing).
Stat. Statute, statutes; Statuary.
S. T. Sons of Temperance.
S. T. B. Bachelor of Sacred Theology.
S. T. D. (Lat. *sacræ theologiæ doctor*), Doctor of Divinity.
ster., stg. Sterling.
St. L. St. Louis.
S. T. P. (Lat. *sacræ theologiæ professor*), Professor of Theology.
Str. Steamer, steam vessel.
Subj. Subjunctive.
Subst. Substantive; Substitute.
Suff. Suffix.
Sun., Sund. Sunday.
Sup. Superior; Superlative; Supplement; Supine.

Sup. Ct. Supreme Court.
Sup. Sgt. Supply Sergeant.
Supt. Superintendent.
Sur., Surg. Surgeon, surgery.
Sur.-gen. Surgeon-general.
Surv. Surveying, surveyor.
Surv.-gen. Surveyor-general.
S. v. (Lat. *sub voce*). Under the word or title.
S. W. Senior Warden; South-west.
Sw. Sweden, Swedish.
Switz. Switzerland.
Syn. Synonym, synonymous.
Synop. Synopsis.
Syr. Syria, Syriac; Syrup.
T. Tenor; Ton; Tun; Tuesday.
T. A. B. Total Abstinence Brotherhood.
Tab. Table; Tabular statement.
Tan. Tangent.
Tart. Tartaric.
Tech. Technical, technically.
Ten., Tenn. Tennessee.
Ter. Territory.
Term. Termination.
Teut. Teutonic.
Tex. Texas.
Text. rec. (Lat. *textus receptus*). The received text.
Th. Thomas; Thursday.
Theo. Theodore.
Theol. Theology.
Theor. Theorum.
Thess. Thessalonians.
Tho., Thos. Thomas.
Thu., Thur., Thurs. Thursday.
Tier. Tierce.
Tim. Timothy.
Tit. Title; Titus.
T. O. Turn over.
Tob. Tobit.
Tom. Tome, volume.
Tonn. Tonnage.
Topog. Topography, topographical.
Tp. Township.
Tr. Translation, translator, translated; Transpose; Treasurer; Trustee.
Trans. Transaction; Translation, translator, translated.
Trav. Travels.
Treas. Treasurer.
Trig., Trigon. Trigonometry, trigonometrical.
Trin. Trinity.
T. S. Transport Ships.
T. T. L. To take leave. [P. P. C.]
Tu., Tues. Tuesday.
Turk. Turkey, Turkish.
Typ. Typographer.
Typog. Typography, typographical.
U. C. (Lat. *urbis conditæ*). From the building of the city — Rome. [A. U. C.]
U. C. (Upper Case) Capital letters in printing.
U. J. D. [J. U. D.]
U. K. United Kingdom.
U. K. A. Ulster King at Arms; United Kingdom Alliance.
Ult. (Lat. *ultimo*). Last, of the last month.
Unit. Unitarian.
Univ. University.
Up. Upper.
U. P. United Presbyterian.
U. S. United States.
U. S. A. United States of America; United States Army.
U. S. L. United States Legation.
U. S. M. United States mail; United States marine.
U. S. M. A. United States Military Academy.
U. S. N. United States Navy.
U. S. N. A. United States Naval Academy.
U. S. S. United States Senate; United States ship or steamer.
U. S. S. Ct. United States Supreme Court.
Usu. Usual, usually.
V. Verb; Verse; Victoria; Violin.
V. vs., (Lat. *versus*). Against.
V. (Lat. *vide*). See.
V. A. Vicar Apostolic; Vice-admiral.
Va. Virginia.
Val. Valve; Value.
Var. Variety.
Vat. Vatican.
V. aux. Verb auxiliary.
V. C. Vice-chancellor; Victoria Cross.
V. def. Verb defective.
V. D. M. (Lat. *Verbum Dei Minister*). Minister of the Word of God.
Ven. Venerable.
V. G. Vicar-General.
V. g. (Lat. *verbi gratia*). For the sake of example.
V. i. Verb intransitive.
Vice-pres. Vice-president.
Vid. (Lat. *vide*). See.
V. imp. Verb impersonal.
V. irr. Verb irregular.
Vis., Visc. Viscount.
Viz. (Lat. *videlicet*). Namely; to wit. [Oz.]
V. n. Verb neuter.
Voc. Vocative.
Vol., Vols. Volume, Volumes.
V. P. Vice-president.
V. r. Verb reflexive.
V. Rev. Very Reverend.
V. R. C. Volunteer Rifle Corps.
vs. (Lat. *versus*). Against.
V. S. Veterinary surgeon.
V. t. Verb transitive.
Vt. Vermont.
Vul., Vulg. Vulgate.
Vulg. Vulgar, vulgarly.
vv. ll. (Lat. *variæ lectiones*). Various readings.
W. Wednesday; Week; Welsh; West, western.
W. A. A. C. Women's Auxiliary Army Corps.
Wall., Wallach. Wallachian.
Wash. Washington.
w. c. Water closet.
W. C. A. Women's Christian Association.
W. C. T. U. Women's Christian Temperance Union.
W. D. War Department.
Wed. Wednesday.
Wel. Welsh.
w. f. Wrong font (in printing).
Whf. Wharf.
W. I. West Indies; West Indian.
Wis., Wisc. Wisconsin.
Wk. Week.
W. Long. West Longitude.
Wm. William.
W. M. Worshipful Master.
W. N. W. West-north-west.
Wp. Worship.
Wpful. Worshipful.
W. S. Writer to the Signet.
W. S. W. West-south-west.
Wt. Weight.
W. Va. West Virginia.
Wyo. Wyoming.
X. Christ.
Xm., Xmas. Christmas.
Xn. Christian.
Xnty. Christianity.
Xper., Xr. Christopher.
Xt. Christ.
Xtian. Christian.
Y. Year.
Yd. Yard.
Yds. Yards.
Ye. The; Thee.
Y. M. C. A. Young Men's Christian Association.
Y. M. Cath. A. Young Men's Catholic Association.
Y. M. H. A. Young Men's Hebrew Association.
Y. P. S. C. E. Young People's Society of Christian Endeavor.
Yr. Year; Younger; Your.
Ys. Years; Yours.
Y. W. C. A. Young Women's Christian Association.
Zach. Zachary.
Zech. Zechariah.
Zeph. Zephaniah.
Z. G., Zoo. Zoölogical Gardens.
Zoochem. Zoochemistry, zoochemical.
Zoogeog. Zoogeography, zoogeographical.
Zoöl. Zoölogy, zoölogical.

FIGURES OF SPEECH

The first and most obvious use of language is to convey thought, but it is not enough that words should be correct and precise and appropriately chosen. The plainest language is not always the most impressive. There is often a warmth and glow accompanying thought which demands imagery and vivacity of speech. It has been said that the life, color, flavor, and fragrance of literature have been secured by the skillful use of figurative language. The picturesque in poetry and prose is due in a large measure to figures of speech. Vividness, strength, beauty, clearness, force, elegance, often lie in the effective use of imagery.

Origin of Figures. Figures of speech are common in every-day conversation. We are all familiar with such phrases as these:— fleecy cloud; roaring wind; flight of time; mad idea; driving a bargain; slow as a snail; eloquent eye; soft voice; piercing tongue; uneven temper; morning of life; ship of state; bright idea; as hungry as a bear; as true as steel; as quick as thought. We find from such expressions that figures of speech originate in the very necessities of language. Words in their bare literal meaning are not capable of rendering every phase of thought. In the beginning of language men gave names to different objects. As ideas multiplied words were increased; but no language could be adequate to supply a separate word for every separate idea, hence arose the figurative or secondary use of words. The word "bright" in its primary meaning signifies that which sends out light, a luminous body or a reflecting surface. When we speak of a "bright" mind we imagine the influence of such a mind upon others as of a light in the midst of darkness. In this way the old word was called into use in a new sense.

Our language has been greatly enriched by the vast number of figurative words which we use unconsciously every day.

Another source of figures is the pleasure which they give. Words in their literalness are incapable of rendering delicate shades of thought or feeling. Figures of speech not only add to the picturesqueness of language but seem to be the natural mode for expressing the emotions. Primitive people, as well as little children, the most illiterate as well as the most learned, talk in figures. When the imagination is awakened or the passion inflamed, then it is natural to turn to the figurative. When figures are appropriately used they strengthen and adorn expression.

Briefly, then, the origin of figures lies, first, in the barrenness of language, the need for more copious expression than in the literal meaning of words; and, second, in the desire to give pleasure, force, and animation. Figures are the ornaments of speech, but they should not be used unless they adorn in an appropriate way.

Definition of Figure of Speech. A figure of speech is any deviation from the literal or ordinary mode of expression for the purpose of making the thought clearer or more attractive or more forceful.

Thinking in concrete images is more vivid and for the most part more interesting than thinking in abstract or in general terms; but for exact thinking we need to cultivate the ability to use expressions that are general, abstract, and literal. So it is well to practice one's self occasionally in converting the figurative into the literal or the reverse.

Comparison between Literal and Figurative Language.

1. Literal, I am growing old.
   Figurative, "My May of life
   Is fallen into the sere, the yellow leaf."
2. Literal, I am in great need of a horse.
   Figurative, "A horse! a horse! my kingdom for a horse!"
3. Literal, Longing for peace.
   Figurative, "O thou sword of the Lord, how long will it be ere thou be quiet? Put up thyself into thy scabbard, rest, and be still."
4. Literal, He was a man to be despised.
   Figurative, "The Chief-Justice was rich, quiet, and infamous."
5. Literal, There is a conceit peculiar to the Boston people.
   Figurative, "Boston State House is the hub of the solar system. You couldn't pry that out of a Boston man if you had the tire of all creation straightened out for a crowbar."
6. Literal, A picture of autumn leaves blowing about.
   Figurative, "Innumerable tawny and yellow leaves skimmed along the pavement, and stole through people's doorways into their passages, with a hesitating scratch on the floor, like the skirts of timid visitors."
7. Literal, Promise of divine protection.
   Figurative, "As the mountains are round about Jerusalem, so the Lord is round about His people, from henceforth even forever."
8. Literal, Promise of abundance.
   Figurative, "And it shall come to pass in that day that the mountains shall drop down new wine, and the hills shall flow with milk."
9. Literal, A great ado about nothing.
   Figurative, "Ocean into tempest wrought,
   To waft a feather or to drown a fly."
10. Literal, A feeling of tenderness when looking at a violet wet with dew.
    Figurative, "Violet, sweet violet!
    Thine eyes are full of tears."
11. Literal, I wish I had the power of seeing myself as other people see me.
    Figurative, "O wad some power the giftie gie us,
    To see oursels as ithers see us!"
12. Literal, The cannon ball shot through the air.
    Figurative, "Whistling so airily,
    Past the air warily,
    Watching me narrowly,
    Crashing I come!" (Song of the Cannon Ball.)

Classifications of Figures. Figures of Grammar. A figure of grammar is an intentional deviation from the ordinary spelling, formation, construction, or application of words. There are, accordingly, figures of orthography, figures of etymology, figures of syntax.

Figures of Orthography. A figure of orthography is an intentional deviation from the ordinary or true spelling of a word. The principal figures of orthography are mi-me'sis and ar'cha-ism.

Mimesis. Mimesis is a ludicrous imitation of some mistake or mispronunciation of a word, in which the error is mimicked by a false spelling, or the taking of one word for another; as, "I will *description* the matter to you, if you will be *capacity* of it."—Shakespere. "We will not anticipate the past; so mind, young people,—our retrospection will all be to the future."—Mrs. Malaprop.

Figures of this kind were formerly called tropes, i. e., turns; because certain words are turned from their original signification.

Archaism. An archaism is a word or phrase expressed according to ancient usage, and not according to our modern orthography; as, "Exceeding was the love he *bare* to him"; "*Albeit* of a stern, unbending mind"; "We have, *thou knowest*, another kinsman."

Figures of Etymology. A figure of etymology is an intentional deviation from the ordinary formation of a word. The principal figures of etymology are: a-phær'e-sis, pros'the-sis, syn'co-pe, a-poc'o-pe, par-a-go'ge, di-ær'e-sis, syn-ær'e-sis, and tme'sis.

Aphæresis is the elision of some initial letter or letters of a word; as, *'gainst* for *against*.

Prosthesis is the prefixing of an expletive syllable to a word; as, *yclad* for *clad*.

Syncope is the elision of a middle letter or letters of a word; as, *o'er* for *over*.

Apocope is the omission of the final letter or letters of a word; as, *th'* for *the*.

Paragoge is the annexing of an expletive syllable to a word; as, *dearie* for *dear*.

Diæresis is the separating of two vowels that might be supposed to form a dipthong; as, *co-operate* or *coöperate*, not *cooperate*.

Synæresis is the sinking of two syllables into one; as, *I'll* for *I will*.

Tmesis is the inserting of a word between the parts of a compound, or between two words which should be united if they stood together; as, *to us ward*.

Figures of Syntax. A figure of syntax is an intentional deviation from the ordinary construction of words. The principal figures of syntax are: el-lip'sis, ple'o-nasm, syl-lep'sis, en-al'la-ge, and hy-per'ba-ton.

Ellipsis is the omission of some word or words which are necessary to complete the construction, but not necessary to convey the meaning: "Prythee, peace."

Pleonasm is the introduction of superfluous words; as, "All ye inhabitants of the world, and *dwellers on the earth*."

Syllepsis is agreement formed according to the figurative sense of a word, and not according to literal use. "Then Philip went down to the *city* of Samaria, and preached Christ unto *them*."

Enallage is the use of one part of speech, or of one modification, for another. "They fall *successive* (ly), and *successive* (ly) rise."

Figures of grammar are in common use and have the sanction of good authority, but it is not at all important that we remember their various names.

Figures of Rhetoric. A figure of rhetoric is an intentional deviation from the literal or ordinary forms of expression. Figures of rhetoric are usually implied whenever we speak of figurative language. Departures from perfect simplicity occur in almost every kind of composition. They are mostly founded on some similitude or relation of things which, by the power of the imagination, makes the thought more attractive or more striking.

Classification of Figures of Rhetoric.

1. Figures based on resemblance; simile, metaphor, personification, allegory.

2. Figures based on contiguity or association; metonymy, synecdoche.

3. Figures based on contrast or surprise; antithesis, epigram, irony.

4. Figures based on emphasis or strength of emotion; hyperbole, interrogation, exclamation, apostrophe, vision.

5. Other deviations from the plain or literal mode of speech which contribute to force or beauty and are sometimes ranked among figures of speech; climax, anticlimax, allusion, litotes, euphemism, onomatopoeia, alliteration.

Figures Based on Resemblance.

Simile. A simile expresses a figurative resemblance between two things essentially different in kind. The comparison is usually introduced by such words as *like* and *as*:

> "Sweet are the uses of adversity,
> Which, like the toad, ugly and venomous,
> Wears yet a precious jewel in his head."

The best similes are those that compare things which are in most respects unlike, but which have at least one strong point of resemblance. Adversity and a toad are as unlike as the mind can well conceive, but Shakespere's creative fancy discovers in them an unexpected relation of precious use. The discovery of such an unexpected likeness gives the reader the pleasure of an agreeable surprise. Similes are appropriate when, without violating truth, they make the subject clearer or bring its relation more strikingly before us. When the similes are too remote or too obvious or too fantastic or even too worn-out from over repetition, then they are not appropriate. The joy of the imagery lies in the mind's surprise because of its unexpectedness and fitness. Any one looking at a cloud may see its resemblance to a fleece or to a bank of snow, but how much better pleased we are with Lowell's less common imagery:

> "A sky above,
> Where one white cloud like a stray lamb doth move."

Wordsworth discovers a close relation between evening and a nun at her devotion,—

> "The holy time is quiet as a nun
> Breathless with adoration."

Ossian discovers a likeness between music and memory: "Like the memory of joys that are past, sweet and mournful to the soul." More beautiful still is the discovery by Shakespere of a resemblance between music and the odor from a bed of violets:

> "It came o'er my ear like the sweet sound
> That breathes upon a bank of violets,
> Stealing and giving odor."

A study of the great similes found in classic literature will teach one how to avoid the trite and commonplace. The Bible forms the richest source from which we draw our figurative language. Greek literature, especially Homer, is our next source, and probably Shakespere the next.

Several of the Homeric similes have been traced through their use by later poets,—the simile of the leaves, the bees, the growth of rumor. They illustrate "the power of a great thought, adequately expressed in one language, to influence thought and expression for centuries in other languages."

Metaphor. A metaphor is founded upon the resemblance of one thing to another. It differs from the simile in that the comparison is implied rather than formally stated:

1. Simile. She sang like a nightingale.
   Metaphor. She had the voice of a nightingale.

2. Simile. "As cold water to a thirsty soul, so is good news from a far country."
   Metaphor. Good news from a far country refreshes the soul.

3. Simile. The temper of the nation, loaded already with grievances, was like a vessel that is now full; and this additional

provocation, like the last drop infused, made their rage and resentment as waters of bitterness overflow.

Metaphor. The vessel of the nation's wrath was now full, and this last drop made the waters of bitterness overflow.

4. Simile. Contentment is like a precious pearl.

Metaphor. Contentment is a pearl of great price.

Metaphors are sometimes called condensed similes. We find them in all speech. They are fitted for the expression of the most intense passion or the simple unconscious use of every day. There are two grades of metaphors. In the first, attributes properly belonging to one thing are applied to another; as, unbridled passion, hard heart, soft answer, black omen, striking thought, clear head. A large class of such phrases, originally metaphorical, have been so widely adopted that they have ceased to be regarded as figurative. In the second degree, one thing is completely identified for the time being with another. "We cannot all be cabin passengers in the voyage of life. Some must be before the mast."

Metaphors are more common than any other figure of speech. Indeed, it has been said that they enter into all figurative language and that nearly all figures are founded upon them. "An unmetaphorical style," says Carlyle, "you shall in vain seek for."

Personification. Personification may be considered as a higher form of metaphor. It consists in attributing life or animation to inanimate things or in transferring the attributes of human beings to lower animals. Examples of personification:

1. "All day the sea-waves sobbed with sorrow."

2. "The wind grumbled and made itself miserable all last night, and this morning it is still howling as ill-naturedly as ever, and roaring and rumbling in the chimneys."

3. "Joy and Temperance and Repose
Slam the door on the doctor's nose."

4. "The Worm, aware of his intent,
Harangued him thus, right eloquent."

The highest form of personification combines direct address and is known as apostrophe. "Put on thy strength, O Zion; put on thy beautiful garments, O Jerusalem, the holy city."

Allegory. Allegory is an extended metaphor generally accompanied by personification. Under this head fall fables and parables.

Resemblance between allegory, metaphor, and simile:

These three figures of speech are all founded upon resemblance, a primary and a secondary object being likened to each other. In simile this resemblance is formally expressed, "Israel is like a vine." In metaphor the formal word of comparison is dropped, "Israel is a vine." In allegory, both the formal comparison and the principal subjects are dropped, and the secondary subject is described by itself, as in the allegory of Israel found in the eightieth Psalm: "Thou hast brought a vine out of Egypt: thou hast cast out the heathen, and planted it. Thou preparedst room for it, and didst cause it to take root, and it filled the land."

It will be noted that there are two marked differences between the metaphor and the allegory. First, the allegory is carried out into great variety of particulars, making usually a complete and connected story, as in "Prodigal Son," "Paradise Lost," Bunyan's "Pilgrim's Progress." Second, it suppresses all mention of the principal subject, leaving that to the imagination of the reader, as vices and virtues are represented in Tennyson's "Idylls of the King" as prominent persons at the court of King Arthur.

Figures Based on Contiguity or Association.

Metonymy. Metonymy is a figure by which the name of one object is given to another, not by way of comparison as in metaphors, but on some such relation as that of cause and effect, of progenitor and posterity, of subject and adjunct, of place and inhabitant, of container and thing contained, of sign and thing signified:

1. Cause for effect. He was basking in the sun.

2. Effect for cause. Children should be taught to respect gray hairs.

3. Sign for thing signified. Sceptre and crown shall tumble down.

4. Container for thing contained. With dignity he addressed the chair.

5. Name of an author for his works. The class is reading Milton.

6. Progenitor and posterity. We are the seed of Abraham.

Synecdoche. Synecdoche, like metonymy, is founded on contiguity rather than resemblance. It is naming a part for the whole or the whole for a part or a definite number for an indefinite; as, "Give us this day our daily *bread*"; i. e., food. "The same day there were added unto them about three thousand *souls*"; i. e., persons. The figures of synecdoche and metonymy are so closely related that there is often no clear distinction between them, or rather some figures of metonymy may also be called figures of synecdoche. The following quotations owe their beauty to the skillful use of these figures:

1. "Our flag of stripe and star
Shall bear to coasts that lie afar
The fruitage of this apple-tree."

2. "Kind hearts are more than coronets,
And simple faith than Norman blood."

3. "Out of this silence yet I picked a welcome;
And in the modesty of fearful duty,
I read as much as from the rattling tongue
Of saucy and audacious eloquence."

Figures Based on Contrast or Surprise.

Antithesis. Antithesis is founded on contrast. It places unlike things in opposition to heighten the effect. Our natural love of variety or surprise is illustrated by the frequent recurrence in literature of this figure. Thus we contrast "life and death," "heat and cold," "youth and age," "peace and war." The only practical rule in regard to antithesis is to give

the contrasted ideas a similar verbal construction. Let nouns be contrasted with nouns, adjectives with adjectives, verbs with verbs, and so on, and let the arrangement of the words in the contrasted clauses be also as nearly alike as possible.

Famous illustrations of antithesis:

From Bunyan: "I will talk of things heavenly, or things earthly; things moral, or things evangelical; things sacred, or things profane; things past, or things to come; things foreign, or things at home; things more essential, or things circumstantial; provided that all be done to our profit."

From Macaulay: "The Puritans hated bear-baiting, not because it gave pain to the bear, but because it gave pleasure to the spectators."

From Pope: "Homer was the greater genius; Virgil, the better artist; in the one, we most admire the man; in the other, the work."

Parallel. An extended antithesis is called a parallel. Dr. Samuel Johnson was inclined to use this form of comparison to the point of weariness.

Epigram. Closely allied to antithesis is the epigram. Epigram originally meant an inscription on a monument. As such inscriptions are usually short, epigram came next to mean any brief saying remarkable for brevity and point. Epigram, in this sense, is akin to antithesis, because in both of these figures there is the element of contrariety. But in antithesis it is the contrariety between two different things brought together; in epigram it is the contrariety between the apparent meaning of the words and the real meaning. The power of the epigram lies very largely in the comparative rarity of its employment. It is too artificial, too elaborate, to be made common; it should be reserved for those thoughts which need to be compressed into especially striking and rememberable statements. To be epigrammatic an expression must have fundamentally two qualities. It must be brief, and it must give some unexpected turn to the idea.

Epigram leads naturally to the pun which turns entirely upon using words in a double meaning:

"Beneath this stone my wife doth lie;
She's now at rest, and so am I."— Old Epitaph.

Examples of epigram that have passed into current speech:

"The more haste the less speed."

"He was so good, he was good for nothing."

"The easiest way of doing nothing is to do it."

"Language is the art of concealing thought."

"A new way to contract debts — pay them off."

"The fastest colors are those that won't run."

"The child is father to the man."

"Beauty unadorned is adorned the most."

"Nothing is so difficult as doing nothing."

Irony. Irony is a figure in which the speaker sneeringly utters the direct reverse of what he intends shall be understood; as, "We have, to be sure, great reason to believe the modest man would not ask him for a debt, when he pursues his life."

The true meaning in irony is indicated mainly by the tone of the voice the words being spoken with a sneer, and hence it is sometimes called a figure of elocution. We have a perfectly finished example of irony in Antony's speech over the dead body of Cæsar:

"Good friends, sweet friends, let me not stir you up
To such a sudden flood of mutiny.
They that have done this deed, are honourable;
What private griefs they have, alas! I know not,
That made them do't; they are wise and honourable,
And will, no doubt, with reasons answer you."

Figures Based on Emphasis or Strength of Emotion.

Hyperbole. Hyperbole is extravagant exaggeration for rhetorical effect:

1. "They were swifter than eagles; they were stronger than lions."

2. "Rivers of waters run down mine eyes, because they keep not thy law."

3. "And it shall come to pass in that day that the mountains shall drop down new wine, and the hills shall flow with milk."

Such passages are strong and effective and do not deceive any more than any other figure of rhetoric as metaphor or personification.

Frequent use of hyperboles, so often indulged in both in conversation and in writing, is a bad habit. Language is cheapened whenever there is an extravagance of modifiers. Such phrases as "awfully cold," "tired to death," "magnificent eyes," "cold as ice," "splendid mince pie," "hideous spider," "stunning hat," "killing effect," are gross and absurd.

Interrogation. Interrogation is a question asked, not for the purpose of obtaining an answer, but for rhetorical effect. "Am I not an apostle? am I not free? have I not seen Jesus Christ our Lord? are not ye my work in the Lord?" asks the apostle Paul. The answer is already known, but this interrogative form of putting a well-known truth emphasizes it. An affirmative interrogation is an emphatic denial, whereas a negative interrogation is an affirmation:

"Hath he not always treasures, always friends — the good great man?" Ans., Yes.

"Can the Ethiopian change his skin or the leopard his spots?" Ans., No.

Exclamation. Exclamation is a more passionate form of emphasis than interrogation. It must be noted that as with interrogation every exclamative sentence is not a rhetorical figure. When the thought springs from real emotion, then we call it a figure of exclamation. "Oh, yes! What a pity!" is exclamative in form but lacks the intensity of emotion. Many exclamative sentences may be found in orations and speeches, but the choicest examples are found in poetry:

1. "How sweet the moonlight sleeps upon this bank!"

2. "How dear to my heart are the scenes of my childhood!"

3. "How firm a foundation, ye saints of the Lord,
Is laid for your faith in His excellent word!"

Apostrophe. Apostrophe is a turning from the regular course of the subject into an animated address. The same excited state of feel-

ing which causes exclamation and interrogation leads also to apostrophe. In this form of address the absent is spoken to as though present, the inanimate as though animate, the dead as though alive. Apostrophe is often combined with metaphor and personification and is often put into the form of interrogation or exclamation. It usually indicates a high degree of excitement or an exalted state of the imagination:

1. "My country, 'tis of thee,
Sweet land of liberty,
Of thee I sing."

2. "O Death, where is thy sting? O Grave, where is thy victory?"

3. "Thus, O Genius, are thy footprints hallowed."

Vision. Vision, or imagery, is a figure by which the speaker represents the objects of his imagination, as actually before his eyes, and present to his senses. It is akin to apostrophe, yet lacks the direct address:

1. "I seem to myself to behold this city, the ornament of the earth, and the capital of all nations suddenly involved in one conflagration."

2. "I see before me the gladiator lie;
He leans upon his hand — his manly brow
Consents to death, but conquers agony,
And his drooped head sinks gradually low."

Other Deviations from the Plain or Literal Mode of Speech.

Climax. Climax is a series of words or statements which advance by successive steps to what is more and more important and interesting or descend to what is more and more minute and particular. - "And besides this, giving all diligence, add to your faith, virtue; and to virtue, knowledge; and to knowledge, temperance; and to temperance, patience; and to patience, godliness; and to godliness, brotherly kindness; and to brotherly kindness, charity."

Anticlimax. Anticlimax reverses the order of the expression, ending with the weakest or least important thought or circumstance. This is often used in humorous writings:

"Alas, alas, what shall I do?
I've lost my wife and seed corn too."

Allusion. Allusion is a reference to some historical or literary fact so well known that it may be denoted by word or phrase without explanation. The following passage is a fine combination of vision and allusion:

"I see the pyramids building; I hear the shoutings of the army of Alexander; I feel the ground shake beneath the march of Cambyses. I sit as in a theatre,— the stage is time, the play is the world."

All great literature is enriched by allusions.

Litotes. Litotes may, in itself, be a plain statement but it strengthens a proposition by denying the negative:

"The immortal names
That were not born to die." i. e., that will live.

The force of this construction lies in its suggesting more than it says. Carlyle says, "The editor is clearly no witch at a riddle," meaning that he is obtuse.

Euphemism. Euphemism is the mention of a disagreeable thing in a more agreeable way than by the plain statement of fact. It is not in itself a figure of speech but is usually based on some other figure, as synecdoche, metonomy, or metaphor. Thus, death is called a sleep; theft, a misappropriation; lie, a prevarication. An untruthful person is sometimes said to have "an unreliable imagination," or to be "liable to blunders," as, "I hope he thought he was speaking the truth; but he is rather a dull man and liable to make blunders."

Onomatopoeia. Onomatopoeia is the use of a word, phrase, or sentence, the sound of which resembles, or intentionally imitates, the sound of the thing signified or spoken of: as, words denoting sounds, whiz, roar, splash, thud, buzz, hubbub, murmur, hiss, rattle, boom; names taken from sounds: cuckoo, whip-poor-will, bumble-bee, humming-bird, crag; words so arranged that the sound expresses the meaning, as,

"Singing through the forests,
Rattling over ridges,
Shooting under arches,
Rumbling over bridges;
Whizzing through the mountain,
Buzzing o'er the vale,
Bless me! this is pleasant,
Riding on the rail!"
—Saxe's "Song of the Rail."

Southey's "Cataract of Lodore" and Poe's poem, "The Bells," are fine examples of this figure:

"Hear the sledges with the bells—
Silver bells—
What a world of merriment their melody foretells!
How they tinkle, tinkle, tinkle,
In the icy air of night!
While the stars that oversprinkle
All the heavens, seem to twinkle
With a crystalline delight.
Keeping time, time, time,
In a sort of Runic rhyme,
To the tintinnabulation that so musically wells
From the bells, bells, bells, bells,
Bells, bells, bells—
From the jingling and the tinkling of the bells."

Alliteration. Alliteration is the name given to a near recurrence of the same initial sound. It is a very natural device in English and has proved so attractive that many authors have chosen alliterative titles for their books, "Pride and Prejudice," "Nicholas Nickleby." A recent pamphlet is entitled, "Dirt, Darkness, Disease, Death." All early English poetry was alliterative. Modern poets use it sparingly but with effect, as in the following lines from Swinburne:

"The mother of months in meadow or plain
Fills the shadows and windy places
With lisp of leaves and ripple of rain."

The Value of Figurative Language.

Like a sunset or a June day the beauty of figurative language cannot be described. It must be enjoyed. A comparative reading of a plain literal passage by the side of a similar thought rendered in highly imaginative and poetic verse is the best summary that can be given of the value of figurative language.

What is a Sonnet? Answered in literal prose

definition: The sonnet stanza consists of fourteen lines, iambic pentameter. It is divided into two distinct portions, called the major and the minor. The major division consists of eight lines, called an octave, and has usually but two rhymes. The minor division consists of six lines, called the sextette, and has sometimes three rhymes, sometimes two. The rhymes are arranged in prescribed order. To prevent the two parts from swaying apart, care is usually taken that there shall be no grammatical break in passing from the one to the other, and thus the whole structure is made one.

What is a Sonnet? Answered by Mr. Richard Watson Gilder in his "Sonnet Upon a Sonnet", written in the most exquisite imagery and in perfect verse:

"What is a sonnet? 'Tis a pearly shell
That murmurs of the far-off murmuring sea.
A precious jewel carved most curiously;
It is a little picture painted well.
What is a sonnet? 'Tis the tear that fell
From the great poet's hidden ecstacy;
A two-edged sword, a star, a song — ah me!
Sometimes a heavy-tolling funeral bell.

"This was the flame that shook with Dante's breath,
The solemn organ whereon Milton played,
And the clear glass where Shakespere's shadow falls;
A sea this is — beware who ventureth!
For like a fiord the narrow floor is laid
Deep as mid-ocean to sheer mountain walls."

LETTER WRITING

It would be foolish to waste time on the importance of letter writing. It is the one form of composition that appeals to every one. You may never be called upon to write an essay or a novel or a page of history, but you will often have occasion to write a letter. To be able to write a letter correctly and attractively is an art worth cultivating. It increases one's personality and popularity. Put yourself into a letter and you command those who are at a distance from you. In no art does individuality count for more, yet, as in all arts, the letter writer must conform to a few general principles which have been laid down for those who would write well.

Materials. A careful letter writer gives attention to the minutest details, the sum total of which makes up a good letter. The first consideration is the size and quality of the stationery to be used. White or cream-colored paper, or paper of a light blue tint, may be used for both business and social correspondence. Let it be of good quality, and always have the envelopes to match. Business paper should have a simple, neat heading; if possible, one that will contain an advertisement that may bring in an inquiry, if not an order. Unruled paper is always preferred for all forms of correspondence. The ordinary size of paper for business purposes is about 8½ inches by 11 inches, or about 6 inches by 9 inches. Both sizes may be used with a number 6¼ envelope. For notes and short letters, 6 by 10 is a suitable size, and for invitations, acceptances, and regrets, 5½ by 8. This is not an arbitrary matter, but, in general, adapt the size of the paper to the length of the communication. Two-page paper is preferred for business, and four-page paper for social letters.

Pale ink and illegible writing are inexcusable, so care should be taken to provide good black ink or blue copying ink that turns black with age, and a pen that suits the writer.

The Form of a Letter. Convenience and custom have prescribed a certain definiteness of form in the arrangement of a letter. It must consist of the following parts: (1) heading, (2) address, (3) salutation, (4) body, (5) complimentary close, (6) signature.

The Heading. This contains the address of the person writing and the date of the letter. For convenience of reference the address is usually placed in full in the upper right hand corner of the first page and the date written after it either on the same line or the next line below.

Examples showing the proper method of spacing, and the proper punctuation of the heading:

POUGHKEEPSIE, N. Y., July 1, 1921.

123 PALL MALL, LONDON, ENG.,
Sept. 4, 1921.

The Address. In business correspondence the address of the person to whom the letter is sent should be written on the line below the date and well to the left of the page. In informal letters it may be omitted altogether. Some prefer to place the address of the writer or of the person written to after the signature, but it is usually considered more convenient to have them both precede the body of the letter. As in the heading, the address should be written with every necessary detail, including place of residence, street, and number. In the simplification of capitals the word street or place or avenue may or may not be begun with a capital. This is left to the choice of the writer, as custom is not uniform.

The Salutation. The form of the salutation depends upon the relation of the writer to the recipient of the letter. Custom permits a variety of forms even in letters addressed to strangers. Appropriate salutations for formal letters:

My dear Sir, or *Dear Sir:*
My dear Madam, or *Dear Madam:*
Gentlemen, or *Dear Sirs:*

Most formal of all are Sir or Honorable Sir or His Excellency, addressed to persons in high position. The President of the United States is addressed without any complimentary salutation. His high office does not require it, though foreign rulers are usually addressed with very elaborate phrases.

My dear Mr. Jones, or My dear Miss Jones, are proper terms of address between entire strangers, as they are understood to signify respect rather than affection. My dear Mr. Snow is regarded as a rather more formal address than Dear Mr. Snow, though curiously enough if one were writing in England just the opposite would be true. There the pronoun "my" signifies a greater degree of intimacy. These are arbitrary matters, but it is well to note the customs of the place where one is writing.

It was formerly the custom to begin each word of the salutation with a capital, but now

good usage prescribes greater simplicity in the use of capitals and punctuation. No absloute rules can be given as there is great variation among good writers. The first word of every salutation should begin with a capital. If "sir," "sirs," or "madam" is used, you may follow the dictates of your own taste about capitalizing it. If the phrase, "My dear sir," were to occur in the body of the letter, sir would not be capitalized, therefore it need not be in the salutation. General usage prefers the capital, but the modern tendency in writing is to lessen the number of capitals, as well as the number of punctuation marks used. Great freedom is allowed in the punctuation mark which follows the salutation. Some prefer the colon, while others use only the comma. The dash adds nothing, so should be omitted.

The following are good forms for the introduction of a letter:

Mr. F. G. Able,
Rochester, N. Y.
My dear Sir:

Mr. S. P. Craig,
27 Windsor Ave., Toledo, Ohio.
My dear Mr. Craig,

The Body of the Letter. The first requisite in good letter writing is a clear, definite knowledge of what you want to say; the second is to say it in such a way that no one can possibly misunderstand what you have said. Most errors of grammar are made because the writer's thought is illogical and confused. One cannot be too careful about the English he uses in his letters. Every letter should be written legibly, properly punctuated, accurately spelled, and divided into suitable paragraphs, each paragraph treating of its subject clearly and definitely.

Do not burden a letter with apologies for not writing. Make your style easy and conversational. It has been said that the best letter writing is like the best conversation. Touches of humor and bright glimpses of thought are very attractive in social letters. A touch of humor, quick and to the point, is attractive in any letter, but care must be taken that in business letters there is no wandering from the point.

The body of the letter may be begun on the same line with the salutation or on the line below. The size and shape of the sheet of paper will determine which is the better arrangement. A uniform margin of one-half inch or more should be reserved at the left-hand side of each page of the letter.

The Complimentary Close. This consists of the concluding words of affection or respect, and indicates the relation in which the writer stands to his correspondent. "Yours truly," or "Very truly yours," are the forms most frequently used in business correspondence to-day. The complimentary close, "Yours respectfully," or "Very respectfully yours," should be used when respect is intended. It is proper in writing to persons older or higher in rank. "Yours sincerely," is common in letters of business between persons who really have some acquaintance with each other. "Your humble servant," "Your obedient servant," are entirely out of date as meaningless conventionalities.

The words of the complimentary close should be written on the line below the last line of the letter. The first word should be begun with a capital and the last word should be followed by a comma.

The Signature. The signature should be written on the line below the complimentary close and a little to the right. Except in the most informal letters it should give the full name of the writer in the form which he would use in signing a document. Business men would be saved a great many embarrassments if people were more considerate about signatures.

In writing to a stranger, a lady should sign her name so that there can be no doubt about the proper way to address her. Alma D. Bowen may be written (Miss) Alma D. Bowen if unmarried, or (Mrs.) Alma D. Bowen if married and writing in her own name, or Alma D. Bowen (Mrs. Frank Bowen) if she wishes to be known by her husband's name.

The Superscription. The address on the envelope should contain every item necessary to insure the prompt delivery of the letter. It usually consists of four lines arranged in the following order: name of individual or firm, street and number, city, state. The firm's or person's name should be written in the middle of the envelope, both with reference to the top and bottom, and the right and left edges. Each added line should follow a slant to the right.

Every year millions of letters and packages find their way to the Dead Letter Office because of incorrect or incomplete address. Illegible writing or any deviation from the correct form of addressing a letter may add one more to these millions already counted. Envelopes used for business purposes should have the name and address of the sender either written or printed in the upper left-hand corner.

In punctuating the lines of the superscription it is now considered good form to omit all commas as unnecessary, though they are usually retained in the punctuation of the address in the introduction. It is left to personal judgment whether to retain them or not, though it is along the advance line to prefer the simpler form when there is a choice.

Note the omission of commas in the following superscription:

Mr. Clarence D. Roxbury
University Block
Los Angeles
California

Titles. It is sometimes embarrassing in addressing a letter to know what title to give or how to arrange the title. Where there are a number of titles the higher presupposes the lower, as, D. D. or LL. D. extinguishes the A. B. or A. M. It is customary, however, to retain both the higher titles, D. D., LL. D., if one happens to reach them both, and the LL. D. in such a case is written last. Clergymen always have the prefix Rev., and Bishops that of Rt. Rev. When a Bishop has the added title D. D. the two are combined as, D. D., LL. D. Judges, members of Congress, and some other high officers

of government, have the prefix Honorable. With this title the designation Esq. is never affixed, though one may with entire propriety say Hon. Henry Somers, LL. D.

When such prefixes are used as Hon. or Rev., the full name should be given, Hon. James Boyd, not Hon. Judge Boyd. When the full name is not known then it is better to insert the customary title Mr., as Rev. Mr. Jones, not Rev. Jones. It is contrary to American etiquette to address a woman with her husband's title, although it is permissible in some parts of Europe to do so. Do not say Mrs. Dr. Brown or Mrs. Major Kent but simply Mrs. Brown or Mrs. Kent.

Dame Etiquette in some things is very exacting. In a letter addressed by one military man to another, an exact form is prescribed by law. The person written to is addressed at the beginning of the letter simply by his title. Then, at the end of the letter, on the line below the signature of the writer, the name of the person addressed is given, with his full official title, and his location, just as it is to be on the envelope.

HEADQUARTERS, MILITARY DIVISION OF THE MISSISSIPPI,
IN THE FIELD, MANCHESTER, VA., May 9, 1865.

General:

I have joined my army at Manchester, opposite Richmond, and await your orders.

W. T. SHERMAN,
Major-General Commanding.

LIEUT.-GENERAL U. S. GRANT,
Commander-in-Chief,
Washington City.

The following exact form has been prescribed for addressing the President of the United States.

On the outside of the letter:

TO THE PRESIDENT
Executive Mansion
Washington, D. C.

On the inside of the letter:

Mr. President,
I have the honor, etc.

The governor of any State is addressed as "His Excellency."

His Excellency
NATHAN L. MILLER
Governor of New York

This same title is also applied to ministers to foreign countries. "Honorable" is applied to the Vice-President, members of the cabinet, members of Congress, mayors of cities, judges, consuls, and other high dignitaries.

BUSINESS LETTERS

A business letter should at all times be a model of clearness, conciseness, completeness, good form and courtesy. The reply should be prompt, courteous and definite. As a rule never let a business letter remain more than twenty-four hours without an answer. If you cannot give the man the information he has asked for, drop him a line saying that his letter has been received and will have the proper attention as soon as the information desired can be obtained. Be prompt, evermore, be prompt, and to this add the injunction be brief, evermore, be brief.

In all business letters that answer an order or an inquiry, the date of the letter you are answering should be mentioned. This can be done anywhere in the first paragraph; e. g., "We regret that we cannot supply you the pattern of wall paper for which you wrote on July 17th;" or, "We are shipping you by fast express to-day the groceries you ordered on the 4th inst."

An Order for Goods.

486 MAIN ST., ROCHESTER, N. Y.,
November 13, 1921.

MILLER, GREINER & CO.,
Wholesale Grocers,
Buffalo, N. Y.

Dear Sirs:

The last invoice of groceries was so satisfactory that we are glad to send you another order. Kindly send at once, by express, the following:

4 bbls. granulated sugar,
3 large boxes of boneless codfish,
300 lbs. of the best Java coffee,
200 lbs. best Mocha coffee,
12 cases of Baker's cocoa.

Trusting you will fill this order as promptly as you did the last one, we remain,

Yours very truly,
THE EASTSIDE MARKET CO.

Acknowledging Receipt of Order.

BUFFALO, N. Y.,
November 14, 1921.

THE EASTSIDE MARKET CO.,
486 Main St., Rochester, N. Y.

Gentlemen:

Your order of the 13th inst. at hand. Inclosed find invoice for same amounting to two hundred forty-eight dollars ($248).

Trusting that the goods will arrive promptly and in good condition, we are,

Very truly yours,
MILLER, GREINER & CO.,
Wholesale Grocers.

Inclosing Remittance.

468 MAIN ST., ROCHESTER, N. Y.,
November 27, 1921.

MILLER, GREINER & CO.,
Wholesale Grocers,
Buffalo, N. Y.

Gentlemen:

In payment of your invoice of the 14th inst., find Buffalo exchange for two hundred forty-eight dollars ($248).

Kindly return receipted bill.

Yours truly,
THE EASTSIDE MARKET CO.

Acknowledging Remittance.

BUFFALO, N. Y., November 28, 1921.

THE EASTSIDE MARKET CO.,
486 Main St., Rochester, N. Y.

Gentlemen:

We inclose receipted bill for your payment of two hundred forty-eight dollars ($248). Accept our thanks for your prompt remittance.

Hoping that we shall have the privilege of serving you again soon, we are,

Sincerely yours,
MILLER, GREINER & CO.,
Wholesale Grocers.

Requesting Payment.

OAKLAND, CALIFORNIA,
January 6, 1922.

MR. JOSEPH W. DUFFY,
Tacoma, Washington.

My dear Sir,

You may have overlooked the fact that your account, amounting to thirty-six dollars and forty-eight cents ($36.48), is past due. We trust that you will be able to pay in full at once.

Assuring you of our appreciation of past favors, we are, with the wish to serve you,

Sincerely yours,
HENRY HULL & CO.

Apologizing for not Paying an Account When Due.

TACOMA, WASHINGTON, Feb. 1, 1922.

HENRY HULL & CO.,
Oakland, Cal.

My dear Sirs,

I owe you an apology for tardiness in paying my account so long overdue. My only excuse is that my customers have been "slow" with me.

Thank you for the courtesy you have shown. It will be my effort to be more prompt in the future.

Yours truly,
JOSEPH W. DUFFY.

Renewing a Subscription.

92 ELM AVE., WORCESTER, MASS.,
December 20, 1921.

THE OUTLOOK COMPANY,
287 Fourth Ave., New York City.

Gentlemen:

Inclosed you will find money order for two dollars for which please renew my subscription to "The Outlook."

Yours truly,
WILLIAM WARING.

A Follow-up Letter.

THE LUNDSTRUM SECTIONAL BOOKCASE CO.,
LITTLE FALLS, N. Y., January 6, 1922.

MRS. G. W. BROWN,
486 Norwood Ave.,
Albany, N. Y.

My dear Madam:

Ten days ago, in reply to your inquiry for our catalogue, we mailed one to you. Not having heard from you, we write to learn whether you received it. If not, let us know and we will mail another. If it has been received, kindly advise us whether you find quoted in it anything fitting your needs. If not, write us what you want, and we will quote you prices.

Hoping to hear from you within a few days, we are,

Yours truly,
THE LUNDSTRUM SECTIONAL BOOKCASE CO.

A Reply to a Letter of Complaint.

THE KELLOGG LITHOGRAPH CO., CLEVELAND, O.,
November 22, 1921.

MR. E. DAKIN HOAG,
Security Mutual Life Ins. Co.,
Providence, R. I.

My dear Sir:

We are sorry that you cannot let us have the specifications for your letter headings until the first of the year. We trust, however, that you will let us have the specifications at as early a date as possible so we can order the paper, and get our transferring and printing done in plenty of time to have the headings in your hands by the time you need them.

In your letter you say that the paper is not so good as you formerly had from us. We cannot understand this, as we thought the last lot of stock we received from the mill was of a very good quality, right up to the mark. If you will send us some of the sheets that you think are light weight, we will have them tested; and if we find there is anything wrong with the paper, we will take it up with the mill. So far as we know, the only trouble there has been with any of this "security" paper was with the first lot, where a small portion of the headings had little specks on them. This, you know, we took up with the mill, and they promised to see that the balance of the paper on the contract should be O. K. in every respect. We certainly want to hold them, if this is not the case.

We know that at the present time we should not be able to secure nearly so good a paper as this is at the price you are paying for this lot; and we want to say that you are very fortunate, indeed, in having placed your order when you did, because, if you were to place a contract now, we could not give you nearly so low a price on it on account of the marked advance in price.

Awaiting your reply, we remain,

Yours very truly,
THE KELLOGG LITH. CO.

Letters of Application.

LAPORTE, MO., January 2, 1922.

MESSRS. HOWE & HOWE,
St. Louis, Mo.

Gentlemen: In reply to your advertisement in Tuesday's "Tribune," I respectfully apply for the position you offer.

I have had two years' experience in the crockery business as salesman and bookkeeper, and I am acquainted with your city, for I lived there three years and worked for the firm of Betz & Co. I refer you to them now should you wish to know more of my fitness for the work. If you decide to hire me, I will work hard to succeed.

Hoping for a favorable answer,

Yours respectfully,
WILLIAM R. STONE.

417 COLLEGE ST., TROY, N. Y.,
January 31, 1922.

MESSRS. WYBURN & CO.,
Spokane, Washington.

Dear Sirs:

My friend, Mr. Bidwell, who is in your office, writes me that you are in need of an expert accountant. I shall be very glad to come West to take the position if you will give me a trial. I am a Yale man, 37 years old, married, and have had five years' experience as an expert accountant with the New York Life Insurance Co., for which I am now working.

If you will write Mr. F. C. Green, who is at the head of the New York Life in Troy, he will tell you of my ability and willingness to work for the interests of the firm that employs me.

Trusting you will send me a favorable answer, I am,

Yours very truly,
SAMUEL H. GORDY.

Notes of Introduction.

MR. CHAS. R. ANDREWS,
Trustee of School District No. 9, Trenton, N. Y.

My dear Sir,

Miss Emily Smith desires to secure a position as assistant in your school. She holds a first-grade certificate and has had three years' successful experience in our school. We regret to lose her, but she prefers your district because it is nearer to her home. I can recommend Miss Smith as an excellent teacher who will be a refining influence in any school.

Very truly yours,
CHARLES J. MAJOR,
Trustee of School District No. 4.

NORTH CORNWALL, VERMONT, July 6, 1922.

MR. WALTER C. STRONG,
84 Arlington Ave., Pittsburg, Pa.

My dear Friend,

It gives me great pleasure to introduce to you my friend, Mr. Weston Beach, who is to become a resident in your city. You will find him a delightful gentleman. I shall greatly appreciate whatever courtesy you may show in helping him to become acquainted.

Cordially yours,
HENRY B. JOHNSON.

Letters of Recommendation. Recommendations are sometimes included in notes of introduction, but often they are written as separate letters. They may be written as general letters addressed "To whom it may concern," or written as special letters to some definite person.

General Recommendations.

To Whom It May Concern:

This is to certify that the bearer of this note, Miss Lillian Glades, was graduated from The Teachers' College, Cumberland University, and has since taught in the schools of this city. For the past three years she has taught in the Straymore school, and I have had the opportunity to closely observe her work. I can recommend her as capable of filling any position in a city graded school.

JOHN W. GROVE,
Principal of Straymore School.

To Whom It May Concern:

Mr. Henry Henrys has been in our employ as bookkeeper the past six years. He is a faithful accountant, and in every way has served us well. We regret to part with him. He goes at his own request because he feels that he ought to receive a higher salary than we can afford to pay.

We wish him every success.

JONES, JONES & CO.
Troy, New York.

Special Recommendation.

Mr. Harvey W. Jonson,
Superintendent of Public Works,
Topeka, Kansas.

My dear Sir,

We have in our school a young man, Mr. Thomas Redding, who has done excellent work in the engineering department. He is a fine, clean young man and has commanded the respect of instructors and students, alike. His home is in Nebraska; and he is anxious, on account of his parents, to get work near home.

I shall greatly appreciate it if you will interest yourself in him, and help him to get work.

Very truly yours,
Thomas Benedict.

Lehigh University, Pennsylvania,
January 1, 1922.

Excuse for Absence from School.

Will Miss Stringer kindly excuse Frances for absence from school on account of illness in the family and greatly oblige,

Sarah C. Prescott.

(Mrs. J. W.)

Invitations and Replies. Formal invitations are written in the third person, and for large gatherings are usually engraved or printed and mailed a week or ten days in advance. An invitation sent out by a school, or class in the school, a club, or any group of persons, is usually in the third person; and if the invitation be to an entertainment, as at a church or a commencement program, no formal reply is needed. Formal replies, however, should always be sent where entertainment has been provided for each individual, for the host or hostess will need to know how to provide.

The letters R. S. V. P. are sometimes put in the lower left-hand corner of an invitation. They stand for the French phrase, "Respondez s' il vous plait": Reply, if you please. The English words, "An answer will oblige," are perhaps in better taste.

Invitations to class commencements furnish happy occasions for friends to send notes of congratulation. The feeling of obligation to present gifts is very much to be regretted. No gifts should be expected unless it may be from near family friends. The formal wording of engraved cards can best be left to the engraver, as the form changes slightly from year to year.

The reply to an invitation should follow the form of the note received, and should repeat the date and hour mentioned in the invitation. In declining an invitation it is not essential to repeat the hour.

Invitation to Commencement Exercises.

The Senior Class of
Columbia Seminary
requests the pleasure of your presence at the
Commencement Exercises
June fifteenth to eighteenth
nineteen hundred seven
Washington, District of Columbia

The Faculty and Graduating Class
of the
Boston Teachers' Training School
invite you to attend the
Seventeenth Annual Commencement Exercises
Friday evening, April fifteenth, 1922
at half past eight o'clock
Teachers' Training School
1124 Tremont Avenue

Formal Invitation to a Reception and Dance.

The Epsilon Mu Sorority
invites you to be present
at a reception and dance
to be held at the
Colonial Club
Tuesday evening, April twelfth
at half after eight o'clock

Wedding Invitations and Announcements.

Mr. and Mrs. Joseph Suffolk
request the honor of your presence at the
marriage of their daughter
Mabel Grace
to
Mr. Andrew Jackman
Wednesday afternoon, June seventeenth
at three o'clock
Saint-Mary's-on-the-Hill Church
Baltimore

Announcements.

Mr. Andrew Jackman
Miss Mabel Grace Suffolk
Married
on Wednesday, June the seventeenth
Nineteen hundred and twenty-one
Baltimore

Mrs. George Sampson
announces the marriage of her daughter
Margaret Louise
to
Mr. William Randolph Holmes
of Roxbury, Massachusetts
Wednesday, December the twenty-sixth
nineteen hundred and twenty-one
At home, Roxbury, Massachusetts.

For a Formal At-home.

Mrs. Jacques Randolph Stearns
At Home
on Wednesday the fifth of December
from three until six o'clock
1106 Ballston Heights
to meet
Mrs. James Winchell Toynbee

Formal Note of Invitation.

Miss Belle Coe requests the pleasure of Miss Hinman's company on Thursday evening at eight o'clock.
128 Fremont St., January nine.

The Invitation Accepted.

Miss Hinman accepts with pleasure the invitation for Thursday evening at eight o'clock.
Wellington Place, January ten.

The Invitation Declined.

Miss Hinman sincerely regrets that she cannot accept Miss Coe's invitation for Thursday evening at eight o'clock.
Wellington Place, January ten.

Calling cards are often used for small informal gatherings of friends.

To meet Miss Wells.

MISS ALICE SMYTHE

Friday, May twenty-ninth, at four o'clock.

40 College Street.

Acceptance.

MISS ELLEN YATES.

The Arlington.

Informal Invitation.

My dear Mr. Collier,
Dr. Hartman, who has just returned from Europe, will dine with us on Saturday next at 6 o'clock, and we shall feel highly honored and pleased if we can have your company.
With the greatest respect, I am,
Yours sincerely,
WILLIAM J. LATTIMER.
190 West Ave., September 6, 1921.

Acceptance.

My dear Dr. Lattimer,
It will give me great pleasure to dine with you on Saturday and to meet our friend, Dr. Hartman.
Thanking you for the pleasure in store, I am,
Very cordially yours,
RALPH A. COLLIER.
86 Union St., September 7, 1921.

Formal Note with Birthday Gift.

Miss Henry presents her compliments to Miss Brinkman, and begs her to accept these flowers with her love and with the wish that she may enjoy many returns of this happy day.

Such a note accompanying a gift that gives so much pleasure will naturally call forth a cordial letter of warm appreciation.

Reply to Note Accompanying Birthday Gift.

My dear Miss Henry,
Your note and beautiful gift of flowers completed a day of perfect happiness. It is good to grow old when friends emphasize the years with increasing kindness. Thank you, dear friend, for the love which has never failed me.
Yours, CELIA BRINKMAN.

Letters of Condolence. Letters of condolence are always difficult to write. Write only what is in your heart to say. Don't use any stereotyped form to be found in a book on etiquette. There is a tendency to-day to overdo this kind of letter writing, and the answering of so many letters is becoming a great burden. In many instances the kindest thing is silence. The following letter of sympathy, now preserved in Oxford university, is a model of this kind of expression and appeals to us all.

EXECUTIVE MANSION,
WASHINGTON, November 21, 1864

Dear Madame: I have been shown on the file of the war department a statement of the Adjutant-General of Massachusetts, that you are the mother of five sons who have died gloriously on the field of battle. I feel how weak and fruitless must be any word of mine which should attempt to beguile you from the grief of a loss so overwhelming, but I cannot refrain from tendering to you the consolation that may be found in the thanks of the republic they died to save. I pray that our Heavenly Father may assuage the anguish of your bereavement and leave only the cherished memory of the loved and lost, and the solemn pride that must be yours to have laid so costly a sacrifice upon the altar of freedom.
Yours very sincerely and respectfully,
A. LINCOLN.
To Mrs. Bixby,
Boston, Mass.

My dear, dear Friend,
A little girl came home from a neighbor's house where her little friend had died. "Why did you go?" questioned the father. "To comfort her mother," said the child. "What could you do to comfort her?" "I climbed up into her lap and I cried with her." Dear friend, I, too, can weep with you, and I do.
Yours in loving sympathy,
SARAH A. HUME.
To Miss Cornelia Y. Maxon.

Letter of Congratulation. A letter of congratulation is easier to write. Here again let the letter come from your heart.

My dear Old Jack:
Could anything be finer than the result of yesterday's election? I don't know which to congratulate more, you or the city. The voters were satisfied with your past record, and have endorsed your worth by giving you this greater honor.
Continue to live up to your high ideals, and you will soon go to Washington to protect the people in their rights.
Remember me to the little woman at the head of the house, and accept my warmest congratulations and heartiest wishes for success.
Very sincerely yours,
ANDREW LANGTRY.
November 7, 1921.

Letters of congratulation are often very brief, sometimes only a telegram—just the single message of sympathetic joy and nothing else. Such congratulations are often sent to high officials after an election or following some notable success.

Telegram to William Howard Taft from Governor Charles E. Hughes, sent June 18, 1908:

"I heartily congratulate you upon your nomination. Under your administration the welfare of the country will be assured."

Letters of Friendship. The joy of letter writing is in letters of friendship, for which, most fortunately, there can be no exact rules. Write to your friend as if you were talking—good, bright, happy talk about the things you are both interested in. No friendship can be so close as to excuse one for indifference or carelessness. Models of good letter writing are found in the memoirs of noted men and women. They form a valuable body of literature and will repay the reading.

Letter writing has been rightly called the "gentlest art." It is the art of giving joy to those who are dear to us, yet far away. An interchange of letters between members of the same family or between friends does more than anything else to keep alive the deep affections. Even brothers and sisters drift apart and hopelessly lose sight of each other when they forget to be faithful in their letters. Whatever the pressure of pleasure or of duties, the absent ones should make time for at least one letter every week to those who are left at home. Write cheerfully, never sharply or pettishly. The word once committed to paper may remain when the irritation has passed away. Never write unnecessarily of bad news. Letter writ-

ing, you remember, in its highest mission, is the "blessed art of giving joy." Answer home letters in detail. Many questions are asked which seem trifling, but they tell the very things about your life that the home people want to know.

The chief charm in letters of friendship is their naturalness. They should make the person who receives them feel that he has had a delightful visit with his friend who wrote. The following passage taken from a letter written by Henry W. Longfellow is full of the charm of simplicity: "I have just had the pleasure of receiving your photograph. It is so good, it could hardly be better. I wish the one I send you in return were as good. But that is wishing I were a handsome man, six feet high, and we all know the vanity of human wishes." Again he writes in a letter, "If 'Long Pond' were called Loch Long, it would be a beautiful lake. This and Sebago are country cousins to the Westmoreland lakes in England, quite as lovely, but wanting a little more culture and good society." This is simple language, but the thought is by no means common-place. Our best thoughts belong to our friends whether in conversation or in letters. Of Hawthorne's letters it is said, "They were full of passages of beauty and of details of his own plans and purposes, hopes and disappointments."

Bayard Taylor thus commends a friend for his naturalness in writing: "You somehow manage to bring your own bodily self before me when you write; I see your eyes and the changing expression of your face, as I read, and the sound of your voice accompanies the written word." Who would not, if he could, write letters that by their naturalness recall both face and voice? Charles Dickens thanks a friend for his letter "which is like a pleasant voice coming across the Atlantic, with that domestic welcome in it that has no substitute on earth."

One likes letters written for the very joy of correspondence and not because the time has come and one must write. How welcome this passage must have been in one of Lowell's letters: "Somehow, this cool, beautiful summer day I feel my heart go out towards you all, and am not writing because I ought." Of the closeness and the intimacy of written thoughts that may be exchanged in letters, Lowell again writes: "I think it fortunate to have dear friends far away. For not only does absence have something of the sanctifying privilege of death, but we dare speak in the little closet of a letter what we should not have the face to at the corner of the street."

Playfulness and humor and lack of formality are charming qualities in home letters when they can be naturally introduced. These opening lines taken from a letter written by Benjamin Franklin to his wife, delight us by their very unexpectedness of humor: "I wrote you a few days since by a special messenger and enclosed letters for all our wives and sweethearts, expecting to hear from you by his return,—— but he has just now returned without a scrap for poor me." Further on he adds in the same light vein of hidden laughter a postscript: "I have scratched out the loving words, having written in haste by mistake when I forgot I was angry." How it brightens life to stop in the busy day for such innocent sparkle of fun! It makes one appreciate the great Benjamin Franklin even more because we know of such genial letters sent to those who were dear to him.

Occasions multiply for writing letters to our friends: birthdays, festivals, anniversaries, betrothals, weddings, funerals; any occasion for peculiar joy or sorrow when sympathy and love are called into expression. One of the most pleasing of the growing customs is the writing of letters to friends to accompany them on their journeys. Now-a-days, those who go abroad in ships are showered with "steamer" letters, which keep them mindful of home and friends throughout their long voyage. The brightness and sweetness of such letters enrich a whole lifetime with pleasant memories.

The mission of the letter has been summed up by Whittier in a letter to a friend: "I am thankful every day of my life that God has put it into the hearts of so many whom I love and honor to send me so many messages of good-will and comfort."

In this day of complex living when so much is said but so little realized of the "simpler life," we sometimes forget the joy which these simple "messages of good will and comfort" bring and unnecessarily burden ourselves to overload our friends with purchased gifts: whereas, Christmas letters, birthday letters, any letters into which we put our best selves, are the most acceptable gifts that we can choose. Beyond compare is the joy of such written words as these sent as a Christmas offering by a young girl to an older friend: "What can I wish for you that you have not already? Your heart is so full of good things that it needs no wish. Some day I may tell you just what you have done for me, my dear friend. Many a door have you opened for me, and these things cheapen in the telling.

"A blessed Christmas time to you and a New Year rich with God's best gifts."

The gift of "things" is forgotten but of such words never.

Postal Cards. Postal cards (post cards the English call them) are often very convenient for a word of greeting or for general business matters which anyone may read, but nothing private should ever be committed to them. To write on a postal a term of warm affection or family news or any message which one would not wish to tell at large is very indelicate.

Picture postal cards furnish pleasant exchanges between friends, and postal cards which bear printed sentiments of refinement or the line of bright humor, are pleasant reminders; but the cheap word or picture of coarse fun should be strictly forbidden, not only by the authority of law, but delicacy of thought for one's friend, as well as for one's own self, should never select what is in any way rude or coarse. In this busy world where there is so much need of frequent intercourse, postal cards have their place and their use will multiply, but they should never be used as substitutes for the well-written letter or the note of social obligation.

SYNONYMS

For *complete* Alphabetical list of Synonyms. see Index under that title—Synonyms.

To Abandon, Desert, Forsake, Relinquish. The idea of leaving or separating oneself from an object is common to these terms, which vary in the circumstances of the action; the two former are more positive acts than the two latter. To abandon may be an act of necessity or discretion, as a captain abandons a vessel when it is no longer safe to remain in it. Abandoning is a violation of the most sacred ties, and exposes the object to every misery: desertion is a breach of honor and fidelity; it deprives a person of the assistance or the countenance which he has a right to expect. By forsaking, the kindly feelings are hurt, and the social ties are broken. A bad mother abandons her offspring; a soldier deserts his comrades; a man forsakes his companions. Things as well as persons may be abandoned, deserted, or forsaken; things only are relinquished. To relinquish is an act of prudence or imprudence; men often inadvertently relinquish the fairest prospects in order to follow some favorite scheme which terminates in their ruin.

To Abase, Humble, Degrade, Disgrace, Debase. To abase expresses the strongest degree of self-humiliation. To humble marks a prostration to the ground, and figuratively a lowering of the thoughts and feelings. Abase and humble have regard to persons considered absolutely, degrade and disgrace to their relative situation. To degrade signifies to lower in the estimation of others. To disgrace is always attended with circumstances of more or less ignominy. To debase is to reduce from a higher to a lower state or grade of worth, dignity, value, etc. The penitent man humbles himself; the contrite man abases himself; the man of rank degrades himself by a too familiar deportment with his inferiors; he disgraces himself by his vices; he debases his character by crime.

To Abhor, Detest, Abominate, Loathe. These terms equally denote a sentiment of aversion. What we abhor is repugnant to our moral feelings; what we detest is opposed to our moral principles; what we abominate does violence to our religious and moral sentiments; what we loathe offends our physical taste. We abhor what is base and ungenerous, we detest hypocrisy; we abominate profanation and open impiety; we loathe food when we are sick.

To Abide, Sojourn, Dwell, Live, Reside, Inhabit. Abide is to make an indefinite stay. Sojourn signifies to pass the day, that is, a certain portion of one's time, in a place. Dwell conveys the idea of a movable habitation, such as was the practice of living formerly in tents. At present it implies a stay in a place by way of residence, which is expressed in common discourse by the word live, for passing one's life. Reside conveys the full idea of a settlement. Inhabit signifies to have or occupy for a permanency. The length of stay implied in these terms is marked by a certain gradation. Abide is to make a continuous stay whether long or short; to sojourn is to remain temporarily; dwell comprehends the idea of perpetuity in a given place, but reside and inhabit are partial and local — we dwell only in one spot, but we may reside at or inhabit many places.

Ability, Capacity, Faculty, Talent. Ability is to capacity as the genus to the species. Ability comprehends the power of doing in general, without specifying the quality or degree; capacity is a particular kind of ability. Ability may be either physical or mental; capacity, when said of persons, is mental only. Ability respects action, capacity respects thought. Ability always supposes something able to be done; capacity is a mental endowment, and always supposes something ready to receive or hold. Ability relates to human power generally, by which a man is enabled to act; it may vary in degree and quality with times, persons, and circumstances. Health, strength, and fortune are abilities; faculty is a gift of nature directed to a certain end, and following a certain rule. An ability may be acquired, and consequently is properly applied to individuals, as an ability to speak extempore or an ability to write; but a faculty belongs to the species, as a faculty of speech, or of hearing, etc. Talent imitates but does not originate.

Able, Capable, Capacious. Able is said of that which one can do, as to be able to write or read; capable is said of that which either a person or a thing can take, receive, or hold. A person is capable of an office, or capable of great things; a thing is capable of improvement. Capacious is used only of the property having the amplitude of space, or a power to take in or comprehend. A hall may be said to be capacious, or, figuratively, a man has a capacious mind.

To Abolish, Abrogate, Repeal, Revoke, Annul, Cancel. The word abolish conveys the idea of putting a total end to a thing, and is applied properly to those things which have been long in existence, and firmly established. An abolition may be effected either by an act of power, as to abolish an institution, or an order of men, and the like; or it may be a gradual act, or effected by indirect means, as to abolish a custom, practice, etc. Laws are either repealed or abrogated, but repealing is a term of modern use, applied to the acts of public councils or assemblies, where laws are made or unmade by the consent or open declaration of numbers. Abrogate is a term of less definite import; to abrogate a law is to render it null by any act of the legislature; thus, the making of a new law may abrogate the old one. Revoking is an act of individual authority — edicts are revoked; annulling is an act of discretion, as official proceedings or private contracts are annulled; cancelling is a species of annulling, as in the case of cancelling deeds, bonds, obligations, etc.

Abridgment, Compendium, Epitome, Digest, Summary, Abstract. The first four terms are applied to a distinct work, the two latter to parts of a work. An abridgment is the reduction of a work into a smaller compass. A compendium is a general and concise view of any science, as geography or astronomy. An epitome is a compressed view of all the substantial parts of a thing, or, in other words, the whole of any matter brought into a small compass. A digest is any materials systematized in order. A summary comprehends the heads and subdivisions of a work. An abstract includes a brief but comprehensive view of any particular proceeding. It is necessary to make abstracts of deeds or judicial proceedings.

Absolute, Despotic, Arbitrary, Tyrannical. Absolute power is independent of and superior to all other power; an absolute monarch is uncontrolled, not only by men, but by things. When this absolute power is assigned to any one according to the constitution of a goverument, it is despotic. Despotic power is something less than absolute power; a prince is absolute of himself; he is despotic by the consent of others. With arbitrariness is associated the idea of caprice and selfishness. With tyranny is associated the idea of oppression and injustice.

To Abstract, Separate, Distinguish. We abstract what we wish to regard particularly and individually; we separate what we wish not to be united; we distinguish what we wish not to confound. The mind performs the office of abstraction for itself; separating and distinguishing are exerted on external objects. Arrangement, place, time, and circumstances serve to separate; the ideas formed of things, the outward marks attached to them, the qualities attributed to them, serve to distinguish.

To Abuse, Disuse, Misuse. Everything is abused which receives any sort of injury; it is disused if not used at all, misused if turned to a wrong use.

Acceptable, Grateful, Welcome. Acceptable signifies worthy to be accepted. Grateful, pleasing, signifies altogether pleasing; it is that which recommends itself. The acceptable is a relative good; the grateful is positive: the former depends upon our external condition, the latter on our feelings and taste. Welcome signifies come well or in season for us; it refers to whatever happens according to our wishes. It is a grateful task to be the bearer of welcome intelligence to our friends.

To Accomplish, Effect, Execute, Achieve. To accomplish an object signifies more than simply to effect a purpose, both as to the thing aimed at and the means employed in bringing it about. Extraordinary means are requisite for accomplishing, and ordinary means for effecting. To accomplish is properly said of that which a person sets before himself; but to effect, execute, and achieve do not relate to the views of a person acting, but to the thing brought about. What is executed is complicated in its nature, as to execute a design or project; what is achieved is of greater and worthier conception, as to achieve an enterprise.

To Accuse, Charge, Impeach, Arraign. The idea of asserting something to the prejudice of another is common to these terms; but accuse is said of acts, charge of moral qualities constituting the character. We accuse a person of murder; we charge him with dishonesty. High officials are impeached; criminals are arraigned.

To Act, Do, Make. We always act when we do, but we do not always do when we act. To act is applied either to persons or things, as a spring or a lock acts; to do applies in this sense to persons only. To act is also mostly intransitive or reflective, as to act well or ill in this or that manner; to do is always transitive, as to do right or wrong, to do one's duty. To make is to bring a thing to pass, as to make a pen.

To Act, Work, Operate. A machine works, but

each of its parts is said to act; so beer works, and bread works. Sometimes act as well as work is taken in the sense of exerting a power upon other bodies and producing changes, as the sun acts on the plants. Operate is applied to matters of a general nature in science or morals, as a measure operates; or words may operate on the mind, or reasons may operate on the understanding.

Action, Gesture, Gesticulation, Posture, Attitude. All these terms are applied to the state of the body; the three former indicate a state of motion, the two latter a state of rest. Action respects the movements of the body in general; gesture is an action indicative of some particular state of mind; gesticulation is a sort of artificial gesture. Raising the arm is an action; bowing is a gesture. Actions may be ungraceful, gestures indecent. Posture and attitude both imply a mode of placing the body, but the posture is either natural or assumed; the attitude is always assumed or represented. We assume a sitting posture or an attitude of prayer.

Active, Diligent, Industrious, Assiduous, Laborious, Busy, Officious. We are active if we are only ready to exert our powers, whether to any end or not; we are diligent when we are active for some specific end; we are industrious when no time is left unemployed in some serious pursuit; we are assiduous if we do not leave a thing until it is finished; we are laborious when the bodily or mental powers are regularly employed in some hard labor. Busy is opposed to leisure. Officious implies being busy without discretion.

Actual, Real, Positive. What is actual has proof of its existence within itself, and may be exposed to the eye; what is real may be satisfactorily proved to exist; and what is positive precludes the necessity of a proof. Actual is opposed to the supposititious, conceived, or reported; real to the feigned, imaginary; positive to the uncertain, doubtful.

To Actuate, Impel, Induce. One is actuated by motives, impelled by passions, and induced by reason or inclination. Whatever actuates is the result of reflection; it is a steady and fixed principle. Whatever impels is momentary and vehement, and often precludes reflection. Whatever induces is not vehement, though often momentary.

Acute, Keen, Shrewd. In the natural sense, a fitness to pierce is predominant in the word acute; and that of cutting, or a fitness for cutting, in the word keen. The shrewd man exposes follies. Arguments may be acute, reproaches keen, and replies or retorts shrewd. A shrewd understanding is quicker at discovering new truths, than at distinguishing truth from falsehood.

Address, Application. An address may be made for an indifferent purpose or without any express object; but an application is always occasioned by some serious circumstance. An address may be rude or civil; an application may be frequent or urgent. It is impertinent to address any one with whom we are not acquainted, unless we have a reason for making an application to him.

To Adhere, Attach. A thing is adherent by the union which nature produces; it is attached by arbitrary ties which keep it close to another thing. What adheres to a thing is closely joined to its outward surface; but what is attached may be fastened to it by the intervention of a third body.

Adjacent, Adjoining, Contiguous. What is adjacent may be separated altogether by the intervention of some third object; what is adjoining must touch in some part; and what is contiguous must be fitted to touch entirely on one side.

To Admit, Receive. Persons are admitted to the tables, and into the familiarity or confidence of others; they are hospitably received by those who wish to be their entertainers. We admit willingly or reluctantly; we receive politely or rudely.

To Admit, Allow, Permit, Suffer, Tolerate. We admit simply by not refusing or preventing; we allow by positively granting or complying with. We admit that which concerns ourselves, or is done towards ourselves; we allow that which is for the convenience of others, or what they wish to do. What is suffered may be burdensome to the sufferer, if not morally wrong; what is tolerated is bad in itself, and suffered only because it cannot be prevented. No earthly power can permit that which is prohibited by the divine law.

Admittance, Admission. Admittance is properly confined to receiving a person or a thing into a given place; admission includes in itself the idea not only of receiving, but also the purpose of receiving. Whoever is admitted, or has the liberty of entering any place, whether with or without an object, has admittance; but a person has admission to places of trust, or into offices and the like.

Adoration, Worship, Reverence, Veneration. Adoration is the service of the heart toward a Superior Being, in which we acknowledge our dependence and obedience by petition and thanksgiving; worship consists in the outward form of showing reverence to some supposed superior being. Reverence differs from adoration inasmuch as it has a mixture of awe, arising from consciousness of weakness and dependence, or of obligations for favors received. The contemplation of any place rendered sacred by its antiquity awakens veneration.

To Advance, Proceed. To advance is to go toward some point; to proceed is to go onward in a certain course.

Advantage, Benefit, Utility. Advantage respects external or extrinsic circumstances of profit, honor, and convenience; benefit respects the consequences of actions and events; utility respects the good which can be drawn from the use of any object. A large house or a particular situation may have its advantages; suitable exercise is attended with benefit; sun-dials have their utility in ascertaining the hour precisely by the sun.

Adverse, Contrary, Opposite. Adverse respects the feelings and interests of persons; contrary regards their plans and purposes; opposite respects the situation and relative nature of things. Fortune is adverse; an event turns out contrary to what was expected; sentiments are opposite to each other.

Adverse, Inimical, Hostile, Repugnant. We are adverse to a proposition, or circumstances are adverse to our advancement; partisans are inimical to the proceedings of government, and hostile to the possessors of power. In respect to persons, adverse denotes merely the relation of being opposed; inimical, the spirit of the individual in private matters; and hostile, the situation, conduct, and temper of individuals or bodies in public matters. Repugnant means offensive to taste or feelings.

Advice, Counsel, Instruction. Advice flows from superior professional knowledge, or from an acquaintance with things in general; counsel regards superior wisdom, or a superior acquaintance with moral principles and practice; instruction respects superior local knowledge in particular transactions. A medical man gives advice to his patients; a father gives counsel to his children; in points of law a counselor gives advice to his client who receives instructions from him in matters of fact.

Affair, Business, Concern. An affair is what happens; a business is what busies; a concern is what is felt. An affair is general; it respects one, many, or all: every business or concern is an affair, though not vice versa. Business and concern are personal; business is that which engages the attention; concern is that which interests the feelings, prospects, and condition, advantageously or otherwise. To make one's peace with one's Maker is the concern of every individual.

To Affect, Concern. Things affect us which produce any change in our outward circumstances; they concern us if connected with our circumstances in any shape. The price of corn affects the interest of the seller; and therefore it concerns him to keep it up, without regard to the public good or injury.

To Affect, Assume, Pretend. To affect is to use forced efforts to appear to have that which one has not; to assume is to appropriate to oneself that which one has no right to have. One affects to have fine feelings, and assumes great importance. We pretend by making a false declaration. One affects the manners of a gentleman, and pretends to gentility of birth.

Affectionate, Kind, Fond. Affectionate characterizes the feelings; kind has mostly a reference to the action. Affectionate is directed to a particular object; kind to objects generally. Fond is a strong liking.

To Affirm, Assert. To affirm is said of facts; to assert, of opinions. We affirm what we know; we assert what we believe.

To Afflict, Distress, Trouble. People are afflicted with grievous maladies. The mariner is distressed for want of water in the midst of the wide ocean; an embarrassed tradesman is distressed for money to maintain his credit. The mechanic is troubled for want of proper tools; the head of the family is troubled for want of good domestics.

Affliction, Grief, Sorrow. Affliction lies deeper in the soul than grief. It is too deep to be vehement. Continued sickness of our friends will cause affliction; the failure of our favorite schemes will occasion grief; the loss of a fortune, or our own mistake will cause sorrow.

Affront, Insult, Outrage. An affront is a mark of reproach shown in the presence of others; it piques and mortifies: an insult is an attack made with insolence; it irritates and provokes: an outrage combines all that is offensive; it wounds and injures.

Afraid, Fearful, Timorous, Timid. Afraid may be used either in a physical or moral application, either

as it relates to ourselves only or to others; fearful and timorous are applied only physically and personally; timid is mostly used in a moral sense. It is the character of the fearful or timorous person to be afraid of what he imagines would hurt himself. Between fearful and timorous there is little distinction, either in sense or application, except that we say fearful of a thing, not timorous of a thing.

To Aggravate, Irritate, Provoke, Exasperate, Tantalize. The crime of robbery is aggravated by any circumstances of cruelty. Whatever comes across the feelings irritates; whatever awakens anger provokes; whatever heightens this anger extraordinarily exasperates; whatever raises hopes in order to frustrate them tantalizes.

To Agree, Accede, Consent, Comply, Acquiesce. To agree is the general term, meaning to fall in with. We accede by becoming a party to a thing; those who accede are on equal terms one objects to that to which one does not accede. We consent to a thing by authorizing it, we comply with a thing by allowing it; those who consent or comply are not on equal terms with those in whose favor the consent is given or compliance made. Consenting is an act of authority, complying an act of good-nature or weakness. To acquiesce is quietly to admit; it is a passive act, dictated by prudence or duty.

Agreeable, Pleasant, Pleasing. Agreeable expresses a feeling less vivid than pleasant; pleasing marks a sentiment less vivid and distinct than either. A pleasing countenance denotes tranquillity and contentment; a pleasant countenance bespeaks happiness.

Aim, Object, End, View. The aim is that which the person has in his own mind; it depends upon the character of the individual whether it be good or bad, attainable or otherwise. The object lies in the thing; it is a matter of choice; it depends upon accident as well as design, whether it be worthy or unworthy. The end is that which follows or terminates any course or proceeding; it depends upon the means taken, whether the end is arrived at or not. It is the aim of the Christian to live peaceably; it is a mark of dullness or folly to act without an object; it is sophistry to suppose that the end will justify the means. The view is, generally speaking, whatever the mind sets before itself, whether by way of opinion or motive; a person's views may be interested or disinterested, correct or false; the view is a matter rather of contemplation than of practice.

To Aim, Point, Level. Aim expresses more than the other two words, inasmuch as it denotes a direction toward some minute point in an object, and the others imply direction toward the whole objects themselves. We aim at a bird; we point a cannon toward a fortress; we level a cannon at a wall.

To Aim, Aspire. We aim at a certain proposed point by endeavoring to gain it; we aspire after that which we think ourselves entitled to, and flatter ourselves with gaining. Many men aim at riches and honor; it is the lot of but few to aspire to a throne.

Air, Manner. Air lies in the whole person; manner is confined to the action or the movement of a single limb. A man has the air of a common person; it discovers itself in all his manners. An air is noble or simple; it marks an elevation or simplicity of character: a manner is rude, rustic, or awkward, for want of culture good society, and good example. We assume an air, and affect a manner.

Air, Mien, Look. Air depends not only on the countenance, but on the stature, carriage, and action; mien respects the whole outward appearance, not excepting the dress; look depends altogether on the face and its changes.

Alarm, Terror, Fright, Consternation. Alarm springs from any sudden signal that announces the approach of danger. Terror springs from any event or phenomenon that may serve as a prognostic of some catastrophe; alarm makes us run to our defense, and terror disarms us. Fright is a less vivid emotion than either, as it arises from the simple appearance of danger; we may be alarmed or terrified for others, but we are mostly frightened for ourselves. Consternation springs from the view of some very serious evil, and commonly affects many. Alarm affects the feelings, terror the understanding, and fright the senses; consternation seizes the whole mind, and benumbs the faculties.

Alertness, Alacrity. We proceed with alertness when the body is in its full vigor; we proceed with alacrity when the mind is in full pursuit of an object.

All, Whole. All respects a number of individuals; whole respects a single body with its components.

All, Every, Each. It is not within the limits of human capacity to take more than a partial survey of all the interesting objects which the whole globe contains. All men are not born with the same talent, either in degree or kind; but every man has a talent peculiar to himself. A parent divides his property among his children, and gives to each his due share.

To Allay, Soothe, Appease, Mitigate, Assuage. All these terms indicate a lessening of something painful. In a physical sense an irritating pain is allayed; a wounded part is soothed by affording ease and comfort. Extreme heat or thirst is allayed; extreme hunger is appeased; a punishment or a sentence is mitigated. In a moral sense one allays what is fervid and vehement; one soothes what is distressed or irritated; one appeases what is tumultuous and boisterous; one mitigates the pains of others, or what is rigorous and severe; one assuages grief or afflictions.

To Alleviate, Relieve. A pain is alleviated by making it less burdensome; a necessity is relieved by supplying what is wanted. Alleviate respects our internal feelings only; relieve respects our external circumstances. That alleviates which affords ease and comfort; that relieves which removes the pain.

Alliance, League, Confederacy. Alliances are formed for the mutual conveniences of parties, as between states to promote commerce. Leagues and confederacies are entered into mostly for purposes of self-defense or for common safety against the attacks of a common enemy; but a league is mostly a solemn act between two or more states and for general purposes of safety, and may, therefore, be both defensive and offensive. A confederacy is mostly the temporary act of several uniting in a season of actual danger to resist a common adversary.

To Allot, Appoint, Destine. Allot is used only for things, appoint and destine for persons or things. A space of ground is allotted for cultivation; a person is appointed as steward or governor; a youth is destined for a particular profession. Allotments and appointments are made for immediate purposes, destinations for a future purpose.

To Allow, Grant, Bestow. That is allowed which may be expected, if not directly required; that is granted which is desired, if not directly asked for; that is bestowed which is wanted as a matter of necessity. A grant comprehends in it something more important than an allowance, and passes between persons in a higher station; what is bestowed is of less value than either. A boy is allowed money for expenses; a king grants pensions to his officers; relief is bestowed on the indigent.

Allowance, Stipend, Salary, Wages, Hire, Pay. All these terms denote a stated sum paid according to certain stipulations. An allowance is gratuitous; it ceases at the pleasure of the donor. All the rest are the requital for some supposed service; they cease with the engagement made between the persons. Stipend is more fixed and permanent than salary, and salary than wages, hire, or pay; a stipend depends upon the fulfilling of an engagement, rather than on the will of an individual. A salary is a matter of contract between the giver and the receiver; an allowance may be given in any form, or at any stated times. Stipend and salary are paid yearly, or at even portions of a year; wages, hire, and pay are estimated by days, weeks, or months, as well as by years.

To Allude, Refer, Hint, Suggest. To allude is not so direct as to refer, but it is more clear and positive than either hint or suggest. We allude to a circumstance by introducing something collaterally allied to it; we refer to an event by expressly introducing it into one's discourse; we hint at a person's intentions by darkly insinuating what may possibly happen; we suggest an idea by some expressions relative to it.

Alone, Solitary, Lonely. Alone, compounded of all and one, signifies altogether one, or single, that is, by oneself. Alone marks the state of a person; solitary the quality of a person or a thing; lonely the quality of a thing only. A person walks alone, or takes a solitary walk in a lonely place.

Ambassador, Envoy, Plenipotentiary, Deputy. Ambassadors, envoys, and plenipotentiaries speak and act in the name of their sovereigns, with this difference: the first is invested with the highest authority, acting in all cases as the representative; the second appears only as a simple authorized minister acting for another, but not always representing him; the third is a sort of envoy used by courts only on the occasion of concluding peace or making treaties. Deputies are not deputed by sovereigns, although they may be deputed to sovereigns; they have no power to act or speak but in the name of some subordinate community or particular body. The functions of the first three belong to the minister, those of the latter to the agent.

Ambiguity, Equivocation. An ambiguity arises from a too general form of expression, which leaves the sense of the author indeterminate; an equivocation lies in the power of particular terms used, which admit of a double

interpretation, or an application to two different things. The ambiguity leaves us in entire uncertainty as to what is meant; the equivocation misleads us in the use of a term in the sense which we do not suspect.

To Amend, Correct, Emend, Improve, Mend, Better. Amend, emend, and correct are all applied to works of the understanding, with this distinction, that amend signifies to remove faults or defects generally, either by adding, taking away, or altering, as to amend a law; to emend is to remove particular faults in any literary work by the alteration of letters or single words; to correct is to remove gross faults, as to correct the press. To mend is employed in respect to any works in the sense of putting that right which either is or has become faulty; to improve is said either of persons or things which are made better, as to improve the mind, morals, etc.; to better is mostly applied to the outward condition on familiar occasions.

Amicable, Friendly. Amicable implies a negative sentiment, a freedom from discordance; friendly implies a positive feeling of regard, the absence of indifference. We make an amicable accommodation, and a friendly visit.

Ample, Spacious, Capacious. Ample is opposed to scanty, spacious to narrow, capacious to small. What is ample suffices and satisfies; it imposes no constraint. What is spacious is free and open; it does not confine. What is capacious readily receives and contains; it is liberal and generous.

To Amuse, Divert, Entertain. Whatever amuses serves to kill time, to lull the faculties and banish reflection; whatever diverts causes mirth and provokes laughter; whatever entertains acts on the senses, and awakens the understanding.

Anger, Resentment, Wrath, Ire, Indignation, Rage, Fury. Anger is a sudden sentiment of displeasure; resentment is a continued anger; wrath is a heightened sentiment of anger, which is poetically expressed by the word ire. Indignation is a sentiment awakened by the unworthy and atrocious conduct of others; as it is exempt from personality, it is not irreconcilable with the temper of a Christian. Rage is a vehement ebullition of anger; and fury is an excess of rage.

Animadversion, Criticism, Stricture. Animadversion includes censure and reproof; criticism implies scrutiny and judgment, whether for or against; and stricture comprehends a partial investigation mingled with censure.

To Animate, Inspire, Enliven, Cheer, Exhilarate. To be animated in its physical sense is simply to receive the first spark of animal life in however small a degree; to be animated in the moral sense is to receive the smallest portion of the sentiment or thinking faculty; to inspire expresses the communication of a strong moral sentiment or passion; to enliven respects the mind; cheer relates to the heart; exhilarate regards the spirits, both animal and mental.

To Announce, Proclaim, Publish. We announce an event that is expected and just at hand; we proclaim an event that requires to be known by all the parties interested; we publish what is supposed likely to interest all who know it.

Answer, Reply, Rejoinder, Response. An answer is given to a question; a reply is made to an assertion; a rejoinder is made to a reply; a response is made in accordance with the words of another. We answer either for the purpose of affirmation, information, or contradiction; we always reply, or rejoin, in order to explain or confute; responses are made by way of assent or confirmation.

Answerable, Responsible, Accountable, Amenable. Answerable and responsible convey the idea of a pledge given for the performance of some act, or the fulfillment of some engagement, a breach of which subjects the defaulter to loss, punishment, or disgrace. A person is accountable to his employer for the manner in which he has conducted any business intrusted to him. To be amenable is to be accountable as far as laws and regulations bind a person; one is amenable to the laws of society, or he is amenable to the rules of the house in which he is only an inmate.

To Apologize, Defend, Justify, Exculpate, Excuse, Plead. We apologize for an error by acknowledging ourselves guilty of it; we defend ourselves against a charge by proving its fallacy; we justify our conduct against any imputation by proving that it was blameless; we exculpate ourselves from all blame by proving that we took no part in the transaction. Excuse and plead are not grounded on any idea of innocence; a plea is frequently an idle or unfounded excuse, a frivolous attempt to lessen displeasure; we excuse ourselves for a neglect by alleging indisposition.

Apparel, Attire, Array. Apparel is the dress of every one; attire is the dress of the great; array is the dress of particular persons on particular occasions.

Apparent, Visible, Clear, Plain, Obvious, Evident, Manifest. That which is simply an object of sight is visible; that which presents itself to our view in any form, real or otherwise, is apparent. The stars themselves are visible to us; but their size is apparent. What is clear is to be seen in all its parts and in its proper colors; what is plain is seen by a plain understanding; what is obvious presents itself readily to the mind of every one; what is evident is seen forcibly, and leaves no hesitation on the mind. Manifest is a greater degree of the evident; it strikes on the understanding and forces conviction.

Applause, Acclamation. These terms express a public demonstration, the former by means of a noise with the hands or feet, the latter by means of shouts and cries. The former is employed as a testimony of approbation; the latter as a sanction, or an indication of respect.

To Appoint, Order, Prescribe, Ordain. To appoint is either the act of an equal or a superior; we appoint a meeting with any one at a given time and place; a king appoints his ministers. To order is the act of one invested with a partial authority; a master gives his orders to his servant. To prescribe is the act of one who is superior by virtue of his knowledge; a physician prescribes for his patient. To ordain is an act emanating from the highest authority; kings and councils ordain; but their ordinances must be conformable to what is ordained by the Divine Being.

To Apprehend, Conceive, Suppose, Imagine. To apprehend is simply to take an idea into the mind; thus we may apprehend any object that we hear or see; to conceive is to form an idea in the mind, as to conceive the idea of doing anything, to conceive a design. What one supposes may admit of a doubt; it is frequently only conjectural: what one imagines may be altogether improbable or impossible; that which cannot be imagined may be too improbable to admit of being believed.

Approach, Access, Admittance. Approach signifies the coming near or toward an object, and consequently is an unfinished act, but access and admittance are finished acts; access is the coming to, that is, as close to an object as is needful; and admittance is the coming into any place, or into the presence or society of any person. An approach may be quick or slow, an access easy or difficult, an admittance free or exclusive.

To Approach, Approximate. To approach denotes simply the moving of an object toward another; but to approximate denotes the gradual moving of two objects toward each other.

To Argue, Evince, Prove. To argue is to serve as an indication amounting to probability; to evince denotes an indication so clear as to remove doubt; to prove marks an evidence so positive as to produce conviction.

Argument, Reason, Proof. An argument serves for defense; a reason for justification; a proof for conviction. Arguments are adduced in support of an hypothesis or a proposition; reasons are assigned in matters of belief and practice; proofs are collected to ascertain a fact.

To Arise, or Rise, Mount, Ascend, Climb, Scale. Arise is used only in the sense of simply getting up, but rise is employed to express a continued motion upward. A person arises from his seat or his bed; a bird rises in the air; a person mounts a hill, and ascends a mountain. To climb is to rise step by step, by clinging to a certain body; to scale is to rise by an escalade, or species of ladder, employed in mounting the walls of fortified towns. Trees and mountains are climbed; walls are scaled.

Arrogance, Presumption. Arrogance is the act of the great; presumption that of the little. The arrogant man takes upon himself to be above others; the presumptuous man strives to be on a level with those who are above him.

Art, Cunning, Deceit. Art implies a disposition of the mind to use circumvention or artificial means to attain an end; cunning marks the disposition to practice disguise in the prosecution of a plan; deceit leads to the practice of dissimulation and gross falsehood, for the sake of gratifying a desire.

Artist, Artisan, Artificer, Mechanic. The artist ranks higher than the artisan; the former requires intellectual refinement, the latter nothing but to know the common practice of art. The sculptor is an artist; the sign-painter is an artisan. Manufacturers are artificers. The mechanic is one

whose work involves manual skill, or skill in the use of tools.

To Ask, Inquire, Question, Interrogate. We perform all these actions in order to get information; but we ask for general purposes of convenience; we inquire from motives of curiosity; we question and interrogate from motives of discretion. Indifferent people ask of each other whatever they wish to know; learners inquire the reasons of things which are new to them; masters question their servants, or parents their children, when they wish to ascertain the real state of any case; magistrates interrogate criminals when they are brought before them.

To Assemble, Muster, Collect. Assemble is said of persons only; muster and collect of persons or things. To assemble is to bring together by a call or invitation; to muster is to bring together by an act of authority, or by a particular effort, into one point of view at one time, and from one quarter; to collect is to bring together at different times, and from different quarters.

Assent, Consent, Approbation, Concurrence. Assent respects matters of judgment; consent respects matters of conduct. We assent to what we admit to be true; we consent to what we allow to be done. Approbation is a species of assent, concurrence of consent. To approve is not merely to assent to a thing as right, but to determine upon it positively to be so; concurrence is properly the consent of many. Assent is given by equals or inferiors; consent by superiors; approbation by equals or superiors; concurrence by equals.

To Assert, Maintain, Vindicate. We assert anything to be true; we maintain it by adducing proofs, facts, or arguments; we vindicate our own conduct or that of another when it is called in question.

Association, Society, Company, Partnership. Whenever we habitually or frequently meet together for some common object, it is an association. Whenever association is used in distinction from the others, it denotes that which is partial in its object and temporary in its duration. It is founded on unity of sentiment as well as on unity of object; but it is mostly unorganized, and kept together only by the spirit which gives rise to it. A society requires nothing but unity of object, which is permanent in its nature; it is organized, and set on foot to promote the cause of humanity, literature, or religion. Companies are brought together for the purposes of interest, and are dissolved when that object ceases to exist; their duration depends on the contingencies of profit and loss. Partnerships are altogether of an individual and private nature. As they are without organization and system, they are more precarious than any other association. Their duration depends not only on the chances of trade, but on the compatibility of individuals to co-operate in a close point of union.

Astronomer, Astrologer. The astronomer studies the course and movement of the stars; the astrologer reasons on their influence.

Asylum, Refuge, Shelter, Retreat. Asylum is chosen by him who has no home; refuge by him who is apprehensive of danger. Shelter is a cover or a protection. Fatigues and toils of life make us seek retreat.

To Atone for, Expiate. Both these terms express a satisfaction for an offense; but atone is general; expiate is particular. We may atone for a fault by any form of suffering; we expiate a crime only by suffering a legal punishment.

To Attack, Assail, Assault, Encounter, Onset, Charge. To attack is to make an approach in order to do some violence to the person; to assail or assault is to make a sudden and vehement attack; to encounter is to meet the attack of another. One assails by means of missile weapons; one assaults by direct personal violence. Onset is employed for the commencement of the battle; charge for an attack from a particular quarter.

Attempt, Trial, Endeavor, Effort, Essay. An attempt is the act of setting about a thing with a view of effecting it; a trial is the act of setting about a thing with a view of seeing the result; an endeavor is a continued attempt. An effort is to an attempt as a means to an end; it is the act of calling forth those powers which are required in an attempt. An essay is an imperfect attempt, or attempt to do something which cannot be done without difficulty. It is applied either to corporeal or intellectual matters.

To Attend, Hearken, Listen. To attend is to have the mind engaged on what we hear; to hearken and listen are to strive to hear. People attend when they are addressed; they hearken to what is said by others; they listen to what passes between others.

Attentive, Careful. We are attentive in order to understand and improve; we are careful to avoid mistakes. Attention respects matters of judgment; care relates to mechanical action: we listen attentively; we read or write carefully.

To Attract, Allure, Invite, Engage. That is attractive which draws the thoughts toward itself; that is alluring which awakens desire; that is inviting which offers persuasion; that is engaging which takes possession of the mind.

To Augur, Presage, Forebode, Betoken, Portend. Augur signifies either to serve or make use of as an augury; to forebode, or to presage, is to form a conclusion in one's own mind; to betoken or portend is to serve as a sign. Persons or things augur; persons only forebode or presage; things only betoken or portend. Auguring is a calculation of some future event, in which the imagination seems to be as much concerned as the understanding. Presaging is rather a conclusion or a deduction of what may be from what is; it lies in the understanding more than in the imagination. Foreboding lies altogether in the imagination. Things are said to betoken, which present natural signs; those are said to portend which present extraordinary or supernatural signs.

Auspicious, Propitious. Those things are auspicious which are casual, or only indicative of good; persons are propitious to the wishes of others who listen to their requests and contribute to their satisfaction.

Austere, Rigid, Severe, Rigorous, Stern. The austere man mortifies himself; the rigid man binds himself to a rule. The manners of a man are austere when he refuses to take part in any social enjoyments; his probity is rigid, that is, inaccessible to the allurements of gain, or the urgency of necessity. Severe is used with reference to conduct: he is severe in the restraints he imposes, and the punishments he inflicts; rigorous implies harshness, severity, as vigorous treatment, a vigorous officer of justice, namely, in the infliction of punishment. Sternness is a species of severity more in manner than in direct action; a commander may issue his commands sternly, or a despot may issue his stern decrees.

Avaricious, Miserly, Parsimonious, Niggardly. An avaricious man shows his love of money in his ordinary dealings; but the miser lives for his money, and suffers every privation rather than part with it. The avaricious man indulges his passion for money by parsimony, that is, by saving out of himself, or by niggardly ways in his dealings with others.

To Awaken, Excite, Provoke, Rouse, Stir Up. We awaken by a simple effort; we excite by repeated efforts or forcible means; we provoke by words, looks, or actions. The tender feelings are awakened; affections, or the passions in general, are excited; the angry passions are commonly provoked. We are roused from an extraordinary state by extraordinary means; we are stirred up from an ordinary to an extraordinary state.

Awe, Reverence, Dread. Awe and reverence both denote a strong sentiment of respect, mingled with some emotions of fear; but the former marks the much stronger sentiment of the two. Dread is an unmingled sentiment of fear for one's personal security.

Awkward, Clumsy, Crooked, Perverted, Untoward, Cross. Awkward respects outward deportment; clumsy the shape and make of the object. A person has an awkward gait, is clumsy in his whole person. What is crooked springs from a perverted judgment; what is untoward is independent of human control. We are cross when partially irritated, resulting from the state of the humors, physical and mental.

Axiom, Maxim, Aphorism, Apophthegm, Saying, Adage, Proverb, By-word, Saw. The axiom is a truth of the first value, a self-evident proposition which is the basis of other truths. A maxim is a truth of the first moral importance for all practical purposes; an aphorism is a truth set apart for its pointedness and excellence. Apophthegm is, in respect to the ancients, what saying is in regard to the moderns; it is a pointed sentiment pronounced by an individual, and adopted by others. Adage and proverb are vulgar sayings, the former among the ancients, the latter among the moderns. The by-word is a casual saying, originating in some local circumstance; the saw, which is a barbarous corruption of saying, is the saying formerly current among the ignorant.

To Babble, Chatter, Chat, Prattle, Prate. Babbling denotes rapidity of speech, which renders it unintelligible; chatter is an imitation of the noise of speech properly applied to magpies or parrots, and figuratively to a corresponding vicious mode of speech in human beings. The winter's fireside invites neighbors to assemble and chat away many an hour which might otherwise hang heavy on hand, or be spent less inoffensively. The prattling of babes has an interest for every feeling mind, but for parents it is one of their highest enjoyments;

prating, on the contrary, is the consequence of ignorance and childish assumption. A prattler has all the unaffected gayety of an uncontaminated mind; a prater is forward, obtrusive, and ridiculous.

Badly, Ill. These terms are both employed to modify the actions or qualities of things, but badly is always annexed to the action, and ill to the quality; as, to do anything badly, the thing is badly done, an ill-judged scheme, an ill-contrived measure, an ill-disposed person.

Band, Company, Crew, Gang. All these terms denote a small association for a particular object. A band is an association in which men are bound together by some strong obligation, whether taken in a good or a bad sense, as a band of soldiers, a band of robbers; a company marks an association for convenience, without any particular obligation, as a company of travelers, a company of strolling players. A crew marks an association collected by some external power, or by coincidence of plan and motive; in the former case it is used for a ship's crew, in the latter and bad sense of the word it is employed for any number of evil-minded persons met together from different quarters, and co-operating for some bad purpose. Gang is used in a bad sense for an association of thieves, murderers, and depredators in general, or in a technical sense for those who work together.

Banishment, Exile, Expulsion. Banishment follows from a decree of justice; exile either by the necessity of circumstances or by an order of authority; banishment is a disgraceful punishment inflicted by tribunals upon delinquents; exile is a disgrace incurred without dishonor; exile removes us from our country; banishment or expulsion drives us from it ignominiously.

Bare, Scanty, Destitute. Bare respects what serves for ourselves; scanty that which is provided by others. A subsistence is bare; a supply is scanty; destitute is generally said of one who wants. One is destitute of friends, of resources, or of comforts.

To Be, Exist, Subsist. We say of qualities, of forms, of actions, of arrangement, of movement, and of every different relation, whether real, ideal, or qualificative, that they are; we say of matter, of spirit, of body, and of all substances, that they exist. Man is man, and will be man under all circumstances and changes of life; he exists under every known climate and variety of heat or cold in the atmosphere. Everything which subsists depends for its existence upon the chances and changes of life.

To Be, Become, Grow. Be is positive; become is relative: a person is what he is without regard to what he was; he becomes that which he was not before. To grow is to become by a gradual process. A man may become a good man from a vicious one, in consequence of a sudden action on his mind; but he grows in wisdom and virtue by means of an increase in knowledge and experience.

To Bear, Yield. Bear conveys the idea of creating within itself; yield, that of giving from itself. Animals bear their young; inanimate objects yield their produce.

To Beat, Defeat, Overpower, Rout, Overthrow. A general is beaten in important engagements; he is defeated and may be routed in partial attacks; he is overpowered by numbers, and overthrown in set engagements.

Beautiful, Fine, Handsome, Pretty. When taken in relation to persons, a woman is beautiful who, in feature and complexion, possesses a grand assemblage of graces; a woman is fine who, with a striking figure, unites shape and symmetry; a woman is handsome who has good features; and pretty if with symmetry of feature be united delicacy. Beautiful, fine, and pretty are applied indifferently to works of nature and art; handsome mostly to those of art only: a beautiful picture, a fine drawing, a pretty cap, and handsome furniture.

Becoming, Comely, Graceful. Becoming respects the decorations of the person, and the exterior deportment; comely respects natural embellishments; graceful, natural or artificial accomplishments. Manner is becoming; figure is comely; air, figure, or attitude is graceful.

To Beg, Desire. To beg marks the wish; to desire, the will and determination. Beg is the act of an inferior, or one in a subordinate condition; desire is the act of a superior. We beg a thing as a favor; we desire it as a right.

To Beg, Beseech, Solicit, Entreat, Supplicate, Implore, Crave. To beg denotes a state of want; to beseech, entreat, and solicit, a state of urgent necessity; supplicate, and implore, a state of abject distress; crave, the lowest state of physical want. One begs with importunity, beseeches with earnestness, entreats by the force of reasoning and strong representation; one solicits by virtue of one's interest, supplicates by an humble address, implores by every mark of dejection and humiliation.

To Begin, Commence, Enter Upon. To begin respects the order of time; to commence, the exertion of setting about a thing. Begin is opposed to end; commence, to complete. A person begins a thing with a view of ending it; he commences a thing with a view of completing it. To enter upon denotes that of first doing what has not been tried before.

Belief, Credit, Trust, Faith. Belief and credit are particular actions or sentiments; trust and faith are permanent dispositions of the mind. Things are entitled to our belief; persons are entitled to our credit; but people repose a trust in others, or have a faith in others. Belief is purely speculative; and trust and faith are operative: the former operates on the mind; the latter on the outward conduct. Trust in God serves to dispel all anxious concern about the future.

Beneficent, Bountiful or Bounteous, Munificent, Generous, Liberal. The sincere well-wisher to fellow-creatures is beneficent according to his means; he is bountiful in providing for the comfort and happiness of others; he is munificent in dispensing favors; he is generous in imparting his property; he is liberal in all he does. Beneficence and bounty are characteristics of the Deity as well as of His creatures.

Benevolence, Benignity, Humanity, Kindness, Tenderness. Benevolence lies in the will. Benignity in the disposition or frame of mind; humanity lies in the heart; kindness and tenderness in the affections. Benevolence indicates a general good-will to all mankind; benignity, particular goodness or kindness of disposition. Humanity is a general tone of feeling; kindness and tenderness are particular modes of feeling.

To Bereave, Deprive, Strip. To bereave expresses more than deprive, but less than strip, which denotes a total and violent bereavement. One is bereaved of children, deprived of pleasures, and stripped of property. We are bereaved of that on which we set most value; the act of bereaving does violence to our inclination. We are deprived of the ordinary comforts and conveniences of life; they cease to be ours. We are stripped of the things which we most want; we are thereby rendered, as it were, naked.

Besides, Except. Besides, which is here taken as a preposition, expresses the idea of addition; except expresses that of exclusion. There were many there besides ourselves; no one except ourselves will be admitted.

Bishopric, Diocese. Both these words describe the extent of an episcopal jurisdiction, the first with relation to the person who officiates, the second with relation to the charge. There may, therefore, be a bishopric either where there are many dioceses or no diocese; but, according to the import of the term, there is properly no diocese where there is no bishopric.

To Blame, Censure, Condemn, Reprove, Reproach, Upbraid. To blame is simply to ascribea fault to; to censure is to express disapprobation: the former is less personal than the latter. The thing more than the person is blamed; the person more than the thing is censured. A person may be blamed for his good nature, and censured for his negligence. That which is condemned is of a more serious nature, and produces a stronger and more unfavorable expression of displeasure or disapprobation, than that which is blamed; reprove is even more personal than censure. A reproof passes from one individual to another, or to a certain number of individuals. Reproaching and upbraiding are as much the acts of individuals as reproving, but the former denote the expression of personal feelings, and may be just or unjust; the latter is presumed to be divested of all personal feelings.

Blemish, Stain, Spot, Speck, Flaw, Defect, Fault. Whatever detracts from the seemliness of appearance is a blemish. In works of art the slightest dimness of color, or want of proportion, is a blemish. A stain or spot sufficiently characterizes itself, as that which is superfluous and out of its place; a speck is a small spot; and a flaw, which is confined to hard substances, consists mostly of a faulty indenture on the outer surface. A blemish tarnishes; a stain spoils; a spot, speck, or flaw disfigures. Defect consists in the want of some specific essential in an object; fault conveys the idea not only of something wrong, but also of its relation to the author. There is a blemish in fine china, a defect in the springs of a clock, and a fault in the contrivance.

To Blot Out, Expunge, Rase or Erase, Efface, Cancel, Obliterate. Letters are blotted out, so that they cannot be seen again; they are expunged, so as to signify that they cannot stand for anything; they are erased, so that the space may be reoccupied with writing. Efface does not designate either the manner or the object:

inscriptions on stone may be effaced, which are rubbed off so as not to be visible. Cancel is principally confined to written or printed characters; they are cancelled by striking through them with the pen. Letters are obliterated which are in any way made illegible.

Bold, Fearless, Intrepid, Undaunted. Boldness is a positive characteristic of the spirit; fearlessness is a negative state of the mind, that is, simply an absence of fear. A person may be bold through fearlessness, but he may be fearless without being bold: he may be fearless where there is no apprehension of danger or no cause for apprehension, but he is bold only when he is conscious or apprehensive of danger, and prepared to encounter it. A man is intrepid who has no fear where the most fearless might tremble; he is undaunted whose spirit is unabated by that which would make the stoutest heart yield.

Booty, Spoil, Prey. Booty and spoil are used as military terms in attacks on an enemy, prey in cases of particular violence. The soldier gets his booty; the combatant his spoils; the carnivorous animal his prey. Booty respects what is of personal service to the captor; spoils whatever serves to designate his triumph; prey includes whatever gratifies the appetite and is to be consumed.

To Bound, Limit, Confine, Circumscribe, Restrict. Bound applies to the natural or political divisions of the earth: countries are bounded by mountains and seas. Limit applies to any artificial boundary: landmarks in fields serve to show the limits of one man's ground. To confine is to bring the limits close together, to part off one space absolutely from another; in this manner we confine a garden by means of walls. To circumscribe is literally to surround, in this manner a circle may circumscribe a square. To restrict is to exercise a strong degree of control: a person is restricted by his physician to a certain portion of food in a day; laws often restrict privileges.

Boundless, Unbounded, Unlimited, Infinite. The ocean is a boundless object so long as no bounds to it have been discovered; desires are often unbounded which ought always to be bounded; power is sometimes unlimited which would be better limited. Nothing is infinite but that Being from whom all finite beings proceed.

Brave, Gallant. Gallantry is extraordinary bravery or bravery on extraordinary occasions: the brave man goes willingly where he is commanded; the gallant man leads on with vigor to the attack. Bravery is common to vast numbers and whole nations; gallantry is peculiar to individuals or particular bodies.

Bravery, Courage, Valor. Bravery lies in the blood; courage lies in the mind: the latter depends on the reason, the former on the physical temperament: the first is a species of instinct; the second is a virtue. A man is brave in proportion as he is without thought; he has courage in proportion as he reasons or reflects. Valor is a higher quality than either bravery or courage, and seems to partake of the grand characteristics of both; it combines the fire of bravery with the determination and firmness of courage.

Breach, Break, Gap, Chasm. A breach and a gap are the consequence of a violent removal, which destroys the connection; a break and a chasm may arise from the absence of that which would form a connection. A breach in a wall is made by means of cannon; gaps in fences are commonly the effect of some violent effort to pass through; a break is made in a page of printing by leaving off in the middle of a line; a chasm is left when an earthquake causes a gaping fissure.

To Break, Bruise, Squeeze, Pound, Crush. Break always implies the separation of the component parts of a body; bruise denotes simply destroying the continuity of the parts. Hard brittle substances, as glass, are broken; soft pulpy substances, as flesh or fruits, are bruised. Squeeze is used for soft substances or for gentle compression. To pound is properly to bruise in a mortar, so as to produce a separation of parts. To crush is the most violent and destructive of all operations, which amounts to the total dispersion of all the parts of a body.

To Break, Burst, Crack, Split. To break does not specify any particular manner or form of action; what is broken may be broken in two or more pieces, broken short or lengthwise, and the like: to burst is to break suddenly and with violence, frequently also with noise. To crack and split are modes of breaking lengthwise: the former in application to hard or brittle objects, as clay, or the things made of clay; the latter in application to wood, or that which is made of wood.

Breeze, Gale, Blast, Gust, Storm, Tempest, Hurricane. A breeze is gentle; a gale is brisk, but steady: we have breezes on a calm summer's day; the mariner has favorable gales, which keep the sails on the stretch. A blast is impetuous: the blare of a trumpet, the breath of bellows, are blasts. A gust is sudden and vehement; storm, tempest, and hurricane include other particulars besides wind. A storm throws the whole atmosphere into commotion; it is a war of the elements, in which wind, rain, hail, and the like conspire to disturb the heavens. Tempest is a species of storm which has also thunder and lightning to add to the confusion. Hurricane is a species of storm which exceeds all the rest in violence and duration.

Brightness, Luster, Splendor, Brilliancy. Brightness and luster are applied properly to natural lights; splendor and brilliancy have been more commonly applied to that which is artificial or unusual: there is always more or less brightness in the sun or moon; there is an occasional luster in all the heavenly bodies when they shine in their unclouded brightness; there is splendor in the eruptions of flame from a volcano or from an immense conflagration; there is brilliancy in a collection of diamonds.

To Bring, Fetch, Carry. To bring is simply to take with oneself from the place where one is; to fetch is to go first to a place and then bring a thing; to fetch, therefore, is a sort of bringing: whatever is near at hand is brought; whatever is at a distance must be fetched. To carry respects always a motion directly from the place or at a distance from the place: he carries a parcel from home.

Bulky, Massive. Whatever is bulky has a prominence of figure; what is massive has compactness of matter.

Burial, Interment, Sepulture. We bury in order to conceal. Interment and sepulture are accompanied with religious ceremonies. Burial is confined to no object or place; interment may be used when a body is deposited in a vault; sepulture is an abstract term confined to particular cases, as in speaking of the rites and privileges of sepulture.

Business, Occupation, Employment, Engagement, Avocation, Vocation. Business occupies all a person's thoughts as well as his time and powers; occupation and employment occupy only his time and strength: the first is mostly regular, it is the object of our choice; the second is casual, it depends on the will of another. Engagement is a partial employment, avocation a particular engagement. Vocation is applied to one's regular work; and avocation to the occupation or pleasures that call one away from the regular routine of work.

Business, Trade, Profession, Art. Buying or selling of merchandise is inseparable from trade; but the exercise of one's knowledge and experience for purposes of gain constitutes a business. When learning or particular skill is required, it is a profession; and when there is a peculiar exercise of art, it is an art.

Bustle, Tumult, Uproar. Bustle has most of hurry in it; tumult most of disorder and confusion; uproar most of noise: the hurried movements of one, or many, cause a bustle; the disorderly struggles of many constitute a tumult. The loud elevation of many opposing voices produces an uproar; uproar is the consequence either of general anger or mirth.

To Buy, Purchase, Bargain, Cheapen. Buy may always be substituted for purchase without impropriety; but purchase would be sometimes ridiculous in the familiar application of buy: necessaries of life are bought; luxuries are purchased. To bargain is to make a contract for exchange. To cheapen is not only to lower the price asked, but to deal in such things as are cheap.

Calamity, Disaster, Misfortune, Mischance, Mishap. A calamity is a great disaster or misfortune; a misfortune is a great mischance or mishap. Whatever is attended with destruction is a calamity; whatever occasions mischief to the person, defeats or interrupts plans, is a disaster; whatever is accompanied with a loss of property, or the deprivation of health, is a misfortune; whatever diminishes the beauty or utility of objects is a mischance or a mishap.

To Calculate, Reckon, Compute, Count. To calculate denotes any numerical operation in general, but is particularly applicable to the abstract science of figures. The astronomer calculates the motions of the heavenly bodies; the mathematician makes algebraic calculations. To reckon is to enumerate and set down things in detail; reckoning is applicable to the ordinary business of life: tradesmen keep their accounts by reckoning; children learn to reckon by various simple processes. Calculation is therefore the science, reckoning the practical art of enumerating. To compute is to come at the result by calculation. We count one by one; we count the minutes.

Calendar, Almanac, Ephemeris. The calendar

is a book which registers events under every month; the almanac is a book which registers times, or the divisions of the year; and an ephemeris is a book which registers the planetary movements every day.

To Call, Cry, Exclaim. Call is used on all ordinary occasions in order to draw a person to a spot, or for any other purpose, when one wishes to be heard. To cry is to call loudly on particular occasions: a call draws attention; a cry awakens alarm. To exclaim is the expression of some particular feeling.

To Call, Invite, Bid, Summon. In the act of calling, any sounds may be used; we may call by simply raising the voice. Inviting may be a direct or indirect act; we may invite by looks or signs as well as by words, by writing as well as by speaking. To bid and summon require the express use of words; the former is always directly addressed to the person, the latter may be conveyed by an indirect channel. To summon is an act of authority, as to summon witnesses.

Calm, Composed, Collected. These terms agree in expressing a state; but calm respects the state of the feelings, composed the state of the thoughts and feelings, and collected the state of the thoughts more particularly. Calmness is peculiarly requisite in seasons of distress, and amidst scenes of horror; composure, in moments of trial, disorder, and tumult; collectedness in moments of danger.

Calm, Placid, Serene. Calm and serene are applied to the elements; placid only to the mind. Calmness respects only the state of the winds, serenity that of the air and the heavens. The weather is calm when it is free from agitation; it is serene when free from noise and vapor. Calm respects the total absence of all perturbation; placid the ease and contentment of the mind; serene, clearness and composure of the mind. We speak of a calm state of mind, and of a serene temper.

Can, May. Can denotes possibility, may liberty and probability: he who has sound limbs can walk; but he may not walk in places which are prohibited.

Candor, Openness, Sincerity. Candor obliges us to acknowledge even that which may make against ourselves; it is disinterested. Openness impels us to utter whatever passes in the mind; it is unguarded. Sincerity prevents us from speaking what we do not think; it is positive.

Capacity, Capaciousness. Capacity is an indefinite term designating the property of being fit to hold or receive, as applied to bodies generally; but capaciousness denotes a fullness of this property as belonging to a particular object in a great degree. Measuring the capacity of vessels belongs to the science of mensuration: the capaciousness of a room is to be observed by the eye.

Captious, Cross, Peevish, Petulant, Fretful. Captious marks a readiness to be offended; cross indicates a readiness to offend or come across the wishes of others; peevish expresses a strong degree of crossness; fretful a complaining impatience; petulant a quick or sudden impatience. Captiousness is the consequence of misplaced pride; crossness of ill-humor; peevishness and fretfulness of a painful irritability. Petulance is either the result of a naturally hasty temper or of a sudden irritability.

Capture, Seizure, Prize. A capture is made by force of arms; a seizure is made by direct and personal force. Prize relates only to the thing taken, and its value to the captor.

Care, Solicitude, Anxiety. Care is the most indefinite of the three; it may be accompanied with pain or not, according to the nature of the object or the intensity of the application. Solicitude and anxiety are accompanied with a positive degree of pain, the latter still more than the former. Care may be exercised with or without feeling; solicitude has desire, mixed with fear; anxiety has distress for the present, mixed with fear for the future.

Care, Charge, Management. Care will include both charge and management; but, in the strict sense, it comprehends personal labor. Charge involves responsibility; management includes regulation and order. A gardener has the care of a garden; a nurse has the charge of children; a steward has the management of a farm.

Careful, Cautious, Provident. Careful, or full of care, that is, having care, is the general term; to be cautious is to be careful in guarding against danger; to be provident is to be careful in preventing straits and difficulties. The term careful is applied for the most part to present matters, but provident only to that which is future. One is careful of his money, but provident toward a time of need.

Carnage, Slaughter, Massacre, Butchery. Carnage respects the number of dead bodies made; it is the consequence of any impetuous attack from a powerful enemy. Slaughter respects the act of taking away life, and the circumstances of the agent; massacre and butchery respect the circumstances of the objects who are the sufferers of the action. The latter three are said of human beings only: defenseless women and children are commonly butchered by the savage furies who are most active in this work of blood.

Carriage, Gait, Walk. Carriage is here the most general term; it respects the manner of carrying the body, whether in a state of motion or rest. Gait is the mode of carrying the limbs and the body whenever we move. Walk is the manner of carrying the body when we move forward to walk.

Case, Cause. The case is matter of fact; the cause is matter of question. A case involves circumstances and consequences; a cause involves reasons and arguments. A case is something to be learned; a cause is something to be decided.

Cast, Turn, Description. Cast, as applicable to persons, respects that which they are made by circumstances; turn, that which they are by themselves: thus there are many casts of religion, that is, men cast in a certain form of religion; and men of a particular moral cast, that is, such as are cast in a particular mold as respects their thinking and acting: so in like manner men of a particular turn, that is, as respects their inclinations and tastes. The description is that by which a man is described or made known to others.

Cause, Reason, Motive. Cause respects the order and connection of things; reason the movements and operations of the mind; motive the movements of the mind and the body. Cause is said of all inanimate objects; reason and motive of rational agents. Whatever happens in the world happens from some cause mediate or immediate; the primary or first cause of all is God: whatever opinions men hold, they ought to be able to assign a substantial reason for them; and for whatever they do, they ought to have a sufficient motive. As the cause gives birth to the effect, so does the reason give birth to the conclusion, and the motive gives birth to the action.

To Cause, Occasion, Create. What is caused seems to follow naturally. What is occasioned follows incidentally, or what occasions may be incidental, but necessary. What is created receives its existence arbitrarily. A wound causes pain; accidents occasion delay; busy bodies create mischief.

Cautious, Wary, Circumspect. We must be cautious on all occasions where there is danger, but we must be wary where there is great danger. A tradesman must be cautious in his dealings with all men, but he must be wary when he has to deal with designing men. Circumspect is used in reference to matters of theory or contemplation, when the mind is principally employed; a man must be circumspect when he transacts business of particular importance and delicacy.

To Cease, Leave Off, Discontinue. Cease is used either for particular actions or general habits; leave off more usually and properly for particular actions; discontinue for general habits. A restless spoiled child never ceases crying until it has obtained what it wants; it is a mark of impatience not to cease lamenting when one is in pain. A laborer leaves off his work at any given hour. A delicate person discontinues his visits when they are found not to be agreeable.

To Celebrate, Commemorate. Everything is celebrated which is distinguished by any marks of attention, without regard to the time of the event, whether present or past; but nothing is commemorated but what has already passed in point of time.

Celestial, Heavenly. Celestial is applied mostly in the natural sense of the heavens; heavenly is employed more commonly in a spiritual sense. Hence, we speak of the celestial globe as distinguished from the terrestrial; and of the celestial bodies. But, on the other hand, we speak of the heavenly habitation, of heavenly joys or bliss, of heavenly spirits, and the like.

To Censure, Carp, Cavil. To censure respects positive errors; to carp and cavil have regard to what is trivial or imaginary: the former is employed for errors in persons; the latter for supposed defects in things. Carping and caviling are resorted to only to indulge ill-nature or self-conceit: party politicians carp at the measures of administration; infidels cavil at the evidences of Christianity, because they are determined to disbelieve.

Certain, Sure, Secure. Certain and sure have regard to a person's convictions; secure to his interests or condition. One is certain from actual knowledge or from a belief in others; one is sure from a reliance upon others; one is secure when free from danger. We can be certain of nothing future but death; we may be sure that God will fulfill His promises in His own way; we may be

secure against any loss or mischief if we use proper precautions.

Cessation, Stop, Rest, Intermission. Cessation respects the course of things; whatever does not go on has ceased; things cease of themselves: stop respects some external action or influence; nothing stops but what is supposed to be stopped or hindered by another: rest is cessation that regards labor or exertion; whatever does not move or exert itself is at rest: intermission is cessation only for a time or at certain intervals. That which ceases or stops is supposed to be at an end; rest or intermission supposes a renewal.

Chance, Fortune, Fate. Chance applies to all things, personal or otherwise; fortune and fate are mostly said of that which is personal. Chance neither forms, orders, nor designs; neither knowledge nor intention is attributed to it; its events are uncertain and variable. Fortune forms plans and designs, but without choice; we attribute to it an intention without discernment; it is said to be blind. Fate forms plans and chains of causes; intention, knowledge, and power are attributed to it; its views are fixed, its results decisive.

Chance, Hazard. Both these terms are employed to mark the course of future events, which are not discernible by the human eye. With the Deity there is neither chance nor hazard. His plans are the result of omniscience; but the designs and actions of men are all dependent on chance or hazard. Chance may be favorable or unfavorable, more commonly the former: hazard is always unfavorable; it is properly a kind of chance.

To Change, Exchange, Barter, Substitute. To change in respect to persons is to take one for another, without regard to whether they are alike or different, as a king changes his ministers; any person may change his servants: to exchange is to take one person in return for another who is in like condition, as prisoners are exchanged in time of war. In respect to things, to change is to take anything new or fresh, whether alike or different. Clothes may be changed. To exchange is to take one thing for another, that is, either of the same kind or equivalent in value, as to exchange one commodity for another. To change may often be the result of caprice, but to exchange is always an act either of discretion or necessity. To barter is to give any commodity for other commodities. To substitute is to put one person in the place of another for the purpose of doing any service or filling any office, as to substitute one for another who has been drawn for the militia.

Change, Variation, Vicissitude. Change consists simply in ceasing to be the same; variation consists in being different at different times; vicissitude consists in being alternately or reciprocally different and the same.

Character, Letter. Character is any written or printed mark that serves to designate something; a letter is a species of character which is the constituent part of a word.

Character, Reputation. Character lies in the man; it is the mark of what he is; it shows itself on all occasions: reputation depends upon others; it is what they think of him.

To Chasten, Chastise. Chasten has most regard to the end, chastise to the means; the former is an act of the Deity, the latter a human action: God chastens His faithful people, to cleanse them from their transgressions; parents chastise their children, to prevent the repetition of faults.

To Cheat, Defraud, Trick. One cheats by direct and gross falsehood or artifice; one defrauds by a settled plan or contrivance; one tricks by a sudden invention.

To Check, Chide, Reprimand, Reprove, Rebuke. A person is checked that he may not continue to do what is offensive; he is chidden for what he has done, that he may not repeat it. People are checked by actions and looks, as well as by words; they are chidden by words only. A person may chide or reprimand in anger, he reproves and rebukes with coolness: great offenses call forth chidings. Omissions or mistakes occasion or require a reprimand; irregularities of conduct give rise to reproof; and improprieties of behavior demand rebuke.

To Check, Stop. Check signifies to impede the course of a body in motion, that is, to cause it to move slowly; to stop (v. cessation), is to cause it not to move at all.

To Cheer, Encourage, Comfort. To cheer regards the spirits; to encourage the resolution: the sad require to be cheered; the timid to be encouraged. To cheer and to comfort have regard to the spirits, but the latter differs in degree and manner: to cheer expresses more than to comfort, the former signifying to produce a lively sentiment, the latter to lessen or remove a painful one. We are cheered in the moments of despondency, whether from real or imaginary causes; we are comforted in the hour of distress.

Chief, Principal, Main. Chief respects order and rank; principal has regard to importance and respectability; main to degree or quantity. We speak of a chief clerk; a commander-in-chief; the chief person in a city: but the principal people in a city; the principal circumstances in a narrative, and the main object.

Chief, Leader, Chieftain, Head. Chief denotes precedency in tribal or civil matters; leader regards the direction of enterprises: chieftain is a kind of leader; and head is the superior in general concerns.

To Choose, Prefer. To choose is to take one thing from among others; to prefer is to take one thing before or rather than another.

To Choose, Pick, Select. We may choose whatever comes in our way without regard to the number of the objects to be chosen from, but we pick or select out of a number only, as to pick or select books from a library. We may pick one or many out of a number, but we mostly select a number. We select with even greater care than we pick.

Circuit, Tour, Round. A circuit is made for a specific end of a serious kind; a tour is always made for pleasure; a round, like a circuit, is employed in matters of business, but of a more familiar and ordinary kind.

To Circumscribe, Inclose. The extent of any place is drawn out for the eye by a circumscription; its extent is limited to a given point by an inclosure. A garden is circumscribed by any ditch, line, or posts, that serve as its boundaries; it is inclosed by wall or fence.

Circumstance, Situation. Circumstance is to situation as a part to a whole; many circumstances constitute a situation: a situation is an aggregate of circumstances. A person is said to be in circumstances of affluence who has an abundance of everything essential to his comfort; he is in an easy situation when nothing exists to create uneasiness.

Circumstance, Incident, Fact. Incident is what happens; fact is what is done; circumstance is not only what happens and is done, but whatever is or belongs to a thing. To everything are annexed circumstances, either of time, place, age, color, or other collateral appendages, which change its nature. Everything that moves and operates is exposed to incidents; effects are produced, results follow, and changes are brought about; these are incidents: whatever moves and operates, does and what it produces is done or is the fact.

Circumstantial, Particular, Minute. Circumstantial expresses less than particular, and particular less than minute. A circumstantial account contains all leading events; a particular account includes every event and movement, however trivial; a minute account omits nothing as to person, time, place, form, and every other trivial circumstance connected with the events.

To Cite, Quote. To cite is employed for persons or things; to quote for things only; authors are cited, passages from their works are quoted: we cite only by authority; we quote for general purposes of convenience.

Civil, Polite. These two epithets are employed to denote different modes of acting in social intercourse. Polite expresses more than civil; it is possible to be civil without being polite. Civility is contented with pleasing when the occasion offers: politeness seeks the opportunity to please; it prevents the necessity of asking by anticipating the wishes; it is full of delicate attentions, and is an active benevolence in the minor concerns of life.

Civil, Obliging, Complaisant. Civil applies to words or manner as well as to the action; obliging to the action only. As civil is indefinite in its meaning, so it is often used indiscriminately in its application; obliging, on the other hand, is confined to what passes between particular persons or under particular circumstances. Civil and obliging both imply a desire to do a kindness; complaisant signifies the desire of receiving pleasure, which is a refined mode of doing a kindness.

Clandestine, Secret. To do a thing clandestinely is to elude observation; to do a thing secretly is to do it without the knowledge of any one: what is clandestine is unallowed, which is not necessarily the case with what is secret.

To Clasp, Hug, Embrace. To clasp makes the act of enclosing another on one's arms when it is performed with the warmth of true affection. To hug is to clasp tightly to the bosom; the more refined term, to embrace, is to infold in the arms in token of friendship or affection.

To Class, Arrange, Range. The general qualities and attributes of things are to be considered in classing; their fitness to stand by each other must be considered in arranging; their capacity for forming a line is the only thing to be attended to in ranging. Classification serves the purposes either of public policy or science; arranging

is a matter of convenience to the individual himself; ranging is a matter of convenience for others.

Clean, Cleanly, Pure. Clean expresses a freedom from dirt or soil; cleanly the disposition or habit of being clean. A person who keeps himself clean is cleanly. Pure is used in a moral sense; the heart should be pure.

Clearly, Distinctly. That is seen clearly of which one has a clear view independent of anything else; that is seen distinctly which is seen so as to distinguish it from other objects. We see the moon clearly whenever it shines; but we cannot see the spots in the moon distinctly without the help of glasses.

Clearness, Lucidity, Brightness, Vividness. A mere freedom from stain or dullness constitutes clearness; the return of light, and consequent removal of darkness, constitutes lucidity; brightness supposes a certain strength of light; vividness a freshness combined with strength, and with a degree of brilliancy.

Clearness, Perspicuity. These epithets denote qualities equally requisite to render a discourse intelligible. Clearness respects our ideas, and springs from the distinction of the things themselves that are discussed: perspicuity respects the mode of expressing the ideas, and springs from the good qualities of style.

Clever, Skillful, Expert, Dexterous. Cleverness is mental power employed in the ordinary concerns of life: a person is clever in business. Skill is both a mental and corporeal power, exerted in mechanical operations and practical sciences: a physician, a lawyer, or an artist, is skillful: one may have a skill in divination, or a skill in painting. Expertness and dexterity require more corporeal than mental power exerted in minor arts and amusements: one is expert at throwing the quoit; dexterous in the management of horses.

Cloister, Convent, Monastery. The proper idea of cloister is that of seclusion; the proper idea of convent is that of community; the proper idea of a monastery is that of solitude. One is shut up in a cloister, put into a convent; one retires to a monastery. Whoever wishes to take an absolute leave of the world shuts himself up in a cloister; whoever wishes to attach himself to a community that has renounced all commerce with the world goes into a convent; whoever wishes to shun all human intercourse retires to a monastery. In the cloister our liberty is sacrificed; in the convent our worldly habits are renounced, and those of a regular religious community being adopted, we submit to the yoke of established orders: in a monastery we impose a sort of voluntary exile upon ourselves; we live with the view of living only to God.

Close, Near, Nigh. Close is more definite than near: houses which are almost joined stand close to each other; men stand close when they touch each other. Objects are near which are within sight; persons are near each other when they can converse together. Near and nigh, which are but variations of each other in etymology, admit of little or no difference in their use.

To Close, Shut. To close signifies simply to put close together; to shut to stop or prevent admittance: closing is therefore a partial shutting, and shutting a complete closing.

To Close, Conclude, Finish. We may close at any point by simply ceasing to have any more to do with it; but we conclude in a definite and positive manner. To conclude is to bring to an end by determination; to finish is to bring to an end by completion: what is settled by arrangement and deliberation is properly concluded; what is begun on a certain plan is said to be finished.

Coarse, Rough, Rude. In the proper sense coarse refers to the composition and materials of bodies, as coarse bread, coarse meat, coarse cloth; rough respects the surface of bodies, as rough wood and rough skin; rude respects the make or fashion of things, as a rude bark, a rude utensil. Coarse is opposed to fine, rough to smooth, rude to polished.

Cogent, Forcible, Strong. Cogency applies to reasons individually considered; force and strength to modes of reasoning or expression. Cogent reasons impel to decisive conduct; strong conviction is produced by forcible reasoning conveyed in strong language.

Colleague, Partner. Colleague is more noble than partner: men in the highest offices are colleagues; tradesmen, mechanics, and subordinate persons, are partners: every Roman Consul had a colleague; every workman has commonly a partner. Colleague is used for community of office; partner for community of interest.

Colorable, Specious, Ostensible, Plausible, Feasible. The first three of these words are figures of speech drawn from what naturally pleases the eye; plausible is drawn from what pleases the ear; feasible takes its signification from what meets the judgment or conviction. What is colorable has an aspect or face upon it that lulls suspicion and affords satisfaction; what is specious has a fair outside when contrasted with that which it may possibly conceal; what is ostensible is that which presents such an appearance as may serve for an indication of something real.

To Combat, Oppose. A person's views or attitudes are combated; his interests or his measures are opposed.

To Come, Arrive. Persons or things come; persons only, or what is personified, arrive. To come specifies neither time nor manner; to arrive is employed with regard to some particular period or circumstances.

Comfort, Pleasure. The main feature of comfort is substantiality; the main feature of pleasure is warmth. Pleasure is quickly succeeded by pain; it is the lot of humanity that to every pleasure there should be an alloy: comfort is that portion of pleasure which seems to lie exempt from this disadvantage; it is the most durable sort of pleasure. Comfort must be sought for at home; pleasure is pursued abroad.

Command, Order, Injunction, Precept. A command is an exercise of power or authority; it is imperative and must be obeyed: an order serves to direct; it is instructive and must be executed. A sovereign issues his commands. Orders may be given by a subordinate or by a body, as orders of a court. Order is applied to the common concerns of life; injunction and precept to the moral conduct or duties of men. Injunction imposes a duty by virtue of the authority which enjoins. The precept lays down or teaches such duties as already exist.

To Commission, Authorize, Empower. We commission in matters where our own will and convenience are concerned; we authorize in matters where our personal authority is requisite; and we empower in matters where the authority of the law is required.

Commodious, Convenient. Commodious is mostly applied to that which contributes to the bodily ease and comfort; convenient to whatever suits the purposes of men in their various transactions.

Commonly, Generally, Frequently, Usually. What is commonly done is an action common to all; what is generally done is the action of the greatest part; what is frequently done is either the action of many, or an action many times repeated by the same person; what is usually done is done regularly by one or many.

To Communicate, Impart. A thing may be communicated directly or indirectly, and to any number of persons, as to communicate intelligence by signal or otherwise. Impart is a direct action that passes between individuals, as to impart instruction.

Communion, Converse. Both these terms imply a communication between minds; but the former may take place without corporeal agency, the latter never does. Spirits hold communion with each other; people hold converse.

Comparison, Contrast. Likeness in the quality and difference in the degree are requisite for a comparison; likeness in the degree and opposition in the quality are requisite for a contrast.

Compatible, Consistent. Compatibility has principally a reference to plans and measures; consistency to character, conduct, and station. Everything is compatible with a plan which does not interrupt its prosecution; everything is consistent with a person's station by which it is neither degraded nor elevated.

To Compel, Force, Oblige, Necessitate. To compel denotes moral rather than physical force; but to force is properly applied to the use of physical force or a violent degree of moral force. A man may be compelled to walk if he have no means of riding; he may be forced to go at the will of another. Oblige expresses only an indirect influence, which may be resisted or yielded at discretion. We are compelled to do that which is repugnant to our will and our feelings. That which one is obliged to do may have the assent of the judgment if not of the will. We are necessitated by circumstances, or by anything which puts it out of our power to do otherwise.

Compensation, Amends, Satisfaction, Recompense, Remuneration, Requital, Reward. A compensation is a return for a loss or a damage sustained; amends is a return for anything that is faulty in ourselves or toward others. Satisfaction is that which satisfies the individual requiring it — it is given for personal injuries; a recompense is a voluntary return for a voluntary service — it is made from a generous feeling. Remuneration is estimated rather according to the condition of the person and the dignity of the service, than for its positive worth. Authors often receive a remuneration for their works according to the reputation they have previously acquired, and not according to the real merit of the work. A reward conveys no idea of an obligation on the part of the person making it; whoever rewards acts optionally. When evil is

returned for good, that is a bad requital, and, as a proof of ingratitude, wounds the feelings.

Competent, Fitted, Qualified. Competent mostly respects the mental endowments and attainments; fitted, the disposition and character; qualified, the artificial acquirements or natural qualities.

To Complain, Lament, Regret. Complaint marks most of dissatisfaction; lamentation most of grief; regret most of pain. Complaint is expressed verbally; lamentation either by words or signs; regret may be felt without being expressed. Complaint is made of personal grievances; lamentation and regret may be made on account of others as well as ourselves. We complain of our ill health, of our inconveniences, or of troublesome circumstances; we lament our inability to serve another; we regret the absence of one whom we love.

Complaint, Accusation. A complaint is mostly made in matters that personally affect the complainant; an accusation is made of matters in general, but especially those of a moral nature. A complaint is made for the sake of obtaining redress; an accusation is made for the sake of ascertaining a fact or for the sake of bringing to punishment.

Complaisance, Deference, Condescension. Complaisance signifies the act of complying with, or pleasing others; deference marks the inclination to defer, or acquiesce in the sentiments of another in preference to one's own; condescension marks the act of conceding one's point to yield to the satisfaction of others, rather than rigorously to exact one's rights. The necessities and the allurements of society and of intimacy lead to complaisance; it makes sacrifices to the wishes, tastes, and personal feelings of others. Complaisance is the act of an equal; deference that of an inferior; condescension that of a superior.

Complete, Perfect, Finished. That is complete which has no deficiency; that is perfect which has positive excellence; and that is finished which is at an end.

To Complete, Finish, Terminate. The characteristic idea of completing is that of making a thing altogether what it ought to be; that of finishing, the doing all that is intended to be done toward a thing; and that of terminating, simply putting an end to a thing.

Compliant, Yielding, Submissive. A compliant person may want command of feeling; a yielding person may want fixedness of principle; a submissive person may want resolution. A too compliant disposition will be imposed upon by the selfish and the unreasonable; a too yielding disposition is most unfit for commanding; a too submissive disposition exposes a person to the exactions of tyranny.

To Comply, Conform, Yield, Submit. To comply is to act from inclination; to conform is to act from judgment. Compliance is altogether optional; we comply with a thing or nor, at pleasure. Conformity is binding on the conscience; it relates to matters in which there is a right and a wrong. To yield is to give way to another, either with one's will, judgment, or outward conduct. To submit is to give up oneself altogether; it is the substitution of another's will for one's own.

To Compose, Settle. We compose that which has been disjointed and separated, by bringing it together again; we settle that which has been disturbed and put in motion, by making it rest.

Composed, Sedate. Composed is opposite to ruffled or hurried, and is a temporary state; sedate is opposed to buoyant or volatile, and is a permanent habit of the mind or the body.

To Compound, Compose. Compound is used in the physical sense only; compose in the proper or the moral sense. A medicine is compounded of many ingredients; society is composed of various classes.

Comprehensive, Extensive. Comprehensive respects quantity; extensive regards space. A comprehensive view of a subject includes all branches of it; an extensive view of a subject enters into minute details. The comprehensive is associated with the concise; the extensive with the diffuse.

To Comprise, Comprehend, Embrace, Contain, Include. A library comprises a variety of books; the whole is comprised within a small compass. Laws comprehend a number of cases. A discourse embraces a variety of topics. A society contains very many individuals; it includes none but those of a certain class, or it includes some of every class.

To Conceal, Dissemble, Disguise. To conceal is simply to abstain from making known what we wish to keep secret; to dissemble and disguise signify to conceal, by assuming some false appearance. We conceal facts; we dissemble feelings; we disguise sentiments.

To Conceal, Hide, Secrete. To conceal is to keep from observation; to hide is to put under cover; to secrete is to set at a distance or in unfrequented places.

Concealment, Secrecy. Concealment has to do with what concerns others; secrecy with that which concerns ourselves. What is concealed is kept from the observation of others; what is secret is known only to ourselves.

Conceit, Fancy. Conceit applies only to internal objects; it is mental in the operation and the result; it is a species of invention: fancy is appliied to external objects, or whatever acts on the senses. Nervous people are subject to strange conceits; timid people fancy they hear sounds or see objects in the dark, which awaken terror.

To Conceive, Understand, Comprehend. Conception is the simplest operation of the three: when we conceive we may have but one idea; when we understand or comprehend we have all the ideas which the subject is capable of presenting. The builder conceives plans; the scholar understands languages; the metaphysician attempts to explain many things which are not to be comprehended.

Conception, Notion. Conception is the mind's own work, what it pictures to itself from the exercise of its own powers; notion is the representation of objects as they are drawn from observation. Conceptions are the fruit of the understanding and the imagination; notions are the result of experience and information.

To Concert, Contrive, Manage. There is a secret understanding in concerting; invention in contriving; execution in managing. Measures are concerted; schemes are contrived; affairs are managed.

To Conciliate, Reconcile. To conciliate is to get the good-will and affections for oneself; to reconcile is to unite the affections of two persons to each other.

Conclusion, Inference, Deduction. Conclusions are drawn from real facts; inferences are drawn from the appearances of things; deductions only from arguments or assertions. Conclusions are practical; inferences ratiocinative; deductions are final.

Conclusive, Decisive, Convincing. Conclusive applies either to practical or argumentative matters; decisive to what is practical only; convincing to what is argumentative only. It is necessary to be conclusive when we deliberate, and decisive when we command. An argument is convincing, a chain of reasoning conclusive.

Concord, Harmony. Concord is generally employed for the union of wills and affections; harmony respects the aptitude of minds to coalesce. Harmony may be used in the sense of adaptation to things generally.

Condition, Station. Condition has most relation to circumstances, education, birth, and the like; station refers rather to the rank, occupation, or mode of life which is marked out.

To Conduce, Contribute. To conduce signifies to serve the full purpose; to contribute signifies only to serve a secondary purpose. Exercise conduces to the health; it contributes to give vigor to the frame.

To Conduct, Manage, Direct. Conducting requires most wisdom and knowledge; managing most action; direction most authority. A lawyer conducts the cause intrusted to him; a steward manages the mercantile concerns for his employer; a superintendent directs the movements of all the subordinate agents.

Confederate, Accomplice. A confederate is a partner in a plot or a secret association; an accomplice is a partner in some active violation of the laws.

To Confer, Bestow. Conferring is an act of authority; bestowing that of charity or generosity. Princes and men in power confer; people in a private station bestow.

Confidence, Trust. Confidence is an extraordinary trust, but trust is always ordinary unless the term be otherwise qualified. Confidence involves communication of a man's mind to another, but trust is confined to matters of action.

Confident, Dogmatical, Positive. Confidence implies a general reliance on one's abilities in whatever we undertake; dogmatism implies a reliance on the truth of our opinions; positivity a reliance on the truth of our assertions. A confident man is always ready to act, as he is sure of succeeding; a dogmatical man is always ready to speak, as he is sure of being heard; a positive man is determined to maintain what he has asserted, as he is convinced that he has made no mistake.

To Confirm, Corroborate. What confirms serves to strengthen the mind; what corroborates gives weight to the thing. An opinion or a story is confirmed; an evidence or the representation of a person is corroborated.

To Confirm, Establish. To confirm is applied to what is partial, if not temporary; to establish to that which is permanent and of importance, as to confirm a report, to establish a reputation, to confirm a treaty or alliance, to establish a trade or a government.

Conformable, Agreeable, Suitable. Conformable is employed for matters of obligation; agreeable for matters of choice; suitable for matters of propriety and discretion. What is conformable accords with some prescribed form or given rule of others; what is agreeable accords with the feelings, tempers, or judgments of ourselves or others; what is suitable accords with outward circumstances.

To Confound, Confuse. A person confounds one thing with another: objects become confused, or a person confuses himself. It is a common error among ignorant people to confound names, and among children to have their ideas confused on commencing a new study.

To Confront, Face. Confront implies to set face to face; and face signifies to set the face toward any object. Witnesses are confronted; a person faces danger.

Confusion, Disorder. Confusion supposes the absence of all order; disorder the derangement of order where it exists, or is supposed to exist.

To Confute, Refute, Disprove, Oppugn. To confute respects what is argumentative; refute what is practical and personal; disprove whatever is represented or related; oppugn what is held or maintained. An argument is confuted by proving its fallacy; a charge is refuted by proving the innocence of the party charged an assertion is disproved by proving that it is incorrect; a doctrine is oppugned by a course of reasoning.

To Connect, Combine, Unite. What is connected and combined remains distinct, but what is united loses all individuality. Things the most dissimilar may be connected or combined; things of the same kind only can be united. Houses are connected by means of a common passage; the armies of two nations are combined; two armies of the same nation are united.

Connection, Relation. Families are connected with each other by the ties of blood or marriage; persons are connected with each other in the way of trade or business; objects stand in a certain relation to each other, as persons stand in the relation of giver and receiver, or of debtor and creditor.

Conqueror, Victor. A conqueror is always supposed to add something to his possessions; a victor gains nothing but the superiority. Those who take possession of other men's lands by force of arms make a conquest; those who excel in any trial of skill are the victors.

To Consent, Permit, Allow. As the act of an equal we consent to that in which we have a common interest with others. We permit or allow what is for the accommodation of others: we allow by not opposing; we permit by a direct expression of our will. Contracts are formed by the consent of the parties who are interested. The proprietor of an estate permits his friends to sport on his grounds; he allows a passage through his premises. A parent consents to the establishment of his children; he permits them to read certain books; he allows them to converse with him familiarly.

Consequence, Effect, Result, Issue, Event. A consequence is that which follows of itself, without any qualification or restriction; an effect is that which is effected or produced, or which follows from the connection between the thing effecting, as a cause, and the thing effected. A result is general, following from a whole; there may be many consequences from the same thing, with one result only. We speak of the issue of a negotiation or a battle, and the event of a war. The fate of a nation sometimes hangs on the issue of a battle; the measures of government are often unjustly praised or blamed according to the event.

To Consider, Reflect. To consider is employed for practical purposes; to reflect for matters of speculation or moral improvement. Common objects call for consideration; the workings of the mind itself, or objects purely spiritual, occupy reflection.

To Consider, Regard. There is more caution or thought in considering; more personal interest in regarding. To consider is to bear in mind all that prudence or propriety suggests; to regard is to bear in mind all that our wishes or interests suggest.

Consideration, Reason. The consideration influences particular actions; the reason determines a line of conduct.

Consonant, Accordant, Consistent. Consonant is employed in matters of representation; accordant in matters of opinion or sentiment; consistent in matters of conduct.

Constancy, Stability, Steadiness, Firmness. Constancy respects the affections; stability the opinions; steadiness the action, or the motives of action; firmness the purpose or resolution.

To Constitute, Appoint, Depute. To constitute is the act of a body; to appoint and depute, either of a body or an individual: a community constitutes any one their leader; a monarch appoints his ministers. Whoever is deputed has private and not public authority; his office is partial, often confined to the particular transaction of an individual, or a body of individuals.

To Consult, Deliberate. Consultations always require two persons at least; deliberations may be carried on either with a man's self or with numbers. An individual may consult with one or many; assemblies commonly deliberate.

To Consummate, Complete. Wishes are consummated; plans are completed.

Contagion, Infection. We consider contagion as to the manner of spreading from one body to another; we consider infection as to the act of its working itself into the system. Whatever acts by contagion acts immediately by direct personal contact; whatever acts by infection acts gradually and indirectly, or through the medium of a third body, as clothes, or the air when infected.

Contagious, Epidemical, Pestilential. The contagious applies to that which is capable of being caught, and ought not, therefore, to be touched; the epidemical to that which is already caught or circulated, and requires, therefore, to be stopped; the pestilential to that which may breed an evil, and is, therefore, to be removed. Diseases are contagious or epidemical; the air or breath is pestilential.

To Contaminate, Defile, Pollute, Taint, Corrupt. Whatever is impure contaminates; what is gross and vile in the natural sense defiles, and in the moral sense pollutes; what is contagious or infectious corrupts; and what is corrupted may taint other things.

To Contemn, Despise, Scorn, Disdain. Contemn signifies to pollute or render worthless, which is the cause of contempt. Despise signifies to look down upon, which is a strong mark of contempt; scorn signifies stripped of all honors and exposed to derision, which situation is the cause of scorn; disdain signifies to hold altogether unworthy.

To Contemplate, Meditate, Muse. Different species of reflection are marked by these terms. We contemplate what is present or before our eyes; we meditate on what is past or absent. The heavens and all the works of the Creator are objects of contemplation; the ways of Providence are fit subjects for meditation. One muses on events or circumstances which have recently passed.

Contemptible, Contemptuous. Contemptible is applied to the thing deserving contempt; contemptuous to that which is expressive of contempt. A production is contemptible; a sneer or a look is contemptuous.

To Contend, Contest, Dispute. To contend is simply to exert a force against a force; to contest is to struggle together for an object; to dispute, according to its original meaning, applies to opinions only, and is distinguished from contend in this, that the latter signifies to maintain one's own opinion, and the former to call in question the opinion of another.

Contentment, Satisfaction. Contentment lies in ourselves; satisfaction is derived from external objects. One is contented when one wishes for no more: one is satisfied when one has obtained all one wishes. Contentment is within the reach of the poor man, to whom it is a continual feast; but satisfaction has never been procured by wealth, however enormous, or ambition, however boundless.

Continual, Perpetual, Constant. What is continual admits of no interruption: what is perpetual admits of no termination. There may be an end to that which is continual, and there may be intervals in that which is perpetual. Constant, like continual, admits of no interruption, and it also admits of no change. What is continual may not always continue in the same state; but what is constant remains in the same state.

Continual, Continued. What is continual may have frequent pauses; what is continued ceases only to terminate.

Continuance, Continuation, Duration. The continuance is said of that which itself continues; the continuation of that which is continued by some other agency, as the continuance of the rain, the continuation of a history, work, line, etc. Things are of long or short duration by comparison.

To Continue, Remain, Stay. To continue is associated with a state of action; to remain with a state of rest. We are said to continue to speak, or do anything, to remain stationary, or in a position. Stay is a voluntary act, as to stay at a friend's, or with a friend.

To Continue, Persevere, Persist. We continue from habit or casualty; we persevere from reflection and the exercise of our judgment; we persist from attachment. A child perseveres in a new study until he has mastered it; he persists in making a request until he has obtained the object of his desire.

Contracted, Confined, Narrow. Contracted signifies drawn into a smaller compass than it might otherwise be in: confined signifies brought within unusually small bounds; it is said of that which is made or becomes so by circumstances. Narrow is the opposite of broad, in extent, scope, views, and resources. A limb is said to be contracted which is drawn up by disease; a situation is confined which has not the necessary or usual degree of open space; a road or a mind is narrow.

To Contradict, Deny. One contradicts in direct terms by asserting something contrary; one denies by advancing arguments, or by suggesting doubts or difficulties. These terms may, therefore, both be used in reference to disputations. We may deny the truth of a position by contradicting the assertions that are advanced in its support.

To Controvert, Dispute. To controvert has regard to speculative points; to dispute respects matters of fact: there is more of opposition in controversy; more of doubt in disputing. A sophist controverts; a sceptic disputes.

Contumacious, Rebellious. The contumacious resist only occasionally; the rebellious resist systematically: the contumacious stand only on certain points, and oppose the individual; the rebellious set themselves up against the authority itself.

Convenient, Suitable. Convenient regards the circumstances of the individual; suitable respects the established opinions of mankind, and is closely connected with moral propriety: nothing is convenient which does not favor one's purpose; nothing is suitable which does not suit the person, place, and thing.

Conversant, Familiar. A person is conversant in matters that come frequently before his notice; he is familiar with such as form the daily routine of his business.

Conversation, Dialogue, Conference, Colloquy. A conversation is always something actually held between two or more persons; a dialogue is mostly fictitious, and written as if spoken: any number of persons may take part in a conversation, but a dialogue always refers to the two persons who are expressly engaged. A conference is always specifically appointed and is mostly on public concerns. The colloquy has the same character as the dialogue but is not confined to two people.

Convert, Proselyte. Convert is more extensive in its sense and application than proselyte: convert in its full sense includes every change of opinion, without respect to the subject. Proselyte, in its original application, denoted changes only from one religious belief to another; proselyte now means a new convert to a religion, a religious sect, or to some particular system or party.

To Convict, Detect. A person is convicted by means of evidence; he is detected by means of ocular demonstration. One is convicted of having been the perpetrator of some evil deed; one is detected in the very act of committing the deed.

To Convict, Convince, Persuade. A person may be convicted of heresy, if it be proved to the satisfaction of others; he may be convinced that the opinion which he has held is heretical. So a person may be convicted who is involuntarily convinced of his error, but he is convinced if he is made sensible of his error without any force on his own mind. What convinces binds; what persuades attracts: our persuasion respects matters of belief or practice.

Convivial, Social. The prominent idea in convivial is that of sensual indulgence; the prominent idea in social is that of enjoyment from an intercourse with society. We speak of convivial meetings, convivial enjoyments, or the convivial board; but social intercourse, social pleasure, social amusements, and the like.

To Copy, Transcribe. To copy respects the matter; to transcribe respects simply the act of writing. What is copied must be taken immediately from the original, with which it must exactly correspond; what is transcribed may be taken from the copy, but not necessarily in an entire state. A copier should be very exact; a transcriber should be a good writer.

Copy, Model, Pattern, Specimen. The term copy is applied to that which is delineated, as writings or pictures, which must be taken faithfully and literally; a model is that which may be used as a guide or a rule; the pattern regards solely the outward form or the color of anything that is made or manufactured; the specimen is any portion of a material which serves to show the quality of that of which it forms a part.

Coquette, Jilt. The coquette makes a traffic of her own charms by seeking a multitude of admirers; the jilt sports with the sacred passion of love, and barters it for the gratification of any selfish propensity.

Correct, Accurate. What is done by the exercise of the judgment is said to be correct, as a correct style, a correct writer; what is done by the effort of the individual is more properly accurate, as accurate observations, an accurate survey.

Correction, Discipline, Punishment. As correction and discipline have commonly required punishment to render them efficacious, custom has affixed to them a strong resemblance in their application, although they are distinguished from each other by obvious marks of difference. The prominent idea in correction (v. to correct) is that of making right what has been wrong. In discipline, the leading idea is that of instructing or regulating. In punishment, the leading idea is that of inflicting pain. We remove an evil by correction; we prevent it by discipline.

To Correspond, Accord. To correspond is to answer or conform to the description of something else. Things that correspond must be alike in size, shape, color, and every minute particular. Appearance and reality seldom correspond. To accord is to make to agree or correspond, to suit one thing to another. Things that accord must be suited to each other. His disposition accords with his looks.

Cost, Expense, Price, Charge. The cost is what a thing costs, or what is to be laid out for it; the expense is that which a person actually lays out; the price is that which a thing may fetch or which it may be worth; the charge is that which a person or a thing is charged with. We do a thing at our own cost, but at another's expense; we can never set a price on anything until we have ascertained what it has cost us, nor can we know or defray the expense until the charge be made. In the moral acceptation, the attainment of an object is said to cost much pains; a thing is persisted in at the expense of health, of honor, or of life. The sacrifice of a man's quiet is the price which he must pay for the gratification of his ambition.

To Countenance, Sanction, Support. Persons are countenanced; things are sanctioned; persons or things are supported. Persons are countenanced in their proceedings by the apparent approbation of others; measures are sanctioned by the consent or the approbation of others who have due authority; measures or persons are supported by every means which may forward the object.

Courage, Fortitude, Resolution. Courage respects action; fortitude respects passion: a man has courage to meet danger, and fortitude to endure pain. Resolution simply marks the will not to recede: we require resolution not to yield to the first difficulties that offer.

To Cover, Hide. The ruling idea in the word cover is that of throwing or putting something over a body; in the word hide is that of keeping carefully to one's self, from the observation of others.

Cover, Shelter, Screen. Cover includes the idea of concealing; shelter comprehends that of protecting from some immediate or impending evil; screen includes that of warding off some trouble.

Credit, Favor, Influence. These terms mark the state we stand in with regard to others as flowing out of their sentiments toward ourselves: credit arises from esteem; favor from good-will or affection; influence from either credit or favor, or external circumstances. Influence is employed in directing others: weak people easily give their credit, or bestow their favor, by which an influence is gained over them to bend them to the will of others.

Crime, Vice, Sin. A crime is a social offense; a vice is a personal offense. Every action which does injury to others, either individually or collectively, is a crime; that which does injury to ourselves is a vice. Crime consists in a violation of human laws; vice in a violation of the moral law; sin in a violation of the Divine Law.

Criminal, Culprit, Malefactor, Felon, Convict. When we wish to speak in general of those who by offenses against the laws or regulations of society have exposed themselves to punishment, we denominate them criminals; when we consider them as already brought before a tribunal, we call them culprits; when we consider them in regard to the moral turpitude of their character, as the promoters of evil rather than of good, we entitle them malefactors; when we consider them as offending by the grosser violations of the law, they are termed

felons; when we consider them as already under the sentence of the law, we denominate them convicts.

Criterion, Standard. The criterion is employed only in matters of judgment; the standard is used in the ordinary concerns of life. The former serves for determining the characters and qualities of things; the latter for defining quantity and measure.

Cruel, Inhuman, Barbarous, Brutal, Savage. A person is cruel who neglects the creature he should protect and take care of; he is inhuman if he withholds from him the common marks of tenderness or kindness which are to be expected from one human being to another; he is barbarous if he finds amusement in inflicting pain; he is brutal or savage according to the circumstances of aggravation which accompany the act of torturing.

Crying, Weeping. Crying arises from an impatience in suffering corporeal pains; weeping is occasioned by mental grief.

Cultivation, Culture, Civilization, Refinement. Cultivation is with more propriety applied to the thing that grows; culture to that in which it grows. The cultivation of flowers will not repay the labor unless the soil be prepared by proper culture. Civilization is the first stage of cultivation; refinement is the last. We civilize savages by divesting them of their rudeness, and giving them a knowledge of such arts as are requisite for civil society; we refine them by the introduction of the liberal arts.

To Cure, Heal, Remedy. To cure is employed for what is out of order; to heal for that which is broken. Diseases are cured, wounds are healed; the former is a complex, the latter is a simple process. Whatever requires to be cured is wrong in the system; whatever requires to be healed is occasioned externally by violence, and requires external applications. To remedy, in the sense of applying remedies, has a moral application; an omission, a deficiency, or a mischief, requires to be remedied.

Cure, Remedy. A cure is performed by the application of a remedy.

Curious, Inquisitive, Prying. Curious respects all objects that can gratify the inclination, taste, or understanding; inquisitive respects such things only as satisfy the understanding; a prying temper is unceasing in its endeavors to get acquainted with the secrets of others.

Cursory, Hasty, Slight, Desultory. An author will take a cursory view of those points which are not necessarily connected with his subject; an author who takes a hasty view of a subject will mislead by his errors; he who takes a slight view will disappoint by the shallowness of his information. Between cursory and desultory there is the same difference as between running and leaping: we run in a line, but we leap from one part to another; so remarks that are cursory have more or less connection, but remarks that are desultory are without any coherence.

Custom, Habit. Custom is a frequent repetition of the same act; habit the effect of such repetition. Custom supposes an act of the will; habit implies an involuntary movement. A custom is followed; a habit is acquired.

Custom, Fashion, Manner, Practice. Custom is authoritative; it stands in the place of law, and regulates the conduct of men in the most important concerns of life. Fashion is arbitrary and capricious; it decides in matters of trifling import. Manners are rational; they are the expressions of moral feelings. Practice signifies actual doing or the thing done: it may be the practice of a person to do acts of charity, as the occasion requires; but, when he uniformly does a particular act of charity at any given period of the year, it is properly denominated his custom.

Daily, Diurnal. Daily is the colloquial term which is applicable to whatever passes in the daytime; diurnal is the scientific term, which applies to what passes within or belongs to the astronomical day.

Danger, Peril, Hazard. Danger signifies the chance of a loss; peril signifies either to go over or to perish; as, a critical situation, a rude trial, which may terminate in one's ruin. In all walks of life we are in danger; the explorer undergoes perils. Hazard respects the possibility of either good or evil. When we run the hazard of a battle, we may either win or lose.

Daring, Bold. He who is daring provokes resistance and courts danger; but the bold man is contented to overcome the resistance that is offered to him. A man may be bold in the use of words only; he must be daring in actions: he is bold in the defense of truth; he is daring in military enterprise.

Dark, Obscure, Dim, Mysterious. Dark is opposed to light; obscure to bright. What is dark is altogether hidden; what is obscure is not to be seen distinctly, or without an effort. Dim expresses a degree of darkness, but it is employed more in relation to the person seeing than to the object seen. Any intricate affair, which involves the characters and conduct of men, may be mysterious.

Deadly, Mortal, Fatal. Deadly is applied to what is productive of death; mortal to what terminates in or is liable to death; fatal applies not only to death, but to everything which may be of serious consequence.

To Debate, Deliberate. These terms equally mark the acts of pausing or withholding the decision, whether applicable to one or many. To debate (v. to controvert, dispute) supposes always a contrariety of opinion: to deliberate (v. to consult, deliberate) supposes simply the weighing or estimating the value of the opinion that is offered.

Debility, Infirmity, Imbecility. Debility is constitutional, or otherwise; imbecility is always constitutional; infirmity is accidental, and results from sickness or a decay of the frame. Debility may be either general or local; infirmity is always local; imbecility always general.

Debt, Due. Debt is commonly applied to that which is owing from the person spoken of; due is always applied to that which is owing to the person: to pay one's debts, and receive one's due.

Decay, Decline, Consumption. What is decayed is fallen or gone; what declines leads toward a fall, or is going. Consumption (v. to consume) implies a rapid decay.

Deceit, Deception. A person is said to be guilty of deceit who has sought to deceive another for his own purposes; but deceptions may be practiced in a diversity of ways, and from a diversity of motives. Deceitful and deceptive are employed with this distinction: a person is said to be deceitful, and a thing deceptive.

Deceit, Fraud, Guile. Deceit is practiced only in private transactions; fraud is practiced toward bodies as well as individuals, in public as well as in private. A child practices deceit toward its parents; frauds are practiced upon government. Guile marks a strong degree of moral turpitude in the individual; guileless is applied to characters which are the most diametrically opposed to, and at the greatest possible distance from, that which is false.

Deceiver, Impostor. A deceiver is any one who practices any sort of deception; but an impostor is a deceiver who studiously deceives by putting on a false appearance.

Decency, Decorum. Decency respects a man's conduct; decorum, his behavior.

Decided, Determined, Resolute. A man who is decided remains in no doubt; he who is determined is uninfluenced by the doubts or questions of others; he who is resolute (v. to determine, resolve) is uninfluenced by the consequences of his actions.

Decided, Decisive. Decided marks that which is actually decided; decisive that which appertains to decision. A person's aversion or attachment is decided; a sentence, a judgment, or a victory, is decisive.

Decision, Judgment, Sentence. A decision has no respect to the agent; it may be said of one or many; it may be the decision of the court, of the nation, of the public, of a particular body of men, or of a private individual. But a judgment is given in a public court, or among private individuals. A sentence is passed in a court of law, or at the bar of the public.

To Declaim, Inveigh. Declaim signifies literally to cry aloud in a set form of words; inveigh involves injurious censure or reproach. Public men and public measures are subjects for the declaimer; private individuals afford subjects for inveighing against.

To Declare, Publish, Proclaim. In declaring, the leading idea is that of speaking out that which passes in the mind; in publishing, the leading idea is that of making public or common; in proclaiming, the leading idea is that of crying aloud. Facts and opinions are declared; events and circumstances are published; the measures of government are proclaimed.

Decree, Edict, Proclamation. A decree is a more solemn and deliberative act than an edict; on the other hand, an edict is more authoritative than a decree. A decree is the decision of one or many; an edict speaks the will of an individual: councils and senates, as well as princes, make decrees; despotic rulers issue edicts. An edict is peculiar to a despotic government; a proclamation is common to a monarchical and aristocratic form of government.

To Dedicate, Devote, Consecrate, Hallow. There is something more solemn in the act of dedicating than in that of devoting; but less so than in that of consecrating. To dedicate and devote may be employed in

both temporal and spiritual matters; to consecrate and hallow only in the spiritual sense. We may dedicate or devote anything that is at our disposal to the service of some object; but the former is employed mostly in regard to superiors, and the latter to persons without distinction of rank. We dedicate a house to the service of God; we devote our time to the benefit of our friends, or to the relief of the poor. We may dedicate or devote ourselves to an object: the former always implies a solemn setting apart springing from a sense of duty; the latter an entire application of oneself from zeal and affection. To consecrate is to declare sacred by means of religious ceremony. The church is consecrated; particular days are hallowed.

Deduction, Abatement. Both these words imply a taking off from something. A person may make a deduction in an account for various reasons, but he makes an abatement in a demand when it is objected to as excessive.

To Deface, Disfigure, Deform. To deface is an act of destruction; it is the actual destruction of that which has before existed. To disfigure is either an act of destruction or an erroneous execution, which takes away the figure. To deform is altogether an imperfect execution, which renders the form what it should not be.

Defective, Deficient. Defective expresses the quality or property of having a defect; deficient is employed with regard to the thing itself that is wanting. A book may be defective, in consequence of some leaves being deficient. A deficiency is, therefore, often what constitutes a defect.

To Defend, Protect, Vindicate. A person may be defended in any particular case of actual danger or difficulty; he is protected from what may happen as well as what does happen. Defense respects the evil that threatens; protection involves the supply of necessities and the affording comforts. Vindicate respects a form of defense only in the moral sense of the word. Acts of importance are defended; those of trifling import are commonly vindicated.

Defendant, Defender. The defendant defends himself (v. to defend); the defender defends another.

Defender, Advocate, Pleader. A defender exerts himself in favor of one that wants support. An advocate signifies one who is called to speak in favor of another; he exerts himself in favor of any cause that offers. A pleader, from plea or excuse, signifies him who pleads in behalf of one who is accused or in distress.

Definite, Positive. Definite signifies that which is defined, or has the limits drawn or marked out; positive that which is placed or fixed in a particular manner. Definite is said of things as they present themselves or are presented to the mind, as a definite idea, a definite proposal. Positive is said of a person's temper of mind; a person is positive as to his opinions, or an assurance is positive which serves to make one positive.

Deity, Divinity. Deity signifies a divine person; divinity signifies the divine essence or power.

Dejection, Depression, Melancholy. Depression is but a degree of dejection. Slight circumstances may occasion a depression; distressing events occasion a dejection: the death of a near and dear relative may be expected to produce dejection in persons of the greatest equanimity. Melancholy is a disease which nothing but clear views of religion can possibly correct.

To Delegate, Depute — Delegate, Deputy. To delegate is applied to the power or the office which is given; depute to the person employed. Parents delegate their office to the instructor; persons are deputed to act for others. A delegate is the person commissioned, who is bound to act according to his commission; the deputy is the person deputed, who acts in the place of another, but may act according to his own discretion or otherwise, as circumstances require.

To Deliver, Rescue, Save. One may be delivered from any evil, whether great or small, and in any manner. To rescue is to deliver from a great impending danger or immediate evil, as to rescue from the hands of robbers, or from the jaws of a wild beast. To save signifies to keep from evil.

To Demand, Require. We demand that which is owing and ought to be given; we require that which we wish and expect to have done. The creditor makes a demand on the debtor; the master requires a certain portion of duty from his servant.

To Demur, Hesitate, Pause. We demur from doubt or difficulty; we hesitate from an undecided state of mind; we pause from circumstances. Demurring is a matter of prudence, it is always grounded on some reason; hesitating is rather a matter of feeling, and is oftener faulty than otherwise. When a request of a dubious nature is made of us, we hesitate in complying with it.

Demur, Doubt, Hesitation, Objection. Demurs often occur in matters of deliberation; doubt in regard to matters of fact; hesitation in matters of ordinary conduct; and objections in matters of common consideration. Artabanes made many demurs to the proposed invasion of Greece by Xerxes. Doubts have been suggested respecting the veracity of Herodotus as a historian. It is not proper to ask that which cannot be granted without hesitation. There are but few things which we either attempt to do or recommend to others that are not liable to some kind of an objection.

To Denote, Signify. Denote is employed with regard to things and their characters; signify with regard to the thoughts or movements. A letter or character may be made to denote any number, as words are made to signify the intentions and wishes of the person.

To Deny, Refuse. To deny respects matters of fact or knowledge; to refuse, matters of wish or request. We deny what immediately relates to ourselves; we refuse what relates to another.

To Deplore, Lament. Deplore is a much stronger expression than lament: the former calls forth tears from the bitterness of the heart; the latter excites a cry from the warmth of feeling. Deploring indicates despair; lamenting marks only pain or distress.

Deponent, Evidence, Witness. All these words are properly applied to judicial proceedings, where the deponent testifies generally to facts either in causes or otherwise. The evidence consists either of persons or things, which are brought before the court for the purpose of making a doubtful matter clear; the witness is always a person who bears witness to any fact for or against another.

Deposit, Pledge, Security. The term deposit has most regard to the confidence we place in another; pledge has most regard to the security we give for ourselves; security is a form of pledge. A security is whatever makes a person secure against a loss, and in the ordinary acceptation consists of any instrument or written document which legally binds a person.

Depravity, Depravation, Corruption. All these terms are applied to objects which are contrary to the order of Providence. But the term depravity characterizes the thing as it is; the terms depravation and corruption designate the making or causing it to be so. Depravity, therefore, excludes the idea of any cause; depravation always carries us to the cause or external agency: hence we may speak of depravity as natural, but we speak of depravation as the result of circumstances. There is a depravity in man which nothing but the grace of God can correct. The introduction of obscenity on the stage tends greatly to the depravation of morals. Bad company tends to the corruption of a young man's morals.

Depth, Profundity. Depth is indefinite in its signification; and profundity is a positive and considerable degree of depth. Moreover, the word depth is applied to objects in general; profundity is confined in its application to moral objects.

To Derive, Trace, Deduce. The act of deriving is immediate and direct; that of tracing a gradual process; that of deducing a ratiocinative process. We discover causes and sources by derivation; we discover the course, progress, and commencement of things by tracing; we discover the grounds and reasons of things by deduction.

Desert, Merit, Worth. Desert is taken for that which is good or bad; merit for that which is good only. We deserve praise or blame; we merit a reward. Worth is that which is absolutely valuable; it must be sought for on its own account.

To Design, Purpose, Intend, Mean. To design is to plan something studied and methodical, it requires reflection; to purpose is to propose or set before the mind; to intend signifies the act to which the mind bends or inclines. We purpose seriously; we intend vaguely; we set about that which we purpose; we may delay that which we have only intended. Mean, which is a term altogether of colloquial use, differs but little from intend, except that it is used for matters requiring but little thought.

To Desire, Wish, Long for, Hanker after, Covet. To desire is imperious; it demands gratification: to wish is less vehement; it consists of a strong inclination. To long for expresses strong and continued desire; to hanker after is to desire that which is set out of one's reach; to covet is to desire that which belongs to another, or what it is in his power to grant.

To Desist, Leave Off. To desist is voluntary or involuntary; to leave off is voluntary. We are frequently obliged to desist; but we leave off at our option. He who annoys another must be made to desist; he who does not wish to offend will leave off when requested.

Despair, Desperation, Despondency. Despair is

a state of mind produced by the view of external circumstances; desperation and despondency may be the fruit of the imagination: the former, therefore, always rests on some ground; the latter are sometimes ideal. Desperation marks a state of vehement and impatient feeling; despondency is a disease of the mind, which nothing but a firm trust in Providence can obviate.

Destiny, Fate, Lot, Doom. Destiny is used in regard to one's station and walk in life; fate in regard to what one suffers; lot in regard to what one gets or possesses; and doom is the final destiny which terminates unhappily, and depends mostly upon the will of another. Destiny is marked out; fate is fixed; a lot is assigned; a doom is passed.

Destiny, Destination. Destiny is the point or line marked out in the walk of life; destination is the place fixed upon in particular: as every man has his peculiar destiny, so every traveler has his particular destination. Destiny is altogether set above human control; destination is, however, the specific act of an individual, either for himself or another.

To Destroy, Consume, Waste. To destroy is to reduce to nothing that which has been artificially raised or formed as to destroy a house: to consume is to use up, as to consume food, or merchandise; to waste is to expend unnecessarily, extravagantly, to spend to no purpose, as to waste time or property.

Destruction, Ruin. Destruction is an act of immediate violence; ruin is a gradual process. A thing is destroyed by some external action upon it; a thing falls to ruin of itself.

To Detect, Discover. Detect is always taken in a bad sense; discover in an indifferent sense. A person is detected in what he wishes to conceal; a person or a thing is discovered that has been previously unknown or unperceived.

To Determine, Resolve. We determine how or what we shall do; this requires examination and choice. We resolve that we will do what we have determined upon; this requires a firm spirit.

To Deviate, Wander, Swerve, Stray. Deviate always supposes a direct path which is departed from; wander includes no such idea. The act of deviating is commonly faulty; that of wandering is indifferent. To swerve is to deviate from that which one holds right; to stray is to wander in the same bad sense. Men swerve from their duty to consult their interest; the young stray from the path of rectitude to seek that of pleasure.

To Devise, Bequeath. In the technical sense, to devise is to give lands by a will duly attested according to law; to bequeath is to give personalty after one's death by a less formal instrument.

To Dictate, Prescribe. Dictate, from the Latin "dictatus" and "dictum" (a word), literally signifies to make a word for another; and prescribe signifies to write down for another (v. to appoint): thus the former of these terms is used technically for a principal who gets his secretary to write down his words as he utters them; and the latter for a physician who writes down for his patient what he wishes him to take as a remedy. They are used figuratively for a sort of counsel given by a superior; to dictate is, however, a greater exercise of authority than to prescribe. He who dictates speaks with an adventitious authority; he who prescribes has the sanction of reason.

Dictate, Suggestion. Dictate signifies the thing uttered, and has an imperative sense; suggestion signifies the thing intimated, and conveys the idea of its being proposed secretly or in a gentle manner. These terms are both applied, with this distinction, to acts of the mind. When conscience, reason, or passion present anything forcibly to the mind, it is called a dictate; when anything enters the mind in a casual manner, it is called a suggestion.

Dictionary, Encyclopædia. The definition of words, with their various changes, modifications, uses, acceptations, and applications, are the proper subjects of a dictionary; the nature and properties of things, with their construction, uses, powers, etc., are the proper subjects of an encyclopædia.

Dictionary, Lexicon, Vocabulary, Glossary, Nomenclature. Lexicon is a species of dictionary appropriately applied to the dead languages. Dictionary is applied to the words of a modern language. A vocabulary is a partial kind of dictionary, which may comprehend a simple list of words, with or without explanation, arranged in order or otherwise. A glossary is an explanatory vocabulary, which commonly serves to explain the obsolete terms employed in any old author. A nomenclature is literally a list of names, and in particular a reference to proper names.

To Die, Expire. Die designates in general the extinction of being. Expire designates the last action of life in certain objects. Plants and trees die. The flame of a lamp expires.

Difference, Variety, Diversity, Medley. Difference and variety seem to lie in the things themselves; diversity and medley are created either by accident or design: a difference may lie in two objects only; a variety cannot exist without an assemblage: a difference is discovered by means of a comparison which the mind forms of objects to prevent confusion; variety strikes on the mind, and pleases the imagination with many agreeable images. Diversity arises from an assemblage of objects naturally contrasted; a medley is produced by an assemblage of objects so ill suited as to produce a ludicrous effect.

Difference, Distinction. Difference (v. difference) lies in the thing; distinction is the act of the person: the former is, therefore, to the latter as the cause to the effect. The distinction rests on the difference: those are equally bad logicians who make a distinction without a difference, or who make no distinction where there is a difference. A difference is either external or internal; a distinction is always external: the former lies in the thing, the latter is designedly made. We have differences in character, and distinction in dress.

Difference, Dispute, Altercation, Quarrel. A difference, as distinguished from the others, is generally of a less serious and personal kind; a dispute consists not only of angry words, but of much ill blood and unkind offices; an altercation is a wordy dispute, in which difference of opinion is drawn out into a multitude of words; a quarrel is the most serious of all differences, which leads to every manner of violence.

Different, Distinct, Separate. Different is opposed to similar; there is no difference between objects absolutely alike. Distinct is opposed to identical; there can be no distinction where there is only one and the same being. Separate is opposed to things united; there can be no separation between objects that coalesce or adhere.

Different, Unlike. Different is positive, unlike is negative: we look at what is different and draw a comparison; but that which is unlike needs no comparison. A thing is said to be different from every other thing, or unlike anything seen before.

Difficulties, Embarrassments, Troubles. These terms are all applicable to a person's concerns in life. Difficulties may relate to the obstacles that arise in conducting a business. Embarrassments may relate to the confusion attending a state of debt. Troubles may relate to the pain which is the natural consequence of not fulfilling engagements or answering demands.

Difficulty, Obstacle, Impediment. Difficulty signifies not easy to be done; obstacle signifies the thing that stands in the way between a person and the object he has in view; impediment signifies something that entangles the feet. A difficulty interferes with the completion of any work; an obstacle interferes with the attainment of any end; an impediment interrupts the progress, and prevents the execution of one's wishes.

Diffuse, Prolix. Both mark defects of style opposed to brevity. The diffuse is properly opposed to the precise; the prolix to the concise or laconic. A diffuse writer is fond of amplification, the prolix writer is fond of circumlocution, minute details, and trifling particulars.

To Digress, Deviate. Both in the original and the accepted sense, these words express going out of the ordinary course. We digress only in a narrative, whether written or spoken; we deviate in actions as well as in words, in our conduct as well as in writings.

To Dilate, Expand. A bladder dilates on the admission of air, or the heart dilates with joy. Knowledge expands the mind, or a person's views expand with circumstances.

Diligent, Expeditious, Prompt. Diligent marks the interest one takes in doing something; he is diligent who loses no time, who keeps close to the work from inclination. Expeditious marks the desire one has to complete the thing begun. Prompt marks one's desire to get ready; he is prompt who sets about a thing without delay, so as to make it ready.

Direction, Address, Superscription. A direction may serve to direct to places as well as to persons. An address is never used but in direct application to the person. A superscription has more respect to the thing than to the person. A direction is given to such as go in search of persons and places. An address is put either on a card, a letter, or in a book. A superscription is placed at the head of other writings, or over tombs and pillars.

Direction, Order. Direction contains most of instruction in it; order most of authority. Directions should be followed; orders obeyed.

Disaffection, Disloyalty. Disaffection may be said

with regard to any form of government; disloyalty with regard to monarchy, obligations, or vows. Many were disaffected to the usurpation of Oliver Cromwell, because they would not be disloyal to their king.

To Disappear, Vanish. A thing disappears either gradually or suddenly; it vanishes of a sudden; it disappears in the ordinary course of things; it vanishes by an unusual effort, a supernatural or a magic power.

To Disapprove, Dislike. Disapprove is an act of the judgment; dislike is an act of the will or of the affection. To approve or disapprove is peculiarly the part of a superior, or one who determines the conduct of others; to dislike is altogether a personal act, in which the feelings of the individual are consulted.

Disbelief, Unbelief. Disbelief properly implies the believing that a thing is not, or refusing to believe that it is. Unbelief expresses properly a believing the contrary of what one has believed before: disbelief is most applicable to the ordinary events of life; unbelief to serious matters of opinion.

To Disclaim, Disown. To disclaim is to throw off a claim; to disown is not to admit as one's own.

Discord, Strife. Discord consists mostly in the feeling; strife consists mostly in the outward action. Discord evinces itself in various ways, by looks, words, or actions; strife displays itself in words or acts of violence.

To Discover, Manifest, Declare. We discover by any means direct or indirect; we manifest by unquestionable marks; we declare by express words: talents and dispositions discover themselves; particular feelings and sentiments manifest themselves; facts, opinions, and sentiments are declared.

Discredit, Disgrace, Reproach, Scandal. Discredit interferes with a man's respectability; disgrace marks him out as an object of unfavorable distinction; reproach makes him a subject of adverse criticism; scandal makes him an object of offense or even of abhorrence.

To Discuss, Examine. Discuss signifies to shake asunder or to separate thoroughly so as to see the whole composition; examine is used where the judgment holds the balance. Discussion is altogether carried on by verbal and personal communication; examination proceeds by reading, reflection, and observation.

Disgust, Loathing, Nausea. Disgust is less than loathing, and loathing than nausea. When applied to sensible objects we are disgusted with dirt; we loathe the smell of food if we have a sickly appetite; we nauseate medicine. When applied metaphorically, we are disgusted with affectation; we loathe the endearments of those who are offensive; we nauseate all the enjoyments of life, after having made an intemperate use of them, and discovered their inanity.

Dishonest, Knavish. What is dishonest violates the established laws of man; what is knavish supposes peculiar art and design in the accomplishment.

Dishonor, Disgrace, Shame. Dishonor deprives a person of those outward marks of honor which men look for according to their rank and station; disgrace deprives a man of the favor and the kindness which he has heretofore received from others. Shame is occasioned by direct moral turpitude, or by that of which one ought to be ashamed.

To Disjoint, Dismember. A limb of the body may be disjointed if it be so put out of the joint that it cannot act; but the body itself is dismembered when the different limbs or parts are separated from each other.

Dislike, Disinclination. Dislike applies to what one has or does; disinclination only to what one does.

To Dismay, Daunt, Appall. We are dismayed by alarming circumstances; we are daunted by terrifying circumstances; we are appalled by horrid circumstances.

Disorder, Disease, Distemper, Malady. In a general sense disorder is altogether indefinite; but in its restricted sense it expresses less than all the rest: it is the mere commencement of a disease. Disease comprehends every serious and permanent disorder in the animal economy, and is, therefore, of universal application. The disorder is slight, partial, and transitory; the disease is deep-rooted and permanent. The disorder may lie in the extremities; the disease lies in the humors and the vital parts. Distemper is used for such particularly as throw the animal frame most completely out of its temper or course, and is consequently applied properly to virulent disorders, such as the small-pox. Malady has less of a technical sense than the other terms; it refers more to the suffering than to the state of the body.

Disparity, Inequality. Disparity applies to two objects which should meet or stand in coalition with each other; inequality is applicable to those that are compared with each other. The disparity of age, situation, and circumstances is to be considered with regard to persons entering into a matrimonial connection: the inequality in the portion of labor which is to be performed by two persons is a ground for the inequality of their recompense.

Dispassionate, Cool. Dispassionate is taken negatively, it marks merely the absence of passion; cool is taken positively, it marks an entire freedom from passion. When we meet with an angry disputant it is necessary to be dispassionate, in order to avoid quarrels; in the moment of danger our safety often depends upon our coolness.

To Dispel, Disperse. Dispel is a more forcible action than disperse: we destroy the existence of a thing by dispelling it; we destroy merely the junction by dispersing it.

To Dispense, Distribute. Dispense is an indiscriminate action; distribute is a particularizing action: we dispense to all; we distribute to each individually.

Displeasure, Anger, Disapprobation. Displeasure is always a softened and gentle feeling; anger is always a harsh feeling, and sometimes rises to vehemence and madness. Displeasure is always produced by some adequate cause, real or supposed; but anger may be provoked by every or any cause, according to the temper of the individual. Displeasure is an act of the will, it is an angry sentiment; disapprobation is an act of the judgment, it is an opposite opinion.

Disposal, Disposition. Disposal is a personal act; it depends upon the will of the individual: disposition is an act of the judgment; it depends upon the nature of the things. The removal of a thing from oneself is involved in a disposal; the good order of the things is comprehended in their disposition.

To Dispose, Arrange, Digest. We may dispose ordinary matters by simply assigning a place to each; in this manner trees are disposed in a row. We arrange and digest by an intellectual effort. We arrange by putting those together which ought to go together; and we digest by both separating that which is dissimilar, and bringing together that which is similar: in this manner books are arranged in a library according to their size or their subject; the materials for a literary production are digested.

Disposition, Temper. Disposition is permanent and settled; temper may be transitory and fluctuating. The disposition comprehends the springs and motives of actions; the temper influences the action of the moment: it is possible and not infrequent to have a good disposition with a bad temper, and vice versa.

Disposition, Inclination. We may always expect a man to do that which he is disposed to do; but we cannot always calculate upon his executing that to which he is merely inclined. We indulge a disposition; we yield to an inclination. The disposition comprehends the whole state of the mind at the time; an inclination is particular, referring always to a particular object.

To Disregard, Neglect, Slight. We disregard the warnings, the words, or opinions of others; we neglect their injunctions or their precepts. To disregard results from the settled purpose of the mind; to neglect from a temporary forgetfulness or oversight. Slight is altogether an intentional act toward an individual.

Dissension, Contention, Discord. A collision of opinions produces dissension; a collision of interests produces contention; a collision of humors produces discord.

Distant, Far, Remote. Distant is used to designate great space; far only that which is ordinary. Astronomers estimate that the sun is ninety-four millions of miles distant from the earth; a person lives not very far off, or a person is far from the spot. Remote expresses the relative idea of having disappeared from sight.

To Distinguish, Discriminate. To discriminate is in fact to distinguish specifically; hence we speak of a distinction as true or false, but of a discrimination as nice. We distinguish by means of the senses as well as by the understanding; we discriminate by the understanding only.

Distinguished, Conspicuous, Noted, Eminent, Illustrious. A thing is distinguished in proportion as it is distinct or separate from others; it is conspicuous in proportion as it is easily seen; it is noted in proportion as it is widely known. Eminent applies to those things which set a man high in the circle of his acquaintances; illustrious applies to that which makes him shine before the world.

Distress, Anxiety, Anguish, Agony. Distress is the pain felt when in a strait from which we see no means of extricating ourselves; anxiety is that pain which one feels on the prospect of an evil. Distress always depends upon some outward cause; anxiety often lies in the imagination; anguish arises from the reflection on the evil that is past; agony springs from witnessing or suffering intense mental or bodily pain.

To Distress, Harass, Perplex. A person is distressed either in his outward circumstances or his feelings; he is harassed mentally or corporeally; he is perplexed in his understanding, more than in his feelings. A deprivation distresses; provocations and hostile measures harass; stratagems and ambiguous measures perplex.

Distrust, Suspicion, Diffidence. Distrust is said either of ourselves or of others; suspicion is said only of others; diffidence only of ourselves. To be distrustful of a person is to impute no good to him; to be suspicious of a person is to impute positive evil to him. As regards oneself, a person may distrust his own powers for the execution of a particular office, or have a distrust of himself in company; he has a general diffidence, or he is naturally diffident.

To Disturb, Interrupt. We may be disturbed either inwardly or outwardly; we are interrupted only outwardly: our minds may be disturbed by disquieting reflections, or we may be disturbed in our rest or in our business by unseemly noises.

To Divide, Separate, Part. That is divided which has been or has been conceived to be a whole; that is separated which might be joined. An army may be divided into two or three divisions or portions: the divisions are frequently separated in their march. To part is to divide or separate into distinct portions or pieces.

To Divide, Distribute, Share. We divide the thing; we distribute to the person. To share is to make into parts, the same as divide, and it is to give those parts to some persons, the same as distribute: but the person who shares takes a part himself; he who distributes gives it all to others.

Doctrine, Precept, Principle. A doctrine requires a teacher; a precept requires a superior with authority; a principle requires only a maintainer or a holder. A doctrine is always framed by some one; a precept is enjoined or laid down by some one; a principle lies in the thing itself. A doctrine is composed of principles; a precept rests upon principles or doctrines.

Doctrine, Dogma, Tenet. A doctrine rests on the authority of the individual by whom it is framed; a dogma on the authority of the body by whom it is maintained; a tenet rests on its own intrinsic merits. A tenet is a species of principles maintained in matters of opinion by persons in general.

To Doubt, Question. Doubt lies altogether in the mind; it is a less active feeling than question: by the former we merely suspend decision; by the latter we actually demand proofs in order to assist us in deciding. We may doubt in silence; we cannot question without expressing it, directly or indirectly: we doubt the truth of a position; we question the veracity of an author.

Doubt, Suspense. Doubt respects that which we should believe; suspense that which we wish to know or ascertain. We are in doubt for the want of evidence; we are in suspense for the want of certainty. Doubt interrupts our progress in the attainment of truth; suspense impedes us in the attainment of our objects.

To Draw, Drag, Haul, or Hale, Pull, Pluck, Tug. Draw expresses here the idea common to the first three terms, namely, of putting a body in motion from behind oneself or toward oneself. To drag is to draw a thing with violence, or to draw that which makes resistance; to haul is to drag it with still greater violence. To pull signifies only an effort to draw without the idea of motion; horses pull very long sometimes before they can draw a heavily laden cart uphill. To pluck is to pull with a sudden twitch in order to separate; to tug is to pull with violence.

Dream, Reverie. Dreams and reveries are alike opposed to the reality, and have their origin in the imagination; but the former commonly passes in sleep, and the latter when awake.

Dull, Gloomy, Sad, Dismal. When applied to natural objects, dull and gloomy denote the want of necessary light or life: in this sense metals are more or less dull according as they are stained with dirt: the weather is dull when the sun is obscured by clouds, and gloomy when the atmosphere is darkened by fogs or thick clouds. Dismal denotes not merely the want of that which is necessary, but also the presence of that which is repugnant to the senses; as, a countenance or a sound may be dismal. Sad is not applied so much to sensible as moral objects: the loss of a parent is sad.

Durable, Lasting, Permanent. Durable is naturally said of material substances; and lasting of those which are spiritual, although in ordinary discourse sometimes they exchange offices. Permanent applies more to the affairs of men. That which perishes quickly is not durable; that which ceases quickly is not lasting; that which is only for a time is not permanent.

Durable, Constant. What is durable is so from its inherent property; what is constant is so by the power of the mind. No durable connections can be formed where avarice or lust prevails.

Duty, Obligation. Duty has to do with the conscience, and arises from the natural relations of society; an obligation arises from circumstances, and is a species of duty. He who guarantees to pay a sum of money contracts an obligation. He who marries contracts new duties.

Ease, Quiet, Rest, Repose. Ease and quiet respect action on the body; rest and repose respect the action of the body. Ease denotes an exemption from any painful agency in general; quiet denotes an exemption from that in particular which noise, disturbance, or the violence of others may cause; rest simply denotes the cessation of motion; repose is that form of rest which is agreeable after labor.

Easy, Ready. Easy marks the freedom of being done; ready the disposition or willingness to do. The former refers mostly to the thing or the manner, the latter to the person.

To Eclipse, Obscure. Heavenly bodies are eclipsed by the intervention of other bodies between them and the beholder; things are in general obscured which are in any way rendered less striking or visible. So, figuratively, real merit is eclipsed by the intervention of superior merit; it is often obscured by an ungracious exterior in the possessor, or by his unfortunate circumstances.

Education, Instruction, Breeding. Instruction and breeding are to education as parts to a whole. Instruction respects the communication of knowledge, and breeding respects the manners or outward conduct; education comprehends not only both these, but the formation of the mind, the regulation of the heart, and the establishment of the principles. Good instruction makes one wiser; good breeding makes one more polished and agreeable; good education makes one really good.

To Effect, Produce, Perform. To produce signifies to bring something forth or into existence; to perform to do something to the end. To effect is to produce a result by performing. Whatever is effected is the consequence of a specific design; it always requires, therefore, a rational agent to effect. What is produced may follow incidentally, or arise from the action of an irrational agent or an inanimate object; what is performed is done by specific efforts.

Effusion, Ejaculation. An effusion commonly flows from a heated imagination uncorrected by the judgment; it is, therefore, in general not only incoherent but extravagant and senseless. An ejaculation is produced by the warmth of the moment, but never without reference to some particular circumstance. Enthusiasts are full of extravagant effusions; contrite sinners will often express their penitence in pious ejaculations.

Elderly, Aged, Old. The elderly man has passed the meridian of life; the aged man is fast approaching the term of our existence; the old man has already reached this term, or has exceeded it.

Eligible, Preferable. What is eligible is desirable in itself, what is preferable is more desirable than another.

Embarrassments, Perplexities, Entanglements. Embarrassments depend altogether on ourselves; the want of prudence and presence of mind is the common cause. Perplexities depend on extraneous circumstances as well as on ourselves; extensive dealings with others are mostly attended with perplexities. Entanglements arise mostly from the evil designs of others.

Emissary, Spy. Both these words designate a person sent out by a body on some public concern among their enemies; but they differ in their office according to the etymology of the words. The emissary is sent so as to mix with the people to whom he goes, to be in all places, and to associate with every one individually as may serve his purpose. The spy takes his station wherever he can best perceive what is passing; he keeps himself at a distance from all but such as may particularly aid him in the object of his search. The emissary is generally employed by those who have some illegitimate object to pursue; spies, on the other hand, are employed by all regular governments in a time of warfare.

Empire, Reign, Dominion. Empire signifies command, or the power exercised in commanding; it properly refers to the country or the people commanded: reign signifies the act of reigning; it refers to the individual who reigns. Dominion may be applied in the proper sense to the power which man exercises over the brutes or inanimate objects, and figuratively to the power of the passions.

To Employ, Use. We employ whatever we take into our service, or make subservient to our convenience for a time; we use whatever we entirely devote to our purpose.

Encomium, Eulogy, Panegyric. We bestow encomiums upon any work of art or production of genius, without reference to the performer; we bestow eulogies on the exploits of a hero, who is of another age or country; but we write panegyrics either in a direct address, or in direct reference to the person who is panegyrized. The encomium is produced by merit, real or supposed; the eulogy may spring from admiration of the person eulogized; the panegyric may be mere flattery, resulting from servile dependence.

To Encourage, Embolden. To encourage is to give courage, and to embolden is to make bold; the former impels to action in general, the latter to that which is more difficult or dangerous.

To End, Terminate, Close. To end is indefinite in its meaning and general in its application. Terminate and close are modes of ending: to terminate is to end finally; to close to end gradually. Whatever is begun will end, and it may end in any way; but what terminates is that which has been designedly brought to an end. A string, a line, a verse, etc., may end; but a road is said properly to terminate.

To Endeavor, Aim, Strive, Struggle. An endeavor springs from a sense of duty; we endeavor to do that which is right, and avoid that which is wrong. Aiming is the fruit of an aspiring temper; the object aimed at is always something superior either in reality or imagination. Striving is the consequence of an ardent desire; the thing striven for is always conceived to be of importance. Struggling is the effect of necessity; it is proportioned to the difficulty of attainment; the thing struggled for is indispensably necessary.

Endeavor, Effort, Exertion. Endeavor expresses little more than this common idea, being a term of general import. Effort and exertion are particular modes of endeavor, the former being a special strong endeavor, the latter a continued strong endeavor.

Energy, Force, Vigor. With energy is connected the idea of activity; with force that of capability; with vigor that of health. Energy lies only in the mind; force and vigor are the property of either body or mind.

To Enlarge, Increase, Extend. Enlarge is applied to dimension and extent; increase is applicable to quantity, signifying to become greater in size by the junction of other matter; extend signifies to make greater in space. We speak of enlarging a house, a room, premises, or boundaries; of increasing an army, or property, capital, expense, etc.; of extending the boundaries of an empire.

Enmity, Animosity, Hostility. Enmity lies in the heart; it is deep and malignant. Animosity, from animus, a spirit, lies in the passions; it is fierce and vindictive. Hostility, from hostis, a political enemy, lies in the action; it is mischievous and destructive. Enmity is altogether personal; hostility respects public or private measures; enmity often lies concealed in the heart, and does not betray itself by any open act of hostility.

Enormous, Prodigious, Monstrous. The enormous contradicts our rules of estimating and calculating; the prodigious raises our minds beyond their ordinary standard of thinking; the monstrous contradicts nature and the course of things. What is enormous excites our surprise or amazement; what is prodigious excites our astonishment; what is monstrous does violence to our senses and understanding.

Enough, Sufficient. He has enough whose desires are satisfied; he has sufficient whose wants are supplied. Enough is in German genug, which comes from genügen, to satisfy. Sufficient, in Latin sufficiens, participle of sufficio, compounded of sub and facio, signifies made or suited to the purpose.

Enterprising, Adventurous. The enterprising character conceives great projects, and pursues objects that are difficult to be obtained; the adventurous character is contented with seeking that which is new, and placing himself in dangerous and unusual situations.

Epithet, Adjective. Epithet is the technical term of the rhetorician; adjective that of the grammarian. The same word is an epithet as it qualifies the sense; it is an adjective as it is a part of speech. Thus, in the phrase, "Alexander the Great," great is an epithet, inasmuch as it designates Alexander in distinction from all other persons; it is an adjective as it expresses a quality in distinction from the noun, Alexander, which denotes a thing.

Equal, Even, Equable, Like, or Alike, Uniform. Equal is said of degree, quantity, number, and dimensions, as equal in years; even is said of the surface and position of bodies; a board is made even with another board. Like is said of accidental qualities in things, as alike in color or in feature; uniform is said of things only as to their fitness to correspond; those which are unlike in color, shape, or make, are not uniform, and cannot be made to match as pairs. Equable is used only in the moral acceptation, in which all the others are likewise employed.

Error, Mistake, Blunder. Error in its universal sense is the general term, since every deviation from what is right in rational agents is termed error. Into whatever we attempt to do or think error will be sure to creep. The other terms designate modes of error, which refer mostly to the common concerns of life: mistake is an error of choice; blunder an error of action.

Error, Fault. Error respects the act; fault respects the agent: an error may lie in the judgment, or in the conduct; but a fault lies in the will or the intention.

Eruption, Explosion. Eruption is the coming into view, by a sudden bursting; explosion signifies bursting out with a noise: hence of flames there will be properly an eruption, but of gunpowder an explosion.

To Estimate, Compute, Rate. To estimate is to obtain the aggregate sum in one's mind, either by an immediate or a progressive act; to compute is to obtain the sum by the gradual process of putting together items; to rate is to fix the relative value in one's mind by deduction and comparison. A builder estimates the expense of building a house on a given plan; a proprietor of houses computes the probable diminution in the value of his property in consequence of wear and tear; the surveyor rates the present value of lands or houses.

Eternal, Endless, Everlasting. The eternal is set above time; the endless lies within time. That is properly eternal which has neither beginning nor end; that is endless which has a beginning, but no end; that which is everlasting has neither interruption nor cessation.

To Evade, Equivocate, Prevaricate. We evade by artfully turning the subject or calling off the attention of the inquirer; we equivocate by the use of expressions of double interpretation; we prevaricate by the use of loose and indefinite expressions. We avoid giving satisfaction by evading; we give a false satisfaction by equivocating; we give dissatisfaction by prevaricating.

Event, Incident, Accident, Adventure, Occurrence. These terms are expressive of what passes in the world, which is the sole signification of the term event; while to that of the other terms are annexed some accessory ideas. An incident is a personal event; an accident an event which happens by the way; an adventure an extraordinary event; an occurrence an ordinary or domestic event. Event, in its ordinary and limited acceptation, excludes the idea of chance; accident excludes that of design; incident, adventure, and occurrence are applicable in both cases.

To Exact, Extort. To exact is to demand peremptorily; it is commonly an act of injustice: to extort is to get with violence; it is an act of tyranny.

Exact, Nice, Particular, Punctual. To be exact is to arrive at perfection; to be nice is to be free from faults; to be particular is to be nice in certain particulars; to be punctual is to be exact in certain points. We are exact in our conduct or in what we do; nice and particular in our mode of doing it; punctual as to the time and the season for doing it.

Example, Pattern, Ensample. The example must be followed generally; the pattern must be followed particularly, not only as to what, but how a thing is to be done: the former serves as a guide to the judgment; the latter to guide the actions. The ensample is a form of example, the word being employed only in the solemn style.

Example, Instance. The example is set forth by way of illustration or instruction; the instance is adduced by way of evidence or proof.

To Excite, Incite, Provoke. To excite is said more particularly of the inward feelings; incite is said of the external actions; provoke is said of both. A person's passions are excited; he is incited by any particular passion to a course of conduct; a particular feeling is provoked, or one is provoked to a particular step by some feeling.

Excursion, Ramble, Tour, Trip, Jaunt. Excursion signifies going out of one's course; a ramble (from roam) is a going without any course or regular path; a tour, from the word turn or return, is a circuitous course; a trip, meaning a quick, light step, is properly a pedestrian excursion or tour, or any journey of short duration; those who have no better means of spending their time make jaunts.

To Excuse, Pardon. We excuse a person by exempting him from blame; we pardon by giving up the punishment of the offense one has committed. We excuse a small fault; we pardon a great fault; we excuse that which personally affects ourselves; we pardon that which offends against morals.

To Execute, Fulfill, Perform. To execute is to bring about an end; it involves active measures, and is peculiarly applicable to that which is extraordinary, or to that which requires particular spirit and talents. Schemes of ambition are executed. To fulfill is to satisfy a moral obligation. We fulfill the duties of citizens. To perform is to carry through by simple action or labor; it is more particularly applicable to the ordinary and regular business of life. We perform a work or a task.

To Exercise, Practice. We exercise in that where the powers are called forth; we practice in that where frequency and habitude of action are requisite.

Exigency, Emergency. The exigency is more common, but less pressing; the emergency is imperious when it comes, but comes less frequently. A prudent traveler will never carry more money with him than what will supply the exigencies of his journey; in case of an emergency he will borrow of his friends rather than risk his property.

To Exonerate, Exculpate. The first is the act of another; the second is one's own act. We exonerate him upon whom a charge has lain, or who has the load of guilt; we exculpate ourselves when there is any danger of being blamed: circumstances may sometimes tend to exonerate; the explanation of some person is requisite to exculpate.

Expediency, Fitness. The expediency of a thing depends altogether upon the outward circumstances; the fitness is determined by a moral rule.

To Explain, Expound, Interpret. Single words or sentences are explained; a whole work, or considerable parts of it, is expounded; the sense of any writing or symbolical sign is interpreted.

Expedient, Resource. The expedient is an artificial means; the resource is a natural means. A cunning man is fruitful in expedients; a fortunate man abounds in resources.

To Explain, Illustrate, Elucidate. To explain is simply to render intelligible; to illustrate and elucidate are to give additional clearness. Everything requires to be explained to one who is ignorant of it; but the best informed will require to have abstruse subjects illustrated, and obscure subjects elucidated.

To Expostulate, Remonstrate. We expostulate in a tone of authority; we remonstrate in a tone of complaint. He who expostulates passes a censure, and claims to be heard; he who remonstrates presents his case and requests to be heard.

Extraneous, Extrinsic, Foreign. The extraneous is that which forms no necessary or natural part of anything. The extrinsic is that which forms a part or has a connection with a thing, but only in an indirect form; it is not an inherent or component part. The foreign is that which forms no part whatever, and has no kind of connection with an object or an incident.

Extraordinary, Remarkable. The extraordinary is that which is out of the ordinary course, but it does not always excite remark, and is not, therefore, remarkable, as when we speak of an extraordinary loan; on the other hand, when the extraordinary conveys the idea of what deserves notice, it expresses what is remarkable.

Extravagant, Prodigal, Lavish, Profuse. The extravagant man spends his money without reason; the prodigal man spends it in excesses. One may be extravagant with a small sum where it exceeds one's means; one can be prodigal only with large sums. Lavish and profuse are properly applied to particular actions, the former to denote an expenditure more or less wasteful or superfluous, the latter to denote a full supply without any sort of scant.

Exuberant, Luxuriant. These terms are both applied to any flourishing growth or abundance: exuberance expresses the excess; luxuriance the perfection.

Facetious, Conversable, Pleasant, Jocular, Jocose. Facetious may be employed either for writing or conversation; the rest only in conversation. The facetious man deals in that kind of discourse which may excite laughter; a conversable man may instruct as well as amuse. The pleasant man says everything in a pleasant manner; his pleasantry even on the most delicate subject is without offense. The person speaking is jocose; the thing said, or the manner of saying it, is jocular.

Factious, Seditious. Factious is an epithet to characterize the tempers of men; seditious characterizes their conduct. The factious man attempts to raise himself into importance, he aims at authority, and seeks to interfere in the measures of government; the seditious man attempts to excite others, and to provoke their resistance to established authority: the first wants to be a law-giver; the second does not hesitate to be a law-breaker.

Fair, Clear. Fair is used in a positive sense; clear in a negative sense: there must be some brightness in what is fair; there must be no spots in what is clear. The weather is said to be fair, which is not only free from what is disagreeable, but somewhat enlivened by the sun; it is clear when it is free from clouds or mists.

Faith, Creed. These words are synonymous when taken for the thing trusted in or believed; but they differ in this: faith has always a reference to the principle in the mind; creed respects the thing which is the object of faith.

Faith, Fidelity. Faith here denotes a mode of action, namely, in acting true to the faith which others repose in us; fidelity, a disposition of the mind to adhere to that faith which others repose in us. We keep our faith; we show our fidelity.

Faithful, Trusty. Faithful respects the principle altogether; it is suited to all relations and stations, public and private. Trusty includes not only the principle, but the mental qualifications in general; it applies to those in whom particular trust is to be placed. It is the part of a Christian to be faithful to all his engagements; it is a particular excellence in a servant to be trusty.

Faithless, Perfidious, Treacherous. A faithless man is faithless only for his own interest; a perfidious man is expressly so to the injury of another. Perfidy may lie in the will to do; treachery lies altogether in the thing done. A friend is perfidious whenever he evinces his perfidy; but he is said to be treacherous only in the particular instance in which he betrays the confidence and interests of another.

Fall, Downfall, Ruin. Fall applies to that which has been erect; downfall to that which has been elevated. Everything which is set up, although as trifling as a stick, may have a fall; but we speak of the downfall of the loftiest trees or the tallest spires. A man may recover from his fall, but his downfall is commonly followed by the entire ruin of his concerns, and often of himself.

Fallacious, Deceitful, Fraudulent. The fallacious has respect to falsehood in opinion; deceitful to that which is externally false: our hopes are often fallacious; the appearances of things are often deceitful. Fallacious, as characteristic of the mind, excludes the idea of design; deceitful excludes the idea of mistake; fraudulent is a gross species of the deceitful.

Fame, Reputation, Renown. Fame may be applied to any object, good, bad, or indifferent; reputation is applied only to real eminence in some department; renown is employed only for extraordinary men and brilliant exploits.

Fame, Report, Rumor, Hearsay. Fame serves to form or establish a character either of a person or a thing; it will be good or bad, according to circumstances: the fame of our Saviour's miracles went abroad through the land. A report serves to communicate information of events; it may be more or less correct according to the veracity or authenticity of the reporter. A rumor serves the purposes of fiction; it is more or less vague according to the temper of the times and the nature of the events. The hearsay serves for information or instruction, and is seldom so incorrect as it is familiar.

Famous, Celebrated, Renowned, Illustrious. Famous signifies literally having fame or the cause of fame; it is applicable to that which causes a noise or sensation; to that which is talked of, written upon, discussed, and thought of; to that which is circulated among all ranks and orders of men. Celebrated signifies literally kept in the memory by a celebration or memorial, and is applicable to that which is praised and honored with solemnity. Renowned signifies literally possessed of a name, and is applicable to whatever extends the name, or causes the name to be often repeated. Illustrious signifies literally what has or gives a luster; it is applicable to whatever confers dignity.

Fanciful, Fantastical, Whimsical, Capricious. Fanciful is said of that which is irregular in the taste or judgment; fantastical is said of that which violates all propriety, as well as regularity: the former may consist of a simple deviation from rule; the latter is something extravagant. Whimsical is a form of the fanciful in regard to one's likes or dislikes; capricious respects errors of temper, or irregularities of feeling.

Fancy, Imagination. The fancy employs itself about things without regarding their nature; but the imagination aims at tracing a resemblance, and getting a true copy. The fancy consequently forms combinations, either real or unreal, as chance may direct; but the imagination is less often led astray. The fancy is busy in dreams, or when the mind is in a disordered state; but the imagination is supposed to act when the intellectual powers are in full play.

Fatigue, Weariness, Lassitude. Fatigue is an

exhaustion of the animal or mental powers; weariness is a wearing out of the strength, or a breaking of the spirits; lassitude is a general relaxation of the animal frame.

Fearful, Dreadful, Frightful, Tremendous, Terrible, Terrific, Horrible, Horrid. A contest is fearful when the issue is important, but the event doubtful; the thought of death is dreadful to one who feels himself unprepared. The frightful is less than the tremendous; the tremendous than the terrible; the terrible than the horrible. Shrieks may be frightful; thunder and lightning may be tremendous; the roaring of a lion is terrible; the glare of his eye terrific; the actual spectacle of killing is horrible or horrid. We may speak of a frightful, dreadful, terrible, or horrid dream; or frightful, dreadful, or terrible tempest; dreadful, terrible, or horrid consequences.

To Feel, be Sensible, Conscious. To feel is said of the whole frame, inwardly and outwardly; it is the accompaniment of existence: to be sensible is said only of the senses. It is the property of all living creatures to feel pleasure and pain in a greater or less degree; those creatures which have not the sense of hearing will not be sensible of sounds. One is conscious only of what passes inwardly; we are conscious of having fallen short of our duty.

To Feign, Pretend. One feigns in order to gain some future end: a person feigns sickness in order to be excused from paying a disagreeable visit. One pretends in order to serve a present purpose: a child who wishes to excuse himself for his idleness pretends to have lost his book.

To Felicitate, Congratulate. Felicitate signifies to make happy, and is applicable only to ourselves; congratulate is applicable either to ourselves or others: we felicitate ourselves on having escaped the danger; we congratulate others on their good fortune.

Female, Feminine, Effeminate. In the female character we expect to find that which is feminine. The female dress, manners, and habits, have engaged the attention of all essayists, from the time of Addison to the present period. The feminine is natural to the female; the effeminate is unnatural to the male.

Ferocious, Fierce, Savage. Ferocious marks the untamed character of a cruel disposition; fierce has a greater mixture of pride and anger in it; savage marks a more permanent, but not so violent a sentiment of either cruelty or anger as the two former. Ferocity and fierceness are in common applied to the brutes, to designate their natural tempers: savage is mostly employed to designate the natural tempers of man, when uncontrolled by the force of reason and a sense of religion.

Fervent, Ardent. The affections are properly fervent; the passions are ardent: we are fervent in feeling, and ardent in acting.

Final, Conclusive. Final designates simply the circumstance of being the last; conclusive the mode of finishing or coming to the last. A determination is final which is to be succeeded by no other; a reasoning is conclusive that puts a stop to further question.

To Find, Discover, Invent. The merit of finding or inventing consists in newly applying or modifying the materials, which exist separately; the merit of discovering consists in removing the obstacles which prevent us from knowing the real nature of the thing. Imagination and industry are requisite for finding or inventing; acuteness and penetration for discovering. Find is applicable to the operative arts; invent to the mechanical; discover to the speculative.

To Find Fault With, Blame, Object To. We find fault with a person for his behavior; we find fault with our house or servant; we blame a person for his temerity or his improvidence; we object to a measure that is proposed. We find fault with or blame that which has been done; we object to that which has been or is to be done.

Fine, Delicate, Nice. Fine, in the natural sense, denotes smallness in general. Delicate denotes a degree of fineness that is agreeable to the taste. Thread is said to be fine; silk is said to be delicate, when to fineness of texture it adds softness. Nice is said of what is agreeable to the appetite.

Finite, Limited. Finite is the natural property of things; and limited is the artificial property: the former is opposite only to the infinite; but the latter, which lies within the finite, is opposed to the unlimited or the infinite. This world is finite, and space infinite; the power of a prince is limited.

Firm, Fixed, Solid, Stable. Firm (v. constancy). Fixed denotes the state of being secure; solid, in Latin solidus, comes from solum, the ground, which is the most solid thing existing; stable (v. constancy). That is firm which is not easily shaken; that is fixed which is fastened to something else, and not easily torn; that is solid which is able to bear, and does not easily give way: that is stable which is able to make a stand against resistance, or the effects of time.

Fit, Apt, Meet. A house is fit for the accommodation of the family according to the plan of the builder; the young mind is apt to receive either good or bad impressions. Meet is a term of rare use, except in spiritual matters or in poetry: it is meet to offer our prayers to the Supreme Disposer of all things.

Flatterer, Sycophant, Parasite. The flatterer is one who flatters by words. The sycophant and the parasite are therefore always flatterers, and something more, for the sycophant adopts every mean artifice by which he can ingratiate himself, and the parasite submits to every degradation and servile compliance by which he can obtain his base purpose.

Flexible, Pliable, Pliant, Supple. Flexible is used in a natural or moral sense; pliable in the familiar sense only; pliant in the higher and moral application only. What can be bent in any degree, as a stick, is flexible; what can be bent as wax, or folded like cloth, is pliable. Supple, whether in a proper or a figurative sense, is an excess of pliability; what can be bent backward and forward, like osier twig, is supple.

To Fluctuate, Waver. To fluctuate conveys the idea of strong agitation; to waver, that of constant motion backward and forward. When applied in the moral sense, to fluctuate designates the action of the spirits or the opinions; to waver is said only of the will or opinions.

To Follow, Succeed, Ensue. Follow and succeed are used of persons and things; ensue of things only. Follow, in respect of persons, denotes the going in order; succeed denotes the going or being in the same place immediately after another: many persons may follow one another at the same time; but only one individual properly succeeds another. Ensue is used in specific cases; quarrels too often ensue from the conversations of violent men who differ either in religion or politics.

To Follow, Pursue. The idea of going after any object in order to reach or obtain it is common to these terms, but under different circumstances: to follow a person is mostly with a friendly intention; to pursue with a hostile intention.

Follower, Adherent, Partisan. A follower is one who follows a person generally; an adherent is one who holds to his cause; a partisan is the follower of a party.

Folly, Foolery. Folly is the abstract of foolish, and characterizes the thing; foolery is the abstract of fool, and characterizes the person. Young people are perpetually committing follies if not under proper control; fashionable people lay aside one foolery only to take up another.

Fool, Idiot, Buffoon. Fool is doubtless connected with our word foul, in German faul, which is either nasty or lazy, and with the Greek word, which signifies worthless or good for nothing. Idiot comes from the Greek word signifying either a private person or one that is rude and unskilled in the ways of the world. Buffoon, in French "bouffon," is in all probability connected with our word beef, buffalo, and bull, signifying a senseless fellow. The fool is either naturally or artificially a fool; the idiot is a natural fool; the buffoon is an artificial fool. Whoever violates common-sense in his actions is a fool; whoever is unable to act according to common-sense is an idiot; whoever intentionally violates common-sense is a buffoon.

Foolhardy, Adventurous, Rash. The foolhardy man ventures in defiance of consequences; the adventurous man ventures from a love of the arduous and the bold; the rash man ventures for want of thought.

Force, Violence. The arm of justice must exercise force in order to bring offenders to a proper account; one nation exercises violence against another in the act of carrying on war. Force is mostly conformable to reason and equity; violence is always resorted to for the attainment of that which is unattainable by law: force is always something desirable; violence is always something hurtful. We ought to listen to arguments which have force in them; we endeavor to correct the violence of all angry passions.

Forefathers, Progenitors, Ancestors. Forefathers signifies our fathers before us, and includes our immediate parents; progenitors signifies those begotten before us, exclusive of our immediate parents; ancestors is said of those from whom we are remotely descended.

To Foretell, Predict, Prophesy, Prognosticate. We may foretell common events, although we cannot predict or prophesy anything important: one foretells by a simple calculation or guess. To predict and prophesy are extraordinary gifts: one predicts by a supernatural power, real or supposed; one prophesies by means of inspiration. To prognosticate is an act of the under-

standing; it is guided by outward symptoms as a rule. A physician prognosticates the crisis of a disorder by the symptoms discoverable in the patient.

Forgetfulness, Oblivion. Forgetfulness characterizes the person, or that which is personal; oblivion the state of the thing: the former refers to him who forgets; the latter to that which is forgotten.

To Forgive, Pardon, Absolve, Remit. Individuals forgive each other personal offenses; they pardon offenses against law and morals: the former is an act of Christian charity; the latter an act of clemency. To remit is to refrain from inflicting; it has more particular regard to the punishment; it is granted either by the prince or magistrates; it arrests the execution of justice. To absolve is to free from penalty either by the civil judge or the ecclesiastical minister; it reestablishes the accused in the rights of innocence.

To Form, Fashion, Mold, Shape. As everything respects a form when it receives existence, so to form conveys the idea of producing. When we wish to represent a thing as formed in any distinct or remarkable way, we may speak of it as fashioned. God formed man out of the dust of the ground; he fashioned him after his own image. When we wish to represent a thing as formed according to a precise rule, we should say it was molded; thus the habits of a man are molded at the will of a superior. When we wish to represent a thing as receiving the accidental qualities which distinguish it from others, we talk of shaping it.

Form, Ceremony, Rite, Observance. Form respects all determinate modes of acting and speaking, that are adopted by society at large, in every transaction of life; ceremony respects those forms of outward behavior which are made the expressions of respect and deference; rite and observance are applied to national ceremonies in matters of religion. Every country has adopted certain rites founded upon its peculiar religious faith, and prescribed certain observances by which individuals can make a public profession of their faith.

Formidable, Dreadful, Terrible, Shocking. The formidable acts neither suddenly nor violently; the dreadful may act violently, but not suddenly: thus the appearance of an army may be formidable; but that of a field of battle is dreadful. The terrible and the shocking act both suddenly and violently; but the former acts both on the senses and the imagination, the latter on the moral feelings: thus, the glare of a tiger's eye is terrible; the unexpected news of a friend's death is shocking.

Forsaken, Forlorn, Destitute. To be forsaken (v. to abandon) is to be deprived of the company and the assistance of those we have looked to; to be forlorn is to be forsaken in time of difficulty, to be without a guide in an unknown road; to be destitute is to be deprived of the first necessaries of life.

To Forswear, Perjure, Suborn. To forswear is applied to all kinds of oaths; to perjure is employed only for such oaths as have been administered by the civil magistrate. A soldier forswears himself who breaks his oath of allegiance by desertion; a man perjures himself in a court of law who swears to the truth of that which he knows to be false. Suborn signifies to make to forswear: a perjured man has all the guilt upon himself; but he who is suborned shares his guilt with the suborner.

To Foster, Cherish, Harbor, Indulge. These terms are all employed here in the moral acceptation, to express the idea of giving nourishment to an object. To foster in the mind is to keep with care and positive endeavors; as when one fosters prejudices by encouraging everything which favors them: to cherish in the mind is to hold dear or set a value upon; as when one cherishes good sentiments, by dwelling upon them with inward satisfaction. To harbor is to allow room in the mind, and is generally taken in the worst sense, for giving admission to that which ought to be excluded; as when one harbors resentment by permitting it to have a resting-place in the heart: to indulge in the mind is to give the whole mind to it, to make it the chief source of pleasure; as when one indulges an affection, by making the will and the outward conduct bend to its gratifications.

Foundation, Ground, Basis. A report is said to be without any foundation which has taken its rise in mere conjecture, or in some arbitrary cause independent of all fact. A man's suspicion is said to be without ground when not supported by the shadow of external evidence: both foundation and basis are the lowest parts of any structure; but the former lies under ground, the latter stands above. The foundation supports some large and artificially erected pile; the basis supports a simple pillar.

Fragile, Frail, Brittle. Man, corporeally considered is a fragile creature, his frame is composed of fragile materials; mentally considered, he is a frail creature, for he is liable to every sort of frailty. Fragile applies to whatever will break from the effects of time; brittle to that which will not bear a temporary violence.

Frank, Candid, Ingenuous, Free, Open, Plain. The frank man is under no constraint; his thoughts and feelings are both set at ease, and his lips are ever ready to give utterance to the dictates of his heart: the candid man has nothing to conceal; he speaks without regard to self-interest or any partial motive; he speaks nothing but the truth. The ingenuous man throws off all disguise; he scorns all artifice, and brings everything to light; he speaks the whole truth. Free, open, and plain have not so high an office as the first three. The frank, free, and open men all speak without constraint; but the frank man is not impertinent like the free man, nor indiscreet like the open man. The frank man speaks only of what concerns himself; the free man speaks of what concerns others; the open man says all he knows and thinks, from the inconsiderate levity of his temper. The plain man speaks plainly but truly; he gives no false coloring to his speech.

Free, Liberal. To be free signifies to act or think at will; to be liberal is to act according to the dictates of an enlarged heart and an enlightened mind.

Free, Familiar. To be free is to be disengaged from all the constraints which the ceremonies of social intercourse impose; to be familiar is to be upon the footing of a friend, of a relative, or of one of the same family.

Free, Exempt. Free is applied to everything from which any one may wish to be free; but exempt, on the contrary, is applied to those burdens which we should share with others.

Freedom, Liberty. Freedom is personal and private; liberty is public. The freedom of the city is the privilege granted by the city to individuals; the liberties of the city are the immunities enjoyed by the city.

To Frequent, Resort To, Haunt. Frequent is more commonly used of an individual who goes often to a place; resort and haunt of a number of individuals. A man may frequent a theater, a club, or any other social meeting, innocent or otherwise; people from different quarters may resort to a fair, a church, or any other place where they wish to meet for a common purpose; but those who haunt any place go to it in privacy for some bad purpose.

To Frighten, Intimidate. The danger that is near or before the eyes frightens; that which is seen at a distance intimidates.

Funeral, Obsequies. We speak of the funeral as the last sad office which we perform for a friend; it is accompanied by nothing but by mourning and sorrow. We speak of obsequies as the greatest tribute of respect which can be paid to the person of one who was high in station or public esteem.

To Gape, Stare, Gaze. Gape and stare are taken in an ill sense: the former indicates the astonishment of gross ignorance; the latter not only ignorance but impertinence. Gaze is taken always in a good sense, as indicating a laudable feeling of astonishment, pleasure, or curiosity.

To Gather, Collect. To gather signifies to bring things of a sort together; to collect annexes also the idea of binding or forming into a whole. We gather that which is scattered in different parts: thus stones are gathered into a heap; vessels are collected so as to form a fleet.

General, Universal. What is general includes the greater part or number; what is universal includes every individual or part.

Genteel, Polite. Gentility respects rank in life; politeness the refinement of the mind and outward behavior. A genteel education is suited to the station of a gentleman; a polite education fits for polished society and conversation, and raises the individual among his equals.

Gentle, Tame. Any unbroken horse may be gentle, but not tame; a horse that is broken in will be tame, but not always gentle. Gentle signifies literally well-born, and is opposed either to the fierce or the rude; tame is opposed either to the wild or the spirited.

Gift, Present, Donation. The gift is an act of generosity or condescension; it contributes to the benefit of the receiver: the present is an act of kindness, courtesy or respect; it contributes to the pleasure of the receiver. The gift is private, and benefits the individual; the donation is public, and serves some general purpose. What is given to relieve the necessities of any poor person is a gift; what is given to support an institution is a donation.

To Give, Grant, Bestow. The idea of communicating to another what is our own, or in our power, is common to these terms; this is the whole signification of give. To grant is to give at one's pleasure; to bestow is to give from a certain degree of necessity. We give money, clothes, food, or whatever is transferable.

Granting is confined to such objects as afford pleasure or convenience; bestowing is applied to such objects only as are necessary to supply wants, which always consist of that which is transferable.

To Give, Present, Offer, Exhibit. We give to our domestics; we present to princes; we offer to God; we give to a person what we wish to be received; we present to a person what we think agreeable. A poem is said to exhibit marks of genius.

To Give Up, Abandon, Resign, Forego. To give up is applied to familiar cases; abandon to matters of importance: one gives up an idea, an intention, a plan, and the like; one abandons a project, a scheme, a measure of government. A man gives up his situation by a positive act of his choice; he resigns his office when he feels it inconvenient to hold it. So, likewise, we give up expectations, and resign hopes; we resign that which we have, and we forego that which we might have.

Glaring, Barefaced. Glaring designates the thing; barefaced characterizes the person: a glaring falsehood is that which strikes the observer in an instant to be a falsehood; a barefaced lie or a falsehood betrays the effrontery of him who utters it.

Glimpse, Glance. A glimpse is the action of the object appearing to the eye; a glance is the action of the eye seeking the object. One catches a glimpse of an object; one casts a glance at an object.

Glory, Honor. Glory is something dazzling and widely diffused; honor is something less splendid, but more solid. Glory impels to extraordinary efforts and to great undertakings; honor induces to a discharge of one's duty.

To Glory, Boast, Vaunt. To glory is to exult or to rejoice; to boast is to set forth to one's advantage; to vaunt is to set oneself up before others. To glory is more particularly the act of the mind, the indulgence of the internal sentiment; to boast denotes rather the expression of the sentiment; to vaunt is properly to proclaim praises aloud, and is taken either in an indifferent or in a bad sense.

Godlike, Divine, Heavenly. Godlike is a more expressive, but less common term than divine: the former is used only as an epithet of peculiar praise for an individual; divine is generally employed for that which appertains to a superior being, in distinction from that which is human. A heavenly being denotes the angels or inhabitants of heaven, in distinction from earthly beings. As divine is opposed to human, so is heavenly to earthly.

Good-nature, Good-humor. Good-nature and good-humor both imply the disposition to please and be pleased; but the former is habitual and permanent, the latter is temporary and partial. The former lies in the nature and frame of the mind, the latter in the state of the humors or spirits.

To Govern, Rule, Regulate. The exercise of authority enters more or less into the signification of these terms; but to govern implies the exercise likewise of judgment and knowledge. To rule implies rather the unqualified exercise of power, the making the will the rule. A king governs his people by means of wise laws and an upright administration; a despot rules over a nation according to his arbitrary decision. To regulate is to govern or control simply by judgment; the word is applicable to things of minor moment, where the force of authority is not so requisite: one governs the affairs of a nation, or a large body where great interests are involved; we regulate the concerns of an individual.

Government, Administration. Both these terms may be employed either to designate the act of governing and administering, or the persons governing and administering. In both cases government has a more extensive meaning than administration: the former includes every exercise of authority; administration implies only that exercise of authority which consists in putting the laws or the will of another in force. When we speak of the government, as it respects the persons, it implies the whole body of constituted authorities; and the administration, only that part which puts in execution the intentions of the whole.

Grace, Charm, Elegance. Grace is altogether corporeal; charm is either corporeal or mental: the grace qualifies the action of the body; the charm is an inherent quality in the body itself. A lady moves, dances, and walks with grace; the charms of her person are equal to those of her mind. A graceful figure is rendered so by the deportment of the body. A comely figure has that in itself which pleases the eye. Grace is a quality pleasing to the eye; but elegance is a quality of a higher nature, and inspires admiration. Elegant is applicable, like graceful, to the motion of the body, or like comely to the person, and is extended in its meaning also to language, and even to dress.

To Gratify, Indulge, Humor. To gratify is a positive act of the choice; to indulge is a negative act of the will, a yielding of the mind to circumstances. One gratifies his desires or appetites; he indulges his humors, or indulges in pleasures. We gratify and indulge others as well as ourselves, and mostly in the good sense. To gratify is for the most part in return for services; it is an act of generosity: to indulge is to yield to the wishes or be lenient to the infirmities of others; it is an act of kindness or good-nature. To humor is mostly taken in a bad sense.

Gratuitous, Voluntary. Gratuitous is opposed to that which is obligatory; voluntary is opposed to that which is compulsory, or involuntary.

Grave, Serious, Solemn, Grave expresses more than serious; it does not merely bespeak the absence of mirth, but that heaviness of mind which is displayed in all the movements of the body. Serious, on the other hand, bespeaks no depression, but simply steadiness of action, and a refrainment from all that is jocular. A judge pronounces the solemn sentence of condemnation in a solemn manner; a preacher delivers many solemn warnings to his hearers.

Great, Large, Big. Great applies to all sorts of dimensions by which things are measured: large may apply to generous giving; it usually refers to magnitude, bulk, or scope. Big denotes great as to expansion or capacity. A house, a room, is great or large; an animal or a mountain is great or big; a road, a city, a street, and the like, is termed great rather than large. We may speak of a large portion, or of a mind big with conception.

Great, Grand, Sublime. These terms are synonymous only in their moral application. Great simply designates extent; grand includes likewise the idea of excellence and superiority. A great undertaking characterizes only the extent of the undertaking; a grand undertaking bespeaks its superior excellence. Sublime designates the dimensions of height. A scene may be either grand or sublime; it is grand as it fills the imagination with its immensity; it is sublime as it elevates the imagination beyond the surrounding and less important objects.

To Groan, Moan. Groan is a deep sound produced by hard breathing; moan is a plaintive, long-drawn sound produced by the organs of utterance. The groan proceeds involuntarily as an expression of severe pain, either of body or mind; the moan proceeds often from the desire of awakening attention or exciting compassion.

Gross, Coarse. These terms are synonymous in the moral application. Grossness of habit is opposed to delicacy; coarseness to softness and refinement. A person becomes gross by an unrestrained indulgence of his sensual appetites, particularly in eating and drinking; he is coarse from the want of polish either as to his mind or manners.

To Guard, Defend, Watch. To guard, in its largest sense, comprehends both watching and defending, that is, both the preventing the attack and the resisting it when it is made. In the restricted sense, to guard is properly to keep off an enemy; to defend is to drive him away when he makes the attack. Watch, like guard, consists in looking to the danger, but it does not necessarily imply the use of any means to prevent the danger: he who watches gives an alarm.

Guard, Guardian. The guard only defends against external evils; the guardian takes upon him the office of parent, counselor, and director.

To Guess, Conjecture, Divine. We guess that a thing actually is; we conjecture that which may be: we guess that it is a certain hour; we conjecture as to the meaning of a person's actions. To guess and to conjecture are natural acts of the mind. To divine, in its proper sense, is a supernatural act; in this sense impostors in our time presume to divine in matters that are set above the reach of human comprehension. The term is, however, employed to denote a kind of guessing in different matters, as to divine the meaning of a mystery.

Guest, Visitor, or Visitant. Guest signifies one who is entertained; visitor or visitant is the one who pays the visit. The visitor simply comes to see the person, and enjoy social intercourse; but the guest partakes also of hospitality.

Guise, Habit. The guise is that which is unusual, and often only occasional; the habit is that which is usual among particular classes. A person sometimes assumes the guise of a peasant, in order the better to conceal himself; he who devotes himself to the clerical profession puts on the habit of a clergyman.

Habitation, Home, House, Residence. Habitation

implies merely a dwelling-place; house refers to a building constructed purposely for dwelling therein. Home is usually restricted to mean an endeared dwelling as the scene of domestic ties and family life. Residence is a more formal, though less exact, term than house.

To Happen, Chance. Happen respects all events, without including any collateral idea; chance comprehends likewise the idea of the cause and order of events. Whatever comes to pass happens, whether regularly in the course of things, or particularly and out of the order; whatever chances, happens altogether without concert, intention, and often without relation to any other thing.

Happy, Fortunate. Both words are applied to the external circumstances of a man: the former conveys the idea of that which is abstractly good; the latter implies rather what is agreeable to one's wishes. A man is happy in his marriage; he is fortunate in his trading concerns. Happy excludes the idea of chance; fortunate excludes the idea of personal effort.

Harbor, Haven, Port. The idea of a resting-place for vessels is common to these terms. Harbor carries with it little more than the common idea of affording a resting or anchoring place; haven conveys the idea of security; port conveys the idea of an enclosure. A haven is a natural harbor; a port is an artificial harbor.

Hard, Firm, Solid. That is hard which will not yield to a closer compression; that is firm which will not yield so as to produce a separation. Ice is hard, as far as it respects itself, when it resists every pressure; it is firm, with regard to the water which it covers, when it is so closely bound as to resist every weight without breaking. Hard and solid respect the internal constitution of bodies, and the adherence of the component parts; but hard denotes a much closer degree of adherence than solid: the hard is opposed to the soft; the solid to the fluid.

Hardly, Scarcely. Where the idea of practicability predominates, hardly seems most proper; where the idea of frequency predominates, scarcely seems preferable. One can hardly judge of a person's features by a single and partial glance; we scarcely ever see men lay aside their vices from a thorough conviction of their enormity.

To Hasten, Accelerate, Speed, Expedite, Dispatch. To hasten expresses little more than the general idea of quickness in moving toward a point; thus, he hastens who runs to get to the end of his journey. Accelerate expresses, moreover, the idea of bringing something to a point; thus, every mechanical business is accelerated by the order and distribution of its several parts. The word speed includes not only quick but forward movement. He who goes with speed goes effectually forward, and comes to his journey's end the soonest. This idea is excluded from the term haste, which may often be a planless, unsuitable quickness. Hence the proverb, "The more haste, the worse speed." Expedite and dispatch are terms of higher import, in application to the most serious concerns in life: expedite expresses a process, a bringing forward toward an end; dispatch implies a putting an end to, making a clearance. We do everything in our power to expedite a business; we dispatch a great deal of business within a given time.

To Hasten, Hurry. To hasten and to hurry both imply to move forward with quickness in any matter; the former may proceed with some design and good order, but the latter always supposes perturbation and irregularity.

To Hate, Detest. To hate is a personal feeling directed toward the object independently of its qualities; to detest (v. to abhor) is a feeling independent of the person, and altogether dependent upon the nature of the thing. One hates, but does not detest, the person who has done an injury to oneself; and one detests, rather than hates, the person who has done injuries to others.

Hateful, Odious. Hateful is properly applied to whatever violates general principles of morality; lying and swearing are hateful vices. Odious is more commonly applied to such things as affect the interests of others, and bring odium upon the individual.

Haughtiness, Disdain, Arrogance. Haughtiness is founded on the high opinion we entertain of ourselves; disdain, on the low opinion we have of others; arrogance is the result of both, but if anything, more of the former than of the latter. Haughtiness and disdain are properly sentiments of the mind, and arrogance a mode of acting resulting from a state of mind.

To Have, Possess. To have is sometimes to have in one's hand or within one's reach; but to possess is to have as one's own. A clerk has the money which he has fetched for his employer; the latter possesses the money which he has the power of turning to his use.

To Hazard, Risk, Venture. He who hazards an opinion or an assertion does it from presumptuous feelings and upon slight grounds; chances are rather against him than for him that it may prove erroneous. He who risks a battle does it often from necessity; he chooses the lesser of two evils; although the event is dubious, yet he fears less from a failure than from inaction. He who ventures on a mercantile speculation does it from a love of gain.

Healthful, Wholesome, Salubrious, Salutary. Healthful is applied to exercise, to air, situation, climate, and most other things except food, for which wholesome is commonly substituted. The life of a farmer is reckoned the most healthful; the simplest diet is the most wholesome. Healthful and wholesome are rather negative in their sense; salubrious and salutary are positive. That is healthful and wholesome which does no injury to the health; that is salubrious which serves to improve the health; that is salutary which serves to remove a disorder.

To Heap, Pile, Accumulate, Amass. To heap is an indefinite action; it may be performed with or without order: to pile is a definite action done with design and order; thus we heap stones, or pile wood. To accumulate is properly to bring or add heap to heap, which is a gradual and unfinished act; to amass is to form into a mass, which is a single complete act. A man may accumulate guineas or anything else in small quantities, but he properly amasses wealth.

Hearty, Warm, Sincere, Cordial. There are cases in which it may be peculiarly proper to be hearty as when we are supporting the cause of religion and virtue; there are other cases in which it is peculiarly proper to be warm, as when our affections ought to be roused in favor of our friends. In all cases we ought to be sincere, when we express either a sentiment or a feeling; it is peculiarly happy to be on terms of cordial regard with those who stand in any close relation to us. The man himself should be hearty; his heart should be warm; professions should be sincere; a reception cordial.

Heed, Care, Attention. Heed (v. to attend) applies to matters of importance to one's moral conduct; care (v. care, solicitude) to matters of minor import. A man is required to take heed; a child is required to take care: the former exercises his understanding in taking heed; the latter exercises his thoughts and his senses in taking care. We speak of giving heed and paying attention: the former is applied only to that which is conveyed to us by another, in the shape of a direction, a caution, or an instruction; the latter is said of everything which we are said to perform.

Heinous, Flagrant, Flagitious, Atrocious. A crime is heinous which seriously offends against the laws of men; a sin is heinous which seriously offends against the will of God. An offense is flagrant which is in direct defiance of established opinions and practice. It is flagitious if a gross violation of the moral law, or coupled with any grossness. A crime is atrocious which is attended with any aggravating circumstances.

To Help, Assist, Aid, Succor, Relieve. Help signifies to do good to; assist signifies to place oneself by another so as to give him our strength; aid signifies to profit toward a specific end; succor signifies to run to the help of anyone; relieve signifies to alleviate. We help a person to prosecute his work, or help him out of a difficulty; we assist in order to forward a scheme, or we assist a person in the time of his embarrassment; we aid a good cause, or we aid a person to make his escape; we succor a person who is in danger; we relieve him in time of distress.

To Hesitate, Falter, Stammer, Stutter. A person who is not in the habit of public speaking, or of collecting his thoughts into a set form, will be apt to hesitate even in familiar conversation; he who first addresses a public assembly will be apt to falter. Children who first begin to read will stammer at hard words; one who has an impediment in his speech will stutter when he attempts to speak in a hurry.

Heterodoxy, Heresy. To be of a different persuasion is heterodoxy; to have a faith of one's own is heresy.

High, Tall, Lofty. High expresses the idea of extension upward, which is common to them all. What is tall is high, but what is high is not always tall; that which attains considerable height by growing is tall; a thing may be high because on a pedestal. Lofty is said of that which is extended in breadth as well as in height. We say that a house is high, a chimney tall, a room lofty.

To Hinder, Stop. To hinder is to interfere with the progress of a person or a thing; to stop refers simply to the cessation of motions.

To Hold, Keep, Detain, Retain. To hold is a physical act; it requires a degree of bodily strength.

or at least the use of the limbs: to keep is simply to have by one at one's pleasure. Detain and retain are modes of keeping: the former signifies keeping back what belongs to another; the latter signifies keeping a long time for one's own purpose.

To Hold, Occupy, Possess. We hold a thing for a long or a short time; we occupy it for a permanence: we hold it for ourselves or others; we occupy it only for ourselves. We hold it for various purposes; we occupy only for the purpose of converting it to our private use. To occupy is only to hold under a certain compact; but to possess is to hold as one's own.

Holiness, Sanctity. Holiness is to the mind of a man what sanctity is to his exterior, with this difference, that holiness to a certain degree ought to belong to every man professing Christianity; but sanctity, as it lies in the manners, the outward garb, and the deportment, is becoming only to certain persons, and at certain times.

Hollow, Empty. That is hollow which has an empty space, or cavity, as a hollow tree. That which has nothing in it is empty, as an empty chair.

Holy, Sacred, Divine. Whatever is most intimately connected with religion and religious worship, in its purest state, is holy, unhallowed by a mixture of inferior objects, and elevated in the greatest possible degree, so as to suit the nature of an infinitely perfect and exalted Being. The sacred derives its sanction from human institutions, and is connected rather with our moral than with our religious duties. What is holy is altogether spiritual, and abstracted from the earthly. The divine is often contrasted with the human; but there are many human things which are denominated divine. What is divine, therefore, may be so superlatively excellent as to be conceived of as having the stamp of inspiration from the Deity.

To Honor, Reverence, Respect. To honor is only an outward act; to reverence is either an act of the mind or is the outward expression of a sentiment; to respect is mostly an act of the mind, though it may admit of being expressed by some outward act. We honor God by adoration and worship; we honor our parents by obeying them and giving them our personal service; we reverence our Maker by cherishing in our minds a dread of offending Him; we respect a person or a thing that is lofty, worthy, or honorable.

Hot, Fiery, Burning, Ardent. In the figurative application, a temper is said to be hot or fiery; rage is burning; the mind is ardent in pursuit of an object. Zeal may be hot, fiery, burning, or ardent; but in the first three cases it denotes the intemperance of the mind when heated by religion or politics. The latter is admissible so long as it is confined to a good object.

Human, Humane. The human race or human beings are opposed to the irrational part of the creation; a humane race or a humane individual is opposed to one that is cruel and fond of inflicting pain.

Humble, Modest, Submissive. A man is humble from a sense of his comparative inferiority to others in point of station and outward circumstances; or he is humble from a sense of his imperfections, and a consciousness of not being what he ought to be. He is modest, inasmuch as he sets but little value on his qualifications, acquirements, and endowments. Between humble and submissive there is this prominent feature of distinction, that the former marks a temper of mind, the latter a mode of action: we may be submissive because we are humble; but we may likewise be submissive from fear, from interested motives, and the like.

Humor, Temper, Mood. The humor is so fluctuating that it varies in the same mind perpetually; but the temper is so far confined that it always shows itself to be the same whenever it shows itself at all. The humor makes a man different from himself; the temper makes him different from others: hence we speak of the humor of the moment; of the temper of youth or of old age. Humor and mood agree in denoting a particular and temporary state of feeling; but they differ in the cause: the former is attributable rather to the physical state of the body, and the latter to the moral frame of the mind. Mood is a temporary or capricious state or condition of the mind in regard to passion or feeling. There is no calculating on the humor of a man; it depends upon his mood whether he performs ill or well.

Hurtful, Pernicious, Noxious, Noisome. Between hurtful and pernicious there is the same distinction as between hurting and destroying: that which is hurtful may hurt in various ways; but that which is pernicious necessarily tends to destruction. Confinement is hurtful to the health; bad company is pernicious to the morals. Noxious and noisome are forms of the hurtful: that which is noxious inflicts a direct injury; that which is noisome inflicts it indirectly. Noxious insects are such as wound; noisome vapors are such as tend to create disorders.

Idea, Thought, Imagination. The idea is the simple representation of an object; the thought is the reflection; and the imagination is the combination of ideas. We have ideas of the sun, the moon, and all material objects; we have thoughts on moral subjects; we have imaginations drawn from the ideas already existing in the mind.

Ideal, Imaginary. The ideal is not directly opposed to, but abstracted from, the real: the imaginary, on the other hand, is directly opposed to the real; it is the unreal thing formed by the imagination. Ideal happiness is the happiness which is formed in the mind without having any direct and actual prototype in nature; the imaginary is that which is opposite to some positive existing reality. The pleasure which a lunatic derives from the conceit of being a king is altogether imaginary.

Idle, Lazy, Indolent. One is termed idle who will do nothing useful; one is lazy who will do nothing at all without great reluctance; one is indolent who does not care to do anything or set about anything.

To Illuminate, Illumine, Enlighten. We illuminate by means of artificial lights: the sun illuminates the world by its own light. Preaching and instruction enlighten the minds of men. Illumine is but a poetic variation of illuminate.

Imminent, Impending, Threatening. All these terms are used in regard to some evil that is exceedingly near: imminent conveys no idea of duration; impending excludes the idea of what is momentary. A person may be in imminent danger of losing his life in one instant, and the danger may be over the next instant; but an impending danger is that which has been long in existence and gradually approaching. A threatening evil gives intimations of its own approach: we perceive the threatening tempest in the blackness of the sky.

To Impair, Injure. To impair is a progressive mode of injuring; to injure is to do harm either by degrees or by an instantaneous act. Straining of the eyes impairs the sight, but a blow injures rather than impairs the eye.

Imperious, Lordly, Domineering, Overbearing. A person's temper or his tone is denominated imperious; his air or deportment is lordly; his tone is domineering. Overbearing is employed for men in the general relations of society, whether superiors or equals. A man of an imperious temper and some talent will frequently be so overbearing in the assemblies of his equals as to awe the rest into silence.

To Implicate, Involve. Implicate, from plico, to fold, denotes to fold into a thing; and involve, from volvo, to roll, signifies to roll into a thing: by this explanation we perceive that to implicate marks something less entangled than to involve; for that which is folded may be folded only once, but that which is rolled is turned many times. In application, therefore, to human affairs, people are said to be implicated who have taken ever so small a share in a transaction; but they are involved only when they are deeply concerned.

To Impugn, Attack. He who impugns may sometimes proceed insidiously and circuitously to undermine the faith of others; he who attacks always proceeds with more or less violence. When there are no arguments wherewith to impugn a doctrine, it is easy to attack it with ridicule and scurrility.

Inability, Disability. The inability lies in the nature of the thing, and is irremediable; the disability lies in the circumstances, and may sometimes be removed.

Inadvertency, Inattention, Oversight. Anyone may be guilty of inadvertencies, since the mind that is occupied with many subjects equally serious may be turned so steadily toward some that others may escape notice; but inattention, which designates a direct want of attention, is always a fault, and belongs only to the young, or to such as are thoughtless by nature. An oversight is properly a species of inadvertency, which arises from looking over, or passing by, a thing: we must be guarded against oversights in business, as their consequences may be serious.

Inclination, Tendency, Propensity, Proneness. All these terms are employed to designate the state of the will toward an object. Inclination denotes its first movement toward an object; tendency is a continued inclination; propensity denotes a still stronger leaning of the will; and proneness characterizes an habitual and fixed state of the will toward an object. Propensity and proneness both designate a downward direction, and consequently refer only to that which is bad and low: a person has a propensity to drinking, and a proneness to lying.

To Inclose, Include. A yard is inclosed by a wall; particular goods are included in a reckoning.

To Inconvenience, Annoy, Molest. We inconvenience in small matters, or by omitting such things as might be convenient; we annoy or molest by doing that which is positively painful: we are inconvenienced by a person's absence; we are annoyed by his presence if he renders himself offensive; we are molested by that which is weighty and oppressive. The rude insults of ill-disposed persons may molest.

To Increase, Grow. To increase is either a gradual or an instantaneous act; to grow is a gradual process: a stream increases by the addition of other waters; but if we say that the river or the stream grows, it is supposed to grow by some regular and continual process of receiving fresh water, as from the running in of different rivulets or smaller streams.

To be Indebted, Obliged. Indebted is more binding and positive than obliged: we are indebted to whoever confers an essential service; we are obliged to him who does us any service. A man is indebted to another for the preservation of his life; he is obliged to him for an ordinary act of civility.

Indifferent, Unconcerned, Regardless. Indifferent respects only the will, unconcerned either the will or the understanding, regardless the understanding only. We are indifferent about matters of minor consideration; we are unconcerned or regardless about serious matters that have remote consequences. An author will seldom be indifferent about the success of his work; he ought not to be unconcerned about the influence which his writings may have on the public, or regardless of the estimation in which his own character as a man may be held.

Indubitable, Unquestionable, Indisputable, Undeniable, Incontrovertible, Irrefragable. When a fact is supported by such evidence as admits of no kind of doubt, it is termed indubitable; when the truth of an assertion rests on the authority of a man whose character for integrity stands unimpeached, it is termed unquestionable authority; when a thing is believed to exist on the evidence of every man's senses, it is termed undeniable; when a sentiment has always been held as either true or false, without dispute, it is termed indisputable; when arguments have never been refuted in any degree, they are termed incontrovertible; when arguments have never been satisfactorily answered, they are termed irrefragable.

Indulgent, Fond. Indulgence lies more in forbearing from the exercise of authority; fondness in the outward behavior and endearments: they may both arise from an excess of kindness or love. An indulgent parent is seldom a prudent parent; a fond parent is foolishly tender and loving. All who have the care of young people should occasionally relax from the strictness of the disciplinarian and show an indulgence where a suitable opportunity offers. A fond mother takes away from the value of indulgences by an invariable compliance with the humors of her children.

Infamous, Scandalous. Infamous and scandalous are both said of that which is calculated to excite great displeasure in the minds of all who hear it, and to degrade the offenders in the general estimation. But the infamous seems to be that which produces greater publicity and more general reprehension than the scandalous, consequently it is more serious in its nature, and a greater violation of good morals.

To Inform, Instruct, Teach. To inform is the act of persons in all conditions; to instruct and teach are the acts of superiors, either on one ground or another: one informs by virtue of an accidental superiority or priority of knowledge; one instructs by virtue of superior knowledge or superior station; one teaches by virtue of superior knowledge, rather than of station.

Information, Intelligence, Notice, Advice. Information is knowledge communicated from one person to another; intelligence is the active principle of the mind by which one is made to understand; notice is that which brings a circumstance to our knowledge; advice signifies that which is made known.

Ingenuity, Wit. Ingenuity comprehends invention; wit is the fruit of the imagination, which forms new and sudden conceptions of things. One is ingenious in matters either of art or science; one is witty only in matters of sentiment.

Ingenuous, Ingenious. We love the ingenuous character on account of the qualities of his heart; we admire the ingenious man on account of the endowments of his mind. One is ingenuous as a man, or ingenious as an author. A man confesses an action ingenuously; he defends it ingeniously. The ingenuous man is frank, candid; the ingenious man is clever, skillful.

Injustice, Injury, Wrong. The violation of justice, or a breach of the rule of right, constitutes injustice; but the quantum of ill which falls on the person constitutes injury. A wrong partakes both of injustice and injury; it is, in fact, an injury done by one person to another in express violation of justice.

Inside, Interior. The term inside may be applied to bodies of any magnitude, small or large; interior is peculiarly appropriate to bodies of great magnitude. We may speak of the inside of a nutshell, but not of its interior. The interior of the church was beautifully decorated.

To Insinuate, Ingratiate, A person who insinuates adopts every art to steal into the good-will of another; but he who ingratiates adopts natural means to conciliate good-will.

Insinuation, Reflection. An insinuation always deals in half words; a reflection is commonly open. They are both leveled at the individual with no good intent: the insinuation is general, and may be employed to convey any unfavorable sentiment; the reflection is particular, and commonly passes between intimates and persons in close connection.

To Insist, Persist. Both these terms being derived from the Latin "sisto," to stand, express the idea of resting or keeping to a thing; but insist signifies to rest on a point, and persist signifies to keep on with a thing, to carry it through. We insist on a matter by maintaining it; we persist in a thing by continuing to do it.

Insolvency, Failure, Bankruptcy. Insolvency is a state; failure, an act flowing out of that state; and bankruptcy an effect of that act. Insolvency is a condition of not being able to pay one's debts; failure is a cessation of business, from the want of means to carry it on; and bankruptcy is a legal surrender of all one's remaining goods into the hands of one's creditors, in consequence of a real or supposed insolvency.

Instant, Moment. A dutiful child comes the instant he is called; a prudent person embraces the favorable moment. When they are both taken for the present time, instant expresses a much shorter space than moment.

Insurrection, Sedition, Rebellion, Revolt. There may be an insurrection against usurped power, which is always justifiable; but sedition and rebellion are leveled against power universally acknowledged to be legitimate. Insurrection is always open; it is a rising up of many in a mass, but it does not imply any concerted, or any specifically active measure. Rebellion is the consummation of sedition; the scheme of opposition which has been digested in secrecy breaks out into open hostilities, and becomes rebellion. Revolt is mostly taken either in an indifferent or a good sense for resisting a foreign dominion which has been imposed by force of arms.

Intellect, Genius, Talent. Intellect is the power or faculty of knowing, improved by cultivation and exercise; in this sense we speak of a man of intellect, or of a work that displays great intellect. Genius is the particular bent of the intellect which is born with a man, as a genius for poetry, painting, music, etc. Talent is a particular mode of intellect which qualifies its possessor to do some things better than others, as a talent for learning languages, a talent for the stage, etc.

Interchange, Reciprocity. Interchange is an act; reciprocity is an abstract property: by an interchange of sentiment, friendships are engendered; the reciprocity of good services is what renders them doubly acceptable to those who do them, and to those who receive them.

Interest, Concern. We have an interest in whatever touches or comes near to our feelings or our external circumstances; we have a concern in that which demands our attention. Interest is that which is agreeable; concern, on the other hand, is something involuntary or painful.

Interval, Respite. The term interval respects time only; respite includes the idea of ceasing from action for a time. Intervals of ease are a respite to one who is oppressed with labor.

Intervention, Interposition. The light of the moon is obstructed by the intervention of the clouds; the life of an individual is preserved by the interposition of a superior.

To Intrude, Obtrude. To intrude is to go into any society unasked and undesired; to obtrude is to put oneself in the way of another by joining the company and taking a part in the conversation without invitation or consent.

Invalid, Patient. An invalid is so denominated because he lacks his ordinary share of health and strength; the patient is one who is laboring under some bodily suffering.

To Invest, Endue, or Endow. One is invested with that which is external; one is endued with that which

is internal. We invest a person with an office or a dignity: a person is endued with good qualities. Endow is but a variation of endue, and yet it seems to have acquired a distinct office: we may say that a person is endued or endowed with a good understanding; but as an act of the imagination endow is not to be substituted for endue, for we do not say that it endows but endues things with properties.

Irrational, Foolish, Absurd, Preposterous. Irrational is applicable more frequently to the thing than to the person, to the principle than to the practice. Foolish, on the contrary, is commonly applicable to the person as well as to the thing, to the practice rather than to the principle; absurd is applied to anything, however trivial, which in the smallest degree offends our understanding: the conduct of children is therefore often foolish, but not absurd and preposterous. It is absurd for a man to persuade another to do that which he in like circumstances would object to do himself; it is preposterous for a man to expose himself to the ridicule of others, and then be angry with those who will not treat him respectfully.

Irreligious, Profane, Impious. All men who are not positively actuated by principles of religion are irreligious. Profanity and impiety are, however, of a still more heinous nature; they consist not in the mere absence of regard for religion, but in a positive contempt for it and open outrage against its laws. The profane man treats what is sacred as if it were profane; the impious man is directly opposed to the pious man: the former is filled with defiance and rebellion against his Maker; the latter is filled with love and fear.

Jealousy, Envy, Suspicion. We are jealous of what is our own; we are envious of what is another's. Jealousy fears to lose what it has; envy is pained at seeing others have that which it wants for itself. Suspicion denotes an apprehension of injury, has more of distrust in it than jealousy; the suspicious man is altogether fearful of the intentions of another.

Journey, Travel, Voyage. Journey signifies the course that is taken in the space of a day, or, in general, any comparatively short passage from one place to another. Travel signifies such a course or passage as requires labor, and causes fatigue; in general, any long course. Voyage is now confined to passages by sea.

Joy, Gladness, Mirth. What creates joy and gladness is of a permanent nature; that which creates mirth is temporary: joy is the most vivid sensation in the soul; gladness is the same in quality, but inferior in degree. Joy is awakened in the mind by the most important events in life.

Judgment, Discretion, Prudence. Judgment is conclusive; it decides by positive inference; it enables a person to discover the truth. Discretion is intuitive; it discerns or perceives what is in all probability right. A person who exercises prudence does not inconsiderately expose himself to danger: a measure is prudent that guards against the chances of evil; the impetuosity of youth naturally impels them to be imprudent.

Justness, Correctness. We estimate the value of remarks by their justness, that is, by their accordance to certain admitted principles. Correctness of outline is of the first importance in drawing; correctness of dates enhances the value of a history.

To Keep, Preserve, Save. The idea of having in one's possession is common to all these terms, which is, however, the simple meaning of keep. To preserve signifies to keep with care, and free from all injury; to save, from safe, is to keep laid up in a safe place, and free from destruction.

Keeping, Custody. The keeping amounts to little more than having purposely in one's possession; but custody is a particular kind of keeping, for the purpose of preventing an escape. Inanimate objects may be in one's keeping; but a prisoner, or that which is in danger of getting away, is placed in custody.

To Know, Be Acquainted With. We may know things or persons in various ways; we may know them by name only, or we may know their internal properties or characters, etc. One is acquainted with either a person or a thing only in a direct manner, and by an immediate intercourse in one's own person.

Knowledge, Science, Learning, Erudition. Knowledge is a general term which simply implies the thing known; science is the department of systematized knowledge; learning is that kind of knowledge which one derives from schools, or through the medium of personal instruction; erudition is scholastic knowledge obtained by profound research.

Land, Country. The term, land, in its proper sense, excludes the idea of habitation; the term country excludes that of the earth, or the parts of which it is composed; hence we speak of the land, as rich or poor, according to what it yields; of a country, as rich or poor, according to what its inhabitants possess.

Large, Wide, Broad. A field is said to be wide both from its figure and from the extent of its space in the cross directions. In like manner, a house is large from its extent in all directions; it is said to be wide from the extent which it runs in front. What is broad is in sense, and mostly in application, wide. Large is opposed to small; wide to close; broad to narrow.

Laudable, Praiseworthy, Commendable. Things are laudable in themselves; they are praiseworthy or commendable in this or that person: that which is laudable is entitled to encouragement and general approbation. An honest endeavor to be useful to one's family or oneself is at all times laudable. What is praiseworthy obtains the respect of all men.

To Lay or Take Hold Of, Catch, Seize, Snatch. To lay or take hold of is here the generic expression; it denotes simply getting into one's possession, which is the common idea in the signification of all these terms, which differ in regard to the motion in which the action is performed. To catch is to lay hold of with an effort; to seize is to lay hold of with violence; to snatch is to lay hold of by a sudden effort.

To Lead, Conduct, Guide. One leads by helping a person onward in any manner, as to lead a child by the hand; conduct and guide are different modes of leading, the former by virtue of one's office or authority, the latter by one's knowledge or power, as to conduct an army, to guide a traveler in an unknown country.

To Lean, Incline, Bend. In the proper sense, lean and incline are both said of the position of bodies; bend is said of the shape of bodies. That which leans rests on one side, or in a sideward direction; that which inclines, leans or turns only in a slight degree; that which bends, forms a curvature.

To Leave, Quit, Relinquish. We leave that to which we may intend to return; we quit that to which we return no more; we relinquish it unwillingly; we leave persons or things; we quit and relinquish things only.

Leavings, Remains. Leavings are the consequence of a voluntary act; they signify what is left: remains are what follow in the course of things; they are the residue.

Letter, Epistle. Letter is a term altogether familiar; it may be used for whatever is written by one friend to another, even those which were written by the ancients, as the letters of Cicero, Pliny, and Seneca. In strict propriety epistle is more formal than letter. An epistle is a written message or communication usually of serious import; it is usually applied to the ancient letters of sacred character or of literary excellence, as the epistles of St. Paul.

To Lie, Lay. To lie is neuter, and designates a state. To lay is active, and denotes an action on an object; it is properly to cause to lie. A thing lies on the table; some one lays it on the table.

To Lift, Heave, Hoist. We lift with or without an effort; we heave and hoist always with an effort. We lift a child up to let him see anything more distinctly; workmen heave the stones or beams which are used in a building; sailors hoist the long-boat into the water.

Likeness, Resemblance, Similarity, or Similitude. Likeness respects either external or internal properties; resemblance respects only the external properties; similarity respects the circumstances or properties. We speak of a likeness between two persons; of a resemblance in the cast of the eye; of a similarity in age and disposition. Similitude is a higher term than similarity when used in a moral sense.

To Linger, Tarry, Loiter, Lag, Saunter. To linger is to stop altogether, or to move but slowly forward; to tarry is properly to suspend one's movements: the former proceeds from reluctance to leave the spot on which we stand; the latter from motives of discretion. To loiter is to move slowly and reluctantly. To lag is to move more slowly than others. To saunter is altogether the act of an idler; those who have no object in moving either backward or forward will saunter if they move at all.

Little, Small, Diminutive. What is little is so in the ordinary sense in respect to size; it is properly opposed to great: the small is that which is less than others in point of bulk; it is opposed to the large. The diminutive is that which is less than it ought to be; as, a person is said to be diminutive in stature who is below the ordinary stature.

Living, Benefice. We speak of a living as a resource immediately derived from the parish, in distinction from a curacy, which is derived from an individual; we speak of a benefice in respect to the terms by which it is held, according to the ecclesiastical law.

Lodging, Apartment. A lodging, or a place to

...two, in comprehends single rooms or many rooms, or in fact any place which can be made to serve the purpose apartment respects only suites of rooms.

Look, Glance. We speak of taking a look, or casting a glance.

Look, Appearance. The look of a thing respects the impression it makes on the senses; that is, the manner in which it meets the appearance implies the action, or is the thing itself.

To Lose, Miss. What is lost is supposed to be entirely, and unintentionally given; but what is missed may be only out of sight or not at hand at the time when it is wanted.

Madness, Frenzy, Rage, Fury. Madness is a confirmed derangement in the organ of thought; frenzy is only a temporary derangement from the violence of any disease or pain or any other cause. Rage refers more immediately to the agitation that exists within the mind; fury refers to that which shows itself outwardly; a person endeavors to stifle his rage, but his fury breaks out into some external mark of violence.

Magnificence, Splendor, Pomp. Magnificence lies not only in the manner and the extent of the objects presented, but in the degree of richness as to their coloring and quality. Splendor is but a characteristic of magnificence, attached to such objects as strike the eye by the quantity of light, or by the variety and contrasts of color. Pomp applies to objects of show and ceremony.

To Make, Form, Produce, Create. To make is the most general and unmeaning term; to form signifies to give a form to a thing, that is, to make it after a given form; to produce is to bring forth into the light, to call into existence; to create is to bring into existence by an absolute exercise of power.

Malevolence, Maliciousness, Malignity. Malevolence has a deep root in the heart, and is a settled part of the character; we contemplate the person malevolent, as it designates the ruling temper of his mind. Maliciousness may be opposed as an epithet to particular parts of a man's character or conduct; one may have a malicious joy or pursuance in seeing the distresses of another. Malignity is not so often employed to characterize the person as the thing; the malignity of a design is estimated by the degree of mischief which was intended to be done.

Manly, Manful. Manly, or like a man, is opposed to juvenile and of course applied properly to youths; but manful, or full of manhood, is opposed to effeminate, and is applicable more properly to grown persons.

Manners, Morals. Manners in an improper sense are the mere forms of acting with others and toward others; morals include the important points of life. By an attention to good manners we render ourselves good companions; by an observance of good morals we become good members of society.

Mark, Trace, Vestige, Footstep, Track. The mark is said of a fresh and uninterrupted line; the trace is said of that which is thrown by time; a carriage in driving along the sand leaves marks of the wheels, but in a short time all traces of its having been there will be lost. The vestige is a species of mark or trace caused by the feet of men or beasts in the same thing, by the works of human industry, as the vestiges of buildings. Footstep is employed only for the steps of an individual. The track is made by the steps of many.

Martial, Warlike, Military, Soldier-like. We speak of martial array, martial preparations, martial law, a court martial, but of a warlike nation, meaning a nation which is fond of war, a warlike spirit or temper, and a warlike appearance, inasmuch as the temper is visible in the air and carriage of a man. We speak of military or destructive, naval, as military expeditions, military movements, and the like. The conduct of an individual is soldier-like or otherwise.

Meeting, Interview. Meeting is the act of coming into the company of another; interview is a personal conference, usually a formal meeting for consultation, as an interview with the president. A meeting is an ordinary occurrence, and its purpose familiar; meetings are daily taking place between friends.

Memory, Remembrance, Recollection, Reminiscence. Memory is the power of recalling images once made on the mind; remembrance is the exercise of memory as a conscious agent, and may be the effect of repetition or habit; recollection carries us back to distant periods. Reminiscence is altogether an abstract exercise of the memory, which is employed on purely intellectual ideas in distinction from those which are awakened by sensible objects; the mathematician makes use of reminiscence in deducing unknown truths from those which he already knows.

Mercantile, Commercial. Mercantile, from merchandise, respects the actual transaction of business or a transfer of merchandise by sale or purchase. Commercial comprehends the theory and practice of exchange, hence we speak in a peculiar manner of a mercantile house, a mercantile situation, and the like; but of a commercial education, a commercial people, and the like.

Minister, Agent. The minister gives his counsel, and exerts his intellectual powers in the service of another; but the agent executes the orders or commissions given him. A minister is employed by government in political affairs; an agent is employed by individuals in commercial and pecuniary affairs.

To Mix, Mingle, Blend, Confound. Mix is here a general and indefinite term, signifying simply to put together; but we may mix two or several things. We mingle several objects: things are mixed so as to lose all distinction; but they may be mingled and yet retain a distinction. To blend is only partially to mix, as colors blend which fall into each other. To confound is to mix in a wrong way, as objects of sight are confounded when they are erroneously taken to be joined.

Modesty, Bashfulness, Diffidence. Modesty is a proper distrust of ourselves: bashfulness is a state of feeling which betrays itself in a downcast look or a timid air; diffidence is a culpable distrust. Diffidence altogether unmans a person, and disqualifies him for his duty.

Moisture, Humidity, Dampness. Moisture is used in general to express any small degree of infusion of a liquid into a body; humidity is employed scientifically to describe the state of having any portion of such liquid: hence we speak of the moisture of a table, the moisture of paper, but of the humidity of the air, or of a wall that has contracted moisture of itself. Dampness is that form of moisture that arises from the gradual contraction of a liquid in bodies capable of retaining it: in this manner a cellar is damp.

Money, Cash. Money is applied to everything which serves as a circulating medium; cash is, in a strict sense, used for coin only.

Motion, Movement. We speak of a state of motion as opposed to a state of rest, of perpetual motion, the laws of motion, and the like. On the other hand, we say, to make a movement when speaking of an army, a general movement when speaking of an assembly.

Moving, Affecting, Pathetic. The good or bad feelings may be moved; the tender feelings only are affected. A field of battle is a moving spectacle; the death of a friend is an affecting spectacle. The pathetic applies only to what is addressed to the heart; hence an address is pathetic.

Mutual. This word is often confounded with common. Mutual is used in referring to a thing that belongs to only two people, as, John and I have a mutual dislike; he dislikes me and I dislike him. We cannot say John and I have a mutual dislike for Mary. Common is used with reference to a third object or person, as, Mary is our common friend; she is your and my friend. It is wrong to say Mary is our mutual friend. Dickens's use of this word in "Our Mutual Friend" is condemned by many good authorities.

To Name, Call. Name is employed for distinguishing or addressing one by name. To call signifies properly to address one loudly, consequently we may name without calling, when we only mention a name in conversation; and we may call without naming.

Native, Natural. Of a person we may say that his worth is native, to designate that it is some valuable property which is born with him; that it is natural, as opposed to that which is acquired or otherwise.

Necessity, Necessary. Necessity is the mode or state of circumstances, or the thing which circumstances render necessary; the necessary is that which is absolutely and unconditionally indispensable. Habit and desire create necessities; nature only requires necessaries.

To Neglect, Omit. To neglect is to disregard, to treat with little or no attention or respect; to omit is to leave out, to leave unnoticed or undone. We neglect an opportunity, we neglect the means, the time, the use, and the like; we omit a word, a sentence, a figure, and the line may be omitted or otherwise, as convenience requires.

Neighborhood, Vicinity. Neighborhood is employed in reference to the inhabitants, or in regard to inhabited places, to denote nearness of persons to each other or to objects in general; but vicinity is employed to denote nearness of one object to another, whether person or thing.

New, Novel, Modern, Fresh, Recent. All these epithets are applied to what has not long existed. New expresses this idea simply without any qualifications; novel is something strange or unexpected; the modern is the thing of to-day, as distinguished from that which

existed in former times; the fresh is that which is so new as not to be the worse for use, or that which has not been before used or employed; the recent is that which is so new as to appear as if it were just made or done.

News, Tidings. News is unexpected; it serves to gratify idle curiosity: tidings are expected; they serve to allay anxiety. In time of war the public is eager after news; and they who have relatives in the army are anxious to have tidings of them.

To Nominate, Name. To nominate and to name are both to mention by name: the former is to mention for a specific purpose; the latter is to mention for general purposes. Persons only are nominated; things as well as persons are named: one nominates a person in order to propose him, or appoint him, to an office; but one names a person casually, in the course of conversation, or one names him in order to make some inquiry respecting him.

To Notice, Remark, Observe. To notice is a more cursory action than to remark; we may notice a thing by a single glance, or on merely turning the head. To remark supposes a reaction of the mind on an object. We observe things in order to judge of or draw conclusions from them, as to observe the condition of the weather. We remark things as matters of fact, as to remark the manner of a speaker.

Numeral, Numerical. Numeral, or belonging to number, is applied to a class of words in grammar, as a numeral adjective or a numeral noun; numerical, or containing number, is applied to whatever other objects respect number, as a numerical difference, where there is a difference between any two numbers, or a difference expressed by numbers.

Obedient, Submissive, Obsequious. One is obedient to command, submissive to power or the will, obsequious to persons. Obedience is always taken in a good sense.

To Object, Oppose. To object to a thing is to propose or start something against it; but to oppose it is to set oneself up steadily against it.

Obnoxious, Offensive. In the sense of giving offense, obnoxious implies as much as hateful, offensive little more than displeasing. A man is obnoxious to a party, whose interest or principles he is opposed to; he may be offensive to an individual merely on account of his manners or on account of any particular actions.

To Observe, Watch. We observe a thing in order to draw an inference from it; we watch anything in order to discover what may happen: we observe with coolness; we watch with eagerness.

Occasion, Opportunity. The occasion is that which determines our conduct, and leaves us no choice; it amounts to a degree of necessity. The opportunity is that which invites to action; it tempts us to embrace the moment for taking the step.

Occasional, Casual. Occasional carries with it more the idea of unfrequency, and casual that of unfixedness, or the absence of all design. Our acts of charity may be occasional; but they ought not to be casual.

Offender, Delinquent. Those who go into a prohibited place are offenders; those who stay away when they ought to go are delinquents.

Offspring, Progeny, Issue. Offspring is a familiar term applicable to one or many children; progeny is employed only as a collective noun for a number; issue is used in an indefinite manner without particular regard to number. When we speak of the children themselves we denominate them the offspring; when we speak of the parents, we denominate the children their progeny. The issue is said only in regard to a man that is deceased; his property descends to his male issue in a direct line.

Omen, Prognostic, Presage. The omen and prognostic are both drawn from external objects; the presage is drawn from one's own feelings. The omen is drawn from objects that have no necessary connection with the thing they are made to represent; it is the fruit of the imagination, and rests on superstition. The prognostic, on the contrary, is a sign which in some degree partakes of the quality of the thing denoted.

Opinionated or Egotistic, Conceited, Egotistical. An opinionated man is not only fond of his own opinion, but full of his own opinion; he has an opinion on everything, which is the best possible opinion. A conceited man has a conceit or an idle fond opinion of his own talent; it is not only high in competition with others, but it is so high as to be set above others. The egotistical man makes himself the darling object of his own contemplation; he admires and loves himself to that degree that he can talk and think of nothing else.

Option, Choice. The option or the power of choosing is given; the choice itself is made: hence we say a thing is at a person's option, or it is his own option, or the option is left to him, in order to designate his freedom of choice more strongly than is expressed by the word choice itself.

Orifice, Perforation. These terms are both scientifically employed to designate certain cavities in the human body; but the former respects that which is natural, the latter that which is artificial. All the vessels of the human body have their orifices, which are so constructed as to open or close of themselves. Surgeons frequently make perforations into the bones.

Outward, External, Exterior. Outward, or inclined to the out, after the manner of the out, indefinitely describes the situation; external is employed only in regard to such objects as are conceived to be independent of man as a thinking being: hence, we may speak of the outward part of a building, of a board, and the like; but of external objects acting on the mind, or of an external agency. When we speak of anything which has two coats, it is usual to designate the outermost by the name of the exterior.

To Paint, Depict. To paint is employed either literally to represent figures on paper, or to represent circumstances and events by means of words; to depict is used only in this latter sense, but the former word expresses a greater exercise of the imagination than the latter. It is the art of the poet to paint nature in lively colors; it is the art of the historian or the narrator to depict a real scene of misery in strong colors.

Part, Piece, Patch. Things may be divided into parts without any express separation; but when divided into pieces they are actually cut asunder: hence we may speak of a loaf as divided into twelve parts when it is conceived only to be so; and divided into twelve pieces when it is really so. The patch is that which is always broken and disjointed, a something imperfect: many things may be formed out of a piece; but the patch only serves to fill up a chasm.

Particular, Individual. Particular is much more specific than individual: the particular confines us to one object only of many; the individual may be said of any one object among many.

Peace, Quiet, Calm, Tranquillity. Peace implies an exemption from public or private broils; quiet implies a freedom from noise or interruption. Calm is a form of quiet, which respects objects in the natural or the moral world; it indicates the absence of violent motion as well as violent noise; it is that state which more immediately succeeds a state of agitation. Tranquillity expresses the situation as it exists in the present moment, independently of what goes before or after; it is sometimes applicable to society, sometimes to natural objects, and sometimes to the mind.

Pellucid, Transparent. Pellucid is said of that which is previous to the light, or of that into which the eye can penetrate; transparent is said of that which is bright throughout. A stream is pellucid; it admits of the light so as to reflect objects but it is not transparent to the eye.

Penurious, Economical, Saving, Sparing, Thrifty, Niggardly. To be economical is a virtue in those who have but narrow means. He who is saving when young will be avaricious when old. To be sparing is to use frugally or stintingly; thrifty suggests careful management; penurious means miserly or sparing in regard to the use of money; niggardly is spending or letting go in the smallest possible quantities.

To Perpetrate, Commit. One may commit offenses of various degrees and magnitude; but one perpetrates crimes only, and those of the more heinous kind.

Pillar, Column. The word pillar is the most general in its application to any structure, whether rude or otherwise; the term column, on the other hand, is applied to whatever is ornamental, as the Grecian order of columns.

Piteous, Doleful, Woeful, Rueful. Piteous is applicable to one's external expression of bodily or mental pain; a child makes piteous lamentations when it suffers from hunger, or has lost its way. Doleful applies to those sounds which convey the idea of pain; there is something doleful in the tolling of a funeral bell or in the sound of a muffled drum. Woeful applies to the circumstances and situations of men; a scene is woeful in which we witness a large family of young children suffering under the complicated horrors of sickness and want. Rueful applies to the outward indications of inward sorrow depicted in the looks or countenance.

Pity, Compassion. Pity is excited principally by the weakness or degraded condition of the subject; compassion by his uncontrollable and inevitable misfortunes.

Playful, Gamesome, Sportive. Playful is applicable to youth or childhood, when there is the greatest disposition to play. Gamesome and sportive are applied to persons of maturer years, the former in the bad sense, and the latter in the good sense. A person may

be said to be gamesome who gives in to idle jests, or sportive who indulges in harmless sport.

To Poise, Balance. To poise is properly to keep the weight from pressing on either side; to balance is to adjust or equalize two forces. The idea of bringing into an equilibrium is common to both terms. A thing is poised as respects itself; it is balanced as respects other things.

Poison, Venom. A poison must be administered inwardly to have its effect; a venom will act by an external application: the juice of the hellebore is a poison; the tongue of the adder and the tooth of the viper contain venom.

Politeness, Polish, Refinement. Politeness and polish do not extend to anything but externals; refinement applies as much to the mind as to the body. Rules of conduct, and contact with good society, will make a man polite; lessons in dancing will serve to give a polish; refined manners or principles will naturally arise out of refinement in men.

Position, Posture. The position is that in which a body is placed in respect to other bodies, as the standing with one's face or back to an object is a position; but a posture is that position which a body assumes in respect to itself, as a sitting or reclining posture.

To Pour, Spill, Shed. We pour with design; we spill by accident: we pour water over a plant or a bed; we spill it on the ground. Shed refers to great quantities.

Powerful, Potent, Mighty. Powerful is applicable to strength as well as to power: a powerful man is one who by size and make can easily overpower another; a powerful person is one who has much in his power. Potent is used only in this latter sense, in which it expresses a larger extent of power: a potent monarch is much more than a powerful prince. Mighty expresses a still higher degree of power; might is power unlimited by any consideration or circumstance. A giant is called mighty in the physical sense; genius which takes everything within its grasp is said to be mighty.

To Press, Squeeze, Pinch, Gripe. The forcible action of one body on another is included in all these terms. In the word press this is the only idea; the rest differ in the circumstances. We may press with the foot, the hand, or any particular limb. One squeezes commonly with the hand. One pinches either with the fingers or with an instrument constructed in a similar form; one gripes with teeth, claws, or any instrument that can gain hold of the object.

Presumptive, Presumptuous, Presuming. A presumptive heir is one presumed or expected to be heir; presumptive evidence is evidence founded on some presumption or supposition; so likewise presumptive reasoning. But a presumptuous man, a presumptuous thought, a presumptuous behavior, all indicate an overconfidence in regard to one's own powers; a man is presuming inasmuch as he is disposed to take unwarranted liberties.

To Prevent, Anticipate. To prevent is literally to come beforehand, and anticipate to take beforehand: the former is employed for actual occurrences; the latter as much for calculations as for actions. To prevent is the act of a person toward other persons or things; to anticipate is the act of a being either toward himself or another. In this sense God is said to prevent man by interposing so as to direct his purposes to the right object or in the right direction.

Previous, Preliminary, Preparatory, Introductory. Previous applies to actions and proceedings in general, as a previous question, a previous inquiry, a previous determination. Preliminary is employed only for matters of contract: a preliminary article, a preliminary condition, are what precede the final settlement of any question. Preparatory is employed for matters of arrangement: the disposing of men in battle is preparatory to an engagement. Introductory is employed for matters of science or discussion: remarks are introductory to the main subject in question.

Principle, Motive. The principle lies in conscious and unconscious agents; the motive only in conscious agents: all nature is guided by certain principles; man is put into action by certain motives.

Privacy, Retirement, Seclusion. Privacy is opposed to publicity; he who lives in privacy is one who follows no public line, who lives so as to be little known: retirement is opposed to openness or freedom of access; he who lives in retirement withdraws from the society of others, he lives by himself. Seclusion is the excess of retirement; he who lives in seclusion bars all access to himself, he shuts himself from the world.

Proceeding, Transaction. Proceeding signifies literally going before; and transaction the thing carried through: the former implies, therefore, something that is going forward; the latter something that is already done. We are witnesses to the whole proceeding; we inquire into the whole transaction.

Production, Performance, Work. The term production cannot be employed without specifying or referring to the source from which it is brought forth, or the means by which it is brought forth, as the production of art, the production of the inventive faculty. A performance cannot be spoken of without referring to the individual by whom it has been executed; hence we speak of this or that person's performance. When we wish to specify anything that results from work or labor, it is termed a work: in this manner we speak either of the work of one's hands, or of a work of the imagination.

Profligate, Abandoned, Reprobate. A profligate man has lost all by his vices, and consequently to his vices alone he looks for regaining the goods or the fortune which he has squandered; as he has nothing to lose, and everything to gain in his own estimation, by pursuing the career of his vices, he surpasses all others in his unprincipled conduct. An abandoned man gives up to his passions, which, having the entire sway over him, naturally impel him to every excess. The reprobate man is one who has been reproved until he becomes insensible to reproof, and is given up to the malignity of his own passions.

Prominent, Conspicuous. What is prominent is, in general, on that very account conspicuous; but many things may be conspicuous which are not expressly prominent. Nothing is prominent except that which projects beyond a certain line; everything is conspicuous which may be seen by many.

Promise, Engagement, Word. In promises the faith of an individual is admitted upon his word, and built upon as if it were a deed; in engagements the intentions of an individual for the future are all that are either implied or understood. As a promise and an engagement can be made only by words, word is often used for either, or for both, as the case requires.

Proportionate, Commensurate, Adequate. Proportionate is here a term of general use; the others are particular terms, employed in a similar sense, in regard to particular objects. That is proportionate which rises as a thing rises, and falls as a thing falls; that is commensurate which is made to rise to the same measure or degree; that is adequate which is sufficient to meet the requirements.

To Provide, Procure, Furnish, Supply. Provide and procure are both actions that have a special reference to the future; furnish and supply are employed for that which is of immediate concern. One provides a dinner in the contemplation that some persons are coming to partake of it; one procures help in the contemplation that it may be wanted. We furnish a room, as we find it necessary for the present purpose. One supplies a family with any article of domestic use.

To Publish, Promulgate, Divulge, Reveal, Disclose. To publish is the most general of these terms, conveying in its extended sense the idea of making known; it is in many respects indefinite: we may publish to many or few. To promulgate is always to make known to many. We may publish that which is a domestic or a national concern; we promulgate properly only that which is of general interest; we divulge things intended to be kept secret; we commonly divulge the secrets or the crimes of another; we reveal the secret or the mystery of a transaction; we disclose from beginning to end an affair which has never before been known or accounted for.

To Put, Place, Lay, Set. To put is a general term meaning to bring to a position: we may put a thing into one's room, one's desk, one's pocket, and the like. To place is to put in a specific manner, and for a specific purpose: one places a book on a shelf. To lay and to set are still more specific than place, the former being applied only to such things as can be made to lie, and set only to such as can be made to stand: a book may be said to be laid on the table when placed in a downward position, and set when placed on one end.

Qualification, Accomplishment. The qualification serves the purpose of utility; the accomplishment serves to adorn: by the first we are enabled to make ourselves useful; by the second we are enabled to make ourselves agreeable.

Quarrel, Broil, Feud. Quarrel is the general and ordinary term; broil and feud, including active hostility, are particular terms. The idea of a variance between two or more persons is common to these terms; but the former respects the complaints and charges which are reciprocally made. Broil respects the confusion and the entanglement which arise from a contention and a collision of interests; feud respects the hostilities which arise out of the variance.

Question, Query. Questions and queries are both put for the sake of obtaining an answer. A question may be for a reasonable or an unreasonable cause; a query is mostly a rational question: idlers may put questions from mere curiosity; learned men put queries for the sake of information.

Radiance, Brilliancy. Radiance denotes the emission of rays, and is, therefore, peculiarly applicable to bodies naturally luminous, like the heavenly bodies; brilliancy denotes the whole body of light emitted, and may, therefore, be applied equally to natural and artificial light.

Rapacious, Ravenous, Voracious. Rapacious is the quality peculiar to beasts of prey, or to what is like beasts of prey. A lion is rapacious when it seizes on its prey; it is ravenous in the act of consuming it. The word ravenous respects the haste with which one eats; the word voracious respects the quantity which one consumes. A ravenous person is loath to wait for the dressing of his food; he consumes it without any preparation: a voracious person not only eats in haste, but he consumes great quantities, and continues to do so for a long time.

Rashness, Temerity, Haste, Precipitancy. Rashness is a general and indefinite term, in the signification of which an improper celerity is the leading idea: in the signification of temerity, the leading idea is want of consideration, springing mostly from an overweening confidence, or a presumption of character. Haste and precipitancy are but modes or characteristics of rashness, and consequently employed only in particular cases, as haste in regard to our movements, and precipitancy in regard to our measures.

Ready, Apt, Prompt. Ready is in general applied to that which has been intentionally prepared for a given purpose; prompt is applied to that which is at hand so as to answer the immediate purpose; apt is applied to that which is fit, or from its nature has a tendency to produce effects.

To Reclaim, Reform. Reclaim signifies to call back to its right place that which has gone astray; reform signifies to form anew that which has changed its form: they are allied only in their application to the moral character. A man is reclaimed from his vicious courses by the force of advice or exhortation; he may be reformed by various means, external or internal.

To Recline, Repose. When we recline we put ourselves into a particular position; but when we repose we put ourselves into that position which will be easiest.

To Recover, Retrieve, Repair, Recruit. We repair that which has been injured; we recruit that which has been diminished; we recover property from those who wish to deprive us of it; we retrieve our misfortunes, or our lost reputation.

Recovery, Restoration. Recovery (v. to recover) is the regaining of any object which has been lost or missing; restoration is the getting back what has been taken away, or that of which one has been deprived. What is recovered may be recovered with or without the use of means; the restoration is effected by foreign agency.

Reform, Reformation. Whatever undergoes such a change as to give a new form to an object occasions a reform; when such a change is produced in the moral character, it is termed a reformation: the concerns of a state require occasional reform; those of an individual require reformation.

To Refuse, Decline, Reject, Repel, Rebuff. We refuse what is asked of us, for want of inclination to comply; we decline what is proposed from motives of discretion; we reject what is offered to us, because it does not fall in with our views. To repel is to reject with violence; to rebuff is to refuse with contempt, or with what may be considered as such.

To Relax, Remit. In regard to our attempts to act, we may speak of relaxing our endeavors, and remitting our labors or exertions; in regard to our dealings with others, we may speak of relaxing in discipline, relaxing in the severity or strictness of our conduct, and of remitting a punishment or a sentence.

To Repeat, Recite, Rehearse, Recapitulate. To repeat is to say or utter again; to recite is to repeat in a formal manner; to rehearse is to repeat or recite by way of preparation; to recapitulate is to repeat the chapters or principal heads of any discourse.

To Repress, Restrain, Suppress. To repress is to press back or down; to restrain is to strain back or down: the former is the general, the latter the specific term. We always repress when we restrain, but not vice versa. Repress is used mostly for pressing down, so as to keep that inward which wants to make its appearance. Restraint is an habitual repression by which a thing is kept down. To suppress, which is to keep under, or keep from appearing or being perceptible, is also used in respect to ourselves or others, as to repress one's feelings, to suppress laughter, sighs, etc.

Reproach, Contumely, Obloquy. The idea of contemptuous or angry treatment of others is common to all these terms; reproach is the general term, contumely and obloquy are the particular terms. Reproach is either deserved or undeserved; the name of Puritan is applied as a term of reproach to such as affect greater purity than others. Contumely is always undeserved; it is the insolent resistance to authority. Obloquy is always supposed to be deserved; it is applicable to those whose conduct has rendered them objects of general censure, and whose name, therefore, has almost become a reproach.

To Restore, Return, Repay. We restore upon a principle of equity; we return upon a principle of justice and honor; we repay upon a principle of undeniable right. We cannot always claim that which ought to be restored; but we can not only claim but enforce the claim in regard to what is to be returned or repaid.

To Retard, Hinder. We retard or make slow the progress of any scheme toward completion; we hinder or keep back the person who is completing the scheme: we often retard a person, therefore, by hindering his progress; but we frequently hinder a person without expressly retarding him.

Right, Claim, Privilege. Right, in its full sense, is altogether an abstract thing which is independent of human laws and regulations; claims and privileges are altogether connected with the establishments of civil society. We have often a claim to a thing which is not in our power to substantiate; and, on the other hand, claims are set up in cases which are totally unfounded on any right. Privileges are rights granted to individuals, depending either on the will of the grantor, or on the circumstances of the receiver, or on both; privileges are, therefore, partial rights transferable at the discretion of persons individually or collectively.

Royal, Regal, Kingly. Royal signifies belonging to a king, in its most general sense; regal signifies appertaining to a king, in its particular application; kingly properly signifies like a king. A royal carriage, a royal residence, royal authority, all designate the general and ordinary appurtenances of a king. Regal government, regal state, regal power, denote the peculiar properties of a king; kingly always implies what is becoming a king, or after the manner of a king: a kingly crown is such as a king ought to wear.

Rural, Rustic. Rural applies to all country objects except man; it is, therefore, always connected with the charms of nature: rustic applies only to persons, or to what is personal, with reference to the country; it is, therefore, generally associated with the want of culture.

Safe, Secure. We may be safe without using any particular measures; but none can reckon on any degree of security without great precaution. A person may be very safe on the top of a coach; but if he wish to be secure from falling off, he must be fastened.

Salute, Salutation, Greeting. A salute may consist either of a word or an action; salutations pass from one friend to another: the salute may be either direct or indirect; the salutation is always direct and personal. Guns are fired by way of a salute. Bows are given in the way of a salutation. Greeting is frequently a particular mode of salutation adopted on extraordinary occasions, indicative of great joy or satisfaction in those who greet.

To Satisfy, Please, Gratify. What satisfies is not always calculated to please; nor is that which pleases that which will always satisfy: plain food satisfies a hungry person; it does not please him when he is not hungry. To gratify is to please in a high degree, to produce a vivid pleasure: we may be pleased with trifles; but we are commonly gratified with such things as act strongly either on the senses or the affections.

Seaman, Waterman, Sailor, Mariner. All these words denote persons occupied in navigation: the seaman, as the word implies, follows his business on the sea; the waterman is one who gets his livelihood on fresh water. The sailor and the mariner are both specific terms to designate the seaman: every sailor and every mariner is a seaman, although every seaman is not a sailor or a mariner. The former is one who is employed about the laborious part of the vessel; the latter is one who traverses the ocean to and fro, who is attached to the water, and passes his life upon it.

Secret, Hidden, Latent, Occult, Mysterious. What is secret is known to some one; what is hidden may be known to no one: it rests in the breast of an individual to keep a thing secret; it depends on the course of things if anything remains hidden. The latent is the secret or the concealed, in cases where it ought to be

open: a latent motive is that which a person intentionally, though not justifiably, keeps to himself. An occult science is one that is hidden from the view of persons in general, which is attainable by but few; occult causes or qualities are those which lie too remote to be discovered by the inquirer. The operations of Providence are said to be mysterious, as they are altogether past our finding out.

To See, Perceive, Observe. The eye sees when the mind is absent; the mind and the eye or other senses perceive in conjunction: hence, we may say that a person sees, but does not perceive. We observe not merely by a simple act of the mind, but by its positive and fixed exertion.

To Seem, Appear. Seem is said of that which is dubious, contingent, or future; appear, of that which is actual, positive, and past. A thing seems strange which we are led to conclude as strange from what we see of it; a thing appears clear when we have a clear conception of it.

Sensualist, Voluptuary, Epicure. The sensualist lives for the indulgence of his senses; the voluptuary is devoted to his pleasures, and, as far as these pleasures are the pleasures of sense, the voluptuary is a sensualist. The epicure is one who makes the pleasures of sense his god, and in this sense he is a sensualist and a voluptuary. In the application of these terms, however, the sensualist is one who is a slave to the grossest appetites; the voluptuary is one who studies his pleasures so as to make them the most valuable to himself; the epicure is a kind of voluptuary who practices more than ordinary refinement in the choice of his pleasures.

Sequel, Close. When a work is published in distinct parts, those which follow at the end may be termed the sequel; if it appears all at once, the concluding pages are the close.

Servant, Domestic, Menial, Drudge. In the term servant is included the idea of service performed; in the term domestic, the idea of one belonging to the house or family; in the word menial is included the idea of labor; and in the term drudge, that of wearisome labor.

Shade, Shadow. Both these terms express that darkness which is occasioned by the sun's rays being intercepted by any body: shade simply expresses the absence of light; shadow signifies also the figure of the body which intercepts the light.

Sharp, Acute, Keen. The general property expressed by these epithets is that of sharpness, or an ability to cut. The term sharp, in German scharf, from scheren, to cut, is generic and indefinite; the two others are modes of sharpness differing in the circumstance or in the degree. Acute is not only more than sharp in the common sense, but signifies also sharp-pointed: a knife may be sharp; but a needle is properly acute. Things are sharp that have either a long or a pointed edge; but keen is applicable only to the long edge, and that in the highest degree of sharpness: a common knife may be sharp; but a razor or a lancet is properly said to be keen.

Short, Brief, Concise, Succinct, Summary. We may term a stick, a letter, or a discourse, short. We speak of brevity only in regard to the mode of speech; conciseness and succinctness as to the matter of speech; summary as to the mode either of speaking or of acting. The brief is opposed to the prolix; the concise and the succinct to the diffuse; the summary to the circumstantial or ceremonious.

Show, Exhibition, Representation, Sight, Spectacle. A show consists of that which merely pleases the eye; it is not a matter either of taste or art, but merely of curiosity: an exhibition, on the contrary, presents some effort of talent or some work of genius; and a representation sets forth the image or imitation of something by the power of art. Hence we speak of a show of wild beasts, an exhibition of paintings, and a theatrical representation; sights and spectacles present themselves to view. Whatever excites notice is a sight; a spectacle, on the contrary, is that kind of sight which has something in it to interest either the heart or the head of the observer: processions are sights; battles or bull-fights are spectacles.

Sick, Sickly, Diseased, Morbid. Sick denotes a partial state, sickly a permanent state of the body, a proneness to be sick. He who is sick may be made well; but he who is sickly is seldom really well. Sickly expresses a permanent state of indisposition unless otherwise qualified; but diseased expresses a violent state of derangement without specifying its duration. Sickly and morbid are applied to the habitual state of the feelings or character: a sickly sentimentality; a morbid sensibility. Morbid is used in no other, except in a technical sense.

Sign, Signal. The sign enables us to recognize an object; it is, therefore, sometimes natural: signal serves to give warning; it is always arbitrary.

Simple, Single, Singular. We may speak of a simple circumstance as independent of anything; of a single instance or circumstance as unaccompanied by any other; and of a singular instance as one that rarely has its like.

Simulation, Dissimulation. Simulation is the making oneself like what one is not; and dissimulation is the making oneself appear unlike what one really is. The hypocrite puts on the semblance of virtue to recommend himself to the virtuous; the dissembler conceals his vices when he wants to gain the simple or the ignorant to his side.

Slack, Loose. Slack is said only of that which is tied, or that with which anything is tied; loose is said of any substances, the parts of which do not adhere closely.

To Slant, Slope. Slant is said of small bodies only; slope is said indifferently of all bodies, large and small. A book may be made to slant by lying in part on another book on a desk or a table; but a piece of ground is said to slope.

To Slip, Slide, Glide. To slip is an involuntary, and slide a voluntary, motion: those who go on the ice in fear will slip; boys slide on the ice by way of amusement. To slip and slide are lateral movements of the feet; but to glide is the movement of the whole body, and just that easy motion which is made by slipping, sliding, flying, or swimming: a person glides along the surface of the ice when he slides; a vessel glides along through the water.

To Soak, Drench, Steep. A person's clothes are soaked in rain when the water has penetrated every thread; he himself is drenched in the rain when it has penetrated, as it were, his very body. Steep respects a manner of soaking employed as an artificial process. Soak is, however, a permanent action by which hard things are rendered soft; steep is a temporary action by which soft bodies become penetrated with a liquid: thus salt meat requires to be soaked; fruits are steeped in brandy.

Social, Sociable. Social people seek others; sociable people are sought for by others.

Solicitation, Importunity. Solicitation is general; importunity is particular: importunity is troublesome solicitation. Solicitation is itself indeed that which gives trouble to a certain extent, but it is not always unreasonable. There may be cases in which we may yield to the solicitations of friends, to do that which we have no objection to being obliged to do; but importunity is that solicitation which never ceases to apply for that which it is not agreeable to give.

Solitary, Desert, Desolate. Solitary simply denotes the absence of all beings of the same kind: thus a place is solitary to a man where there is no human being but himself. Desert conveys the idea of a place made solitary by being shunned, from its unfitness as a place of residence. Desolate conveys the idea of a place made solitary, or bare of inhabitants, and all traces of habitation, by violent means.

Sound, Sane, Healthy. Sound is extended in its application to all things that are in the state in which they ought to be, so as to preserve their vitality: thus, animals and vegetables are said to be sound when in the former there is nothing amiss in their breath, and in the latter in their root. Healthy expresses more than either sound or sane: we are healthy in every part, but we are sound in that which is essential to life. He who is sound may live, but he who is healthy enjoys life: sane is applicable to human beings, in the same sense, but with reference to the mind; a sane person is opposed to one that is insane.

To Speak, Say, Tell. To speak may simply consist in uttering an articulate sound; but to say is to communicate some idea by means of words: a child begins to speak the moment it opens its lips to utter any acknowledged sound; but it will be some time before it can say anything. To say is to communicate that which passes in our own minds, to express our ideas and feelings as they rise. To tell is to communicate events or circumstances respecting ourselves or others.

To Spread, Expand, Diffuse. To spread may be said of anything which occupies more space than it has done, whether by a direct separation of its parts, or by an accession to the substance; but to expand is to spread by means of extending or unfolding the parts. A mist spreads over the earth; a flower expands its leaves. To diffuse is to scatter, to cause to spread, as to diffuse information.

Staff, Stay, Prop, Support. Anything may be denominated a staff which holds up after the manner of a staff, particularly as it respects persons: bread is said to be the staff of life. The stay makes a thing secure

for the time being, it keeps it in its place. A prop is usually of a temporary nature, a support is more permanent. Every pillar on which a building rests is a support; the timbers which keep a damaged structure from falling are props. Whatever supports, that is, bears the weight of an object, is a support, whether in a state of motion like a staff, or in a state of rest like a stay or a prop.

To Stain, Soil, Sully, Tarnish. All these terms imply the act of diminishing the brightness of an object, but the term stain denotes something grosser than the other terms, and is applied to inferior objects. Things which are not remarkable for purity or brightness may be stained, as hands when stained with blood. Nothing is sullied or tarnished but what has some intrinsic value. A fine picture or piece of writing may be easily soiled by a touch of the finger. The finest silver is the soonest tarnished: hence, in the moral application, a man's life may be stained by the commission of some gross immorality; his honor may be sullied, or his glory tarnished.

State, Realm, Commonwealth. The ruling idea in the sense and application of the word state is that of government in its most abstract sense; affairs of state may either respect the internal regulations of a country, or they may respect the arrangements of different states with each other. The term realm is employed for the nation at large, but confined to such nations as are monarchical and aristocratical. The term commonwealth refers rather to the aggregate body of men and their possessions, than to the government of a country: it is the business of the minister to consult the interests of the commonwealth.

To Stir, Move. We may move in any manner, but to stir is to move so as to disturb the rest and composure either of the body or the mind.

Story, Tale. The story is either an actual fact or something feigned; the tale is frequently feigned. Stories are circulated respecting accidents and occurrences which happen to persons. Tales of distress are told by many merely to excite compassion.

Stream, Current, Tide. All rivers are streams, which are more or less gentle according to the nature of the ground through which they pass. The force of the current is very much increased by the confinement of any water between rocks, or by means of artificial impediments. The tide is high or low, strong or weak, at different hours of the day; when the tide is high, the current is strongest.

To Strengthen, Fortify, Invigorate. Whatever adds to the strength, be it in ever so small a degree, strengthens; exercise strengthens either body or mind: whatever gives strength for a particular emergency fortifies; religion fortifies the mind against adversity: whatever adds to the strength, so as to give a positive degree of strength, invigorates; morning exercise in fine weather invigorates.

Strict, Severe. He who has authority over others must be strict in enforcing obedience, in keeping good order, and in encouraging attention to duty; but it is possible to be very severe in punishing those who are under us, and yet to be very lax in all matters that our duty demands of us.

Strife, Contention. Strife is mostly used for verbal conflict, in which each person strives against the other by the use of contumelious or provoking expressions. Contention is used for an angry striving with others, either in respect to matters of opinion or matters of claim, in which each party seeks to get the better of the other.

Successive, Alternate. The successive may be accidental or intentional; the alternate is always intentional. It may rain for three successive days, or a fair may be held for three successive days. Trees are placed sometimes in alternate order, when every other tree is of the same size and kind.

To Surround, Encompass, Environ, Encircle. We may surround an object by standing at certain distances all round it; in this manner a person may be surrounded by other persons; a garden is surrounded by a wall. To encompass is to surround in the latter sense, and applies to objects of a great or indefinite extent: the earth is encompassed by the air. To surround is to go round an object of any form, whether square or circular, long or short; but to environ and to encircle carry with them the idea of forming a circle round an object. Thus a town or a valley may be environed by hills, a basin of water may be encircled by trees, or the head may be encircled by a wreath of flowers.

Sympathy, Compassion, Commiseration, Condolence. Sympathy has the literal meaning of fellow-feeling, that is, a kindred or like feeling, or feeling in company with another. Compassion, commiseration, condolence signify a like suffering, or a suffering in company. Sympathy preserves its original meaning in its application, for we laugh or cry because of sympathy. Compassion is altogether a moral feeling, which makes us enter into the distresses of others. We may, therefore, sympathize with others, without essentially serving them; but, if we feel compassion, we naturally turn our thoughts toward relieving them. Commiseration is awakened toward those who are in an abject state of misery. Condolence supposes an entire equality, and is often produced by some common calamity.

Taste, Genius. Taste seems to designate the capacity to derive pleasure from an object; genius designates the power we have for accomplishing any object.

To Tease, Vex, Taunt, Tantalize, Torment. To tease is applied to that which is most trifling; torment to that which is most serious. We are teased by a fly that buzzes in our ears; we are vexed by the carelessness and stupidity of our servants; we are taunted by the sarcasms of others; we are tantalized by the fair prospects which only present themselves to disappear again; we are tormented by the importunities of troublesome beggars.

Tenacious, Pertinacious. To be tenacious is to hold a thing close, to let it go with reluctance; to be pertinacious is to hold it out in spite of what can be advanced against it. A man of a tenacious temper insists on trifles that are supposed to affect his importance; a pertinacious temper insists on everything which is apt to affect his opinions.

Tenet, Position. The tenet is the opinion which we hold in our minds; the position is that which we lay down for others. Our tenets may be hurtful, our positions false.

Thankfulness, Gratitude. Our thankfulness is measured by the number of our words; our gratitude is measured by the nature of our actions. A person who afterward proves very ungrateful may appear very thankful at the time.

Thick, Dense. We speak of thick in regard to hard or soft bodies, as a thick board or thick cotton; we speak of thick in regard to solid or liquid bodies, as a thick cheese or thick milk; we use the term dense mostly in regard to the air in its various forms, as a dense air.

To Think, Suppose, Imagine, Believe, Deem. We think a thing right or wrong; we suppose it to be true or false; we imagine it to be real or unreal. In regard to moral points, in which case the word deem may be compared with the others, to think is a conclusion drawn from certain premises. I think that a man has acted wrongly. To suppose is to take up an idea arbitrarily or at pleasure; to imagine is to take up an idea by accident, or without any connection with the truth or reality. To deem is to form a conclusion; things are deemed hurtful or otherwise in consequence of observation. We think as the thing strikes us at the time; we believe from a settled deduction.

Threat, Menace. We may be threatened with either small or great evils; but we are menaced only with great evils.

Timely, Seasonable. The former signifies within the time, that is, before the time is past; the latter according to the season, or what the season requires. A timely notice prevents that which would otherwise happen; mercy and kindness are seasonable in the time of affliction.

Torment, Torture. Torture is an excess of torment. We may be tormented by a variety of indirect means; but we are mostly said to be tortured by the direct means of the rack, or similar instrument.

To Transfigure, Transform, Metamorphose. Transfigure is to make to pass over into another figure; transform and metamorphose are to put into another form: the former is said only of spiritual beings, and particularly in reference to our Saviour; the other two terms are applied to that which has a corporeal form. Transformation is commonly applied to that which changes its outward form; in this manner a harlequin transforms himself into all kinds of shapes and likenesses. Metamorphosis is applied to the form internal as well as external, that is, to the whole nature.

Trembling, Tremor, Trepidation. Trembling expresses any degree of involuntary shaking of the frame, from the affection either of the body or the mind; cold, nervous affections, fear, and the like are the ordinary causes of trembling. Tremor is a slight degree of trembling, which arises mostly from a mental affection; when the spirits are agitated, the mind is thrown into a tremor by any trifling incident. Trepidation is more violent than either of the two, and springs from the defective state of the mind; it shows itself in the action, or the different movements of the body, rather than in the body.

To Trouble, Disturb, Molest. Trouble is the most general in its application; we may be troubled by the want of a thing, or troubled by that which is unsuitable;

we are disturbed and molested only by that which actively troubles. Pecuniary wants are the greatest troubles in life. Trouble may be permanent; disturbance and molestation are temporary, and both refer to the peace which is destroyed. A disturbance ruffles or throws out of a tranquil state; a molestation burdens or bears hard either on the body or the mind.

Truth, Veracity. Truth belongs to the thing; veracity to the person: the truth of the story is admitted upon the veracity of the narrator.

To Turn, Bend, Twist, Distort, Wring, Wrest, Wrench. We turn a thing by moving it from one point to another; thus we turn the earth over. To bend is simply to change direction; thus a stick is bent, or a body may bend its direction to a certain point. To twist is to bend many times, to make many turns. To distort is to turn or bend out of the right course; thus the face is distorted in convulsions. To wring is to twist with violence; thus linen which has been wetted is wrung. To wrest or wrench is to separate from a body by means of twisting; thus a stick may be wrested out of the hand, or a hinge wrenched off the door.

To Turn, Wind, Whirl, Twirl, Writhe. Turn is to cause to rotate; wind is to turn a thing round in a regular manner; whirl, to turn it round in a violent manner; twirl, to turn it round in an irregular and unmeaning way; writhe, to turn round in convolution within itself.

Unbelief, Infidelity, Incredulity. The Jews are unbelievers in the mission of our Saviour; the Turks are infidels, inasmuch as they do not believe in the Bible: Deists and Atheists are likewise infidels, inasmuch as they set themselves up against Divine revelation. Well-informed people are always incredulous of stories respecting ghosts and apparitions.

Understanding, Intellect, Intelligence. Understanding is employed to describe a familiar and easy power or operation of the mind in forming distinct ideas of things. Intellect is employed to mark the same operation in regard to higher and more abstruse objects. Understanding applies to the first exercise of the rational powers: it is therefore aptly said of children and savages that they employ their understandings on the simple objects of perception. Intellect, being a matured state of the understanding, is most properly applied to the efforts of those who have their powers in full vigor; we speak of understanding as the characteristic distinction between man and brute. Intellect is applied merely to human power, and intelligence to the spiritual power of higher beings, as the intelligence of angels; so, when applied to human beings, it is taken in the most abstract sense for the intellectual power: hence we speak of intelligence as displayed in the countenance of a child whose looks evince that he has exerted his intellect, and thereby has proved that it exists.

Unless, Except. Unless, which is equivalent to if less, if not, or if one fail, is employed only for the particular case; but except has always a reference to some general rule, of which an exception is hereby signified: I shall not do it unless he asks me; no one can enter except those who are provided with tickets.

Unspeakable, Ineffable, Unutterable, Inexpressible. The unspeakable is said of objects in general, particularly of those which are above human conception, and surpass the power of language to describe, as the unspeakable goodness of God. Ineffable is said of such objects as cannot be painted in words with adequate force, as the ineffable sweetness of a person's look. Unutterable and inexpressible are extended in their signification to that which is incommunicable by signs from one being to another: grief is unutterable which it is not in the power of the sufferer by any sounds to bring home to the feelings of another; grief is inexpressible which is not to be expressed by looks, or words, or any sign.

Unworthy, Worthless. Unworthy is a term of less reproach than worthless: the former signifies not to be worthy of praise or honor; the latter signifies to be without all worth, and consequently in the fullest sense bad. There are many unworthy members in every religious community; but every society that is conducted upon proper principles will take care to exclude worthless members.

Usage, Custom, Prescription. Usage is what one has been long accustomed to do; custom (v. custom) is what one generally does; prescription is what is indicated by usage to be done. The usage acquires force and sanction by dint of time; the custom acquires sanction by the frequency of its being done or by the numbers doing it; the prescription acquires force by the authority which prescribes.

To Utter, Speak, Articulate, Pronounce. Utter from out, signifies to put out; that is, to send forth a sound: this, therefore, is a more general term than speak, which is to utter an intelligible sound. We may utter a groan; we speak words only, or that which is intended to serve as words. Speak, therefore, is only a form of utterance; a dumb man has utterance, but not speech. Articulate and pronounce are modes of speaking. To articulate, from articulum, a joint, is to pronounce distinctly the letters or syllables of words; this is the first effort of a child beginning to speak. Pronounce is a formal mode of speaking.

To Value, Prize, Esteem. To value is to estimate the worth, real or suppositious, relative or absolute, of a thing; in this sense men value gold above silver, or an appraiser values goods. Prize and esteem are taken only as mental actions: the former is taken in reference to sensible or moral objects; the latter, only to moral objects. We may value books according to their market price, or we may value them according to their contents: we prize books only for their contents; in this sense prize is a much stronger term than value.

Venial, Pardonable. Venial is applied to what may be tolerated without express disparagement to the individual, or without direct censure; but the pardonable is that which may only escape severe censure, but cannot be allowed: garrulity is a venial offense in old age; levity in youth is pardonable in single instances.

View, Survey, Prospect. We take a view or survey; the prospect presents itself: the view is of an indefinite extent; the survey is always comprehensive in its nature. Ignorant people take but narrow views of things; the capacious mind of a genius takes a survey of all nature. Our prospects are very delusive. Sometimes our prospects depend upon our views, at least in matters of religion. He who forms erroneous views of a future state has but a wretched prospect beyond the grave.

Violent, Furious, Boisterous, Vehement, Impetuous. A man is violent in his opinions, violent in his measures, violent in his resentments; he is furious in his anger, or has a furious temper; he is vehement in his affections or passions, vehement in love, vehement in zeal, vehement in pursuing an object. Violence transfers itself to some external object on which it acts with force; but vehemence respects that manner of violence which is confined to the person himself: we may dread violence, because it is always liable to do mischief. Impetuosity is rather the extreme of violence or vehemence. An impetuous attack is an excessively violent attack; an impetuous character is an excessively vehement character. Boisterous is said of the manner and of the behavior rather than of the mind.

Wakefulness, Watchfulness, Vigilance. Wakefulness is an affair of the body, and depends upon the temperament; watchfulness is an affair of the will, and depends upon the determination. Some persons are more wakeful than they wish to be; few are as watchful as they ought to be. Vigilance expresses a high degree of watchfulness. A sentinel is watchful who on ordinary occasions keeps good watch; but it is necessary for him, on extraordinary occasions, to be vigilant, in order to detect whatever may pass.

To Want, Need, Lack. To want is to be without that which contributes to our comfort, or is an object of our desire; to need is to be without that which is essential to our existence or our purposes. To lack expresses little more than the general idea of being without, unaccompanied by any collateral idea; it is usual to consider what we want as artificial, and what we need as natural and indispensable. What one man wants is a superfluity to another; but that which is needed by one is in like circumstances needed by all.

Wave, Billow, Surge, Breaker. Those waves which swell more than ordinarily are termed billows; those waves which rise higher than usual are termed surges; those waves which dash against the shore, or against vessels, with more than ordinary force, are termed breakers.

Weak, Feeble, Infirm. We may be weak in body or mind; but we are feeble and infirm only in the body: we may be weak from disease, or weak by nature; both equally convey the gross idea of a defect. But the terms feeble and infirm are qualified expressions for weakness: an old man is feeble from age; he may likewise be infirm in consequence of sickness.

Weight, Burden, Load. A person may sink under the weight that rests upon him; a platform may break down from the weight upon it; a person sinks under his burden or load; a cart breaks down from the load.

Whole, Entire, Complete, Total, Integral. Whole excludes subtraction; entire excludes division; complete excludes deficiency. A whole orange has had nothing taken from it; an entire orange is not yet cut; and a complete orange is grown to its full size. Total is the opposite of partial. Integral is applied now to parts or numbers not broken.

Wicked, Iniquitous, Nefarious. It is wicked to deprive another of his property unlawfully, under any circumstances; but it is iniquitous if it be done by fraud and circumvention; and nefarious if it involves any breach of trust.

To Will, Wish. We can will nothing but what we can effect; we may wish for many things which lie above our reach.

Wisdom, Prudence. Wisdom directs all matters present or to come; prudence, which acts by foresight, directs what is to come. Rules of conduct are framed by wisdom, and it is the part of prudence to apply these rules to the business of life.

Wonder, Miracle, Marvel, Prodigy, Monster. Wonders are natural; miracles are supernatural. The whole creation is full of wonders; the Bible contains an account of the miracles which happened in those days. Wonders are real; marvels are often fictitious; prodigies are extravagant and imaginary; monsters are violations of the laws of nature. The production of a tree from a grain of seed is a wonder; but the production of a calf with two heads is a monster.

Work, Labor, Toil, Drudgery, Task. Every member of society must work for his support, if he is not in independent circumstances. The poor are obliged to labor for their daily subsistence; some are compelled to toil incessantly for the pittance which they earn. Drudgery falls to the lot of those who are the lowest in society. A man wishes to complete his work; he is desirous of resting from his labor; he seeks for a respite from his toil; he submits to drudgery. Task is a work imposed by others, and is, consequently, more or less burdensome.

Writer, Author. Writer refers us to the act of writing; author to the act of inventing. There are, therefore, many writers who are not authors; but there is no author of books who may not be termed a writer. Compilers and contributors to periodical works are properly writers, though not always entitled to the name of authors. Poets and historians are properly termed authors rather than writers.

Youthful, Juvenile, Puerile. Youthful signifies full of youth, or in the complete state of youth; juvenile signifies the same; but puerile signifies literally boyish. Hence the first two terms are taken in an indifferent sense; but the latter in a bad sense, or at least always in the sense of what is suitable to a boy only: thus we speak of youthful vigor, youthful employments, juvenile performances, juvenile years, and the like: but puerile objections, puerile conduct, and the like. We expect nothing from a youth but what is juvenile; we are surprised and dissatisfied to see what is puerile in a man.

WORDS AND PHRASES FROM THE CLASSIC AND MODERN LANGUAGES

GREEK AND LATIN

ab extra, From without.
ab incunabilis, From the cradle.
ab initio, From the beginning.
ab origine, From the origin or commencement.
ab ovo, From the egg; from the very beginning.
ab ovo usque ad mala (lit., from the egg to the apples, a term borrowed from Roman banquets, which began with eggs and ended with fruit), From beginning to end; from first to last.
absens hæres non erit (The absent one will not be the heir), Out of sight, out of mind.
absit invidia, Let there be no ill-will; envy apart.
ab uno disce omnes (From one example judge of the rest), From a single instance infer the whole.
ab urbe condita, From the building of the city, i. e., Rome. [A. U. C.]
a capite ad calcem, From head to heel.
a cruce salus, Salvation by or from the cross.
ad arbitrium, At will; at pleasure.
ad calendas græcas, At the Greek calends, i. e., never. (The Greeks had no calends.)
ad captandum vulgus, To attract or please the rabble.
a Deo et rege, From God and the king.
ad extremum, To the extreme; at last.
ad gustum, To one's taste.
ad hominem, Personal; to the individual.
a die, From that day.
ad internecionem, To extermination.
ad libitum, At pleasure.
ad modum, In the manner of.
ad multos annos, For many years.
ad nauseam, So as to disgust or nauseate.
ad patres, Gathered to his fathers; dead.
ad rem, To the purpose; to the point.
adscriptus glebæ, attached to the soil.
adsum, I am present; I am here.
ad summum, To the highest point or amount.
ad unguem, To a nicety; exactly.
ad unum omnes, To a man.
ad utrumque paratus, Prepared for either event or case.
ad vivum, Like life; to the life.
ægrescit medendo, It becomes worse from the remedies employed.
æquabiliter et diligenter, Equably and diligently.
æquo animo, With a calm mind.
ætatis suæ, Of his or her age.
a fortiori, For the stronger reason.
age quod agis, Do what you are doing; attend to your business.
alere flammam, To feed the flame.
alloi kamon, alloi onanto (Gr.), Some toil, others reap the advantage.
alma mater, Kind or benign mother. (Specifically one's college or university.)
alter ego, Another self.
alter ipse amicus, A friend is another self.
alterum tantum, As much more.
amantium iræ amoris integratio, Lovers' quarrels are the renewing of love.
a maximis ad minima, From the greatest to the least.
amicus humani generis, A friend of the human race.
amicus usque ad aras, A friend even to the altar (of sacrifice), i. e., To the last extremity.
amor patriæ, Love of country; patriotism.
anangka d" oude theoi machontai (Gr.), Not even the gods can fight against necessity.
andron epiphanon pasa ge taphos (Gr.), All the world is a burial-place for illustrious men.
aner ho pheugon kai palin machesetai (Gr.), The man who flies shall fight again. (A line said to have been written by Demosthenes as an excuse for his running away and leaving his shield behind him at the battle of Cheronæa, 338 B. C.)
anguis in herba, A snake in the grass; a false friend; an unforeseen danger.
animo et fide, Courageously and faithfully.
anno ætatis suæ, In the year of his or her age.
anno Christi, In the year of Christ. [A. C.]
anno humanæ salutis, In the year of man's redemption. [A. H. S.]
anno salutis, In the year of redemption. [A. S.]
anno urbis conditæ, In the year from the time the city—i. e., Rome — was built.
annus mirabilis, A year of wonders. (Often applied in English History to the year 1666, noteworthy for the war with the Dutch, the Plague, and the Great Fire of London. See Dryden's poem "Annus Mirabilis.")
ante bellum, Before the war.
ante lucem, Before daybreak.
ante meridiem, Before noon.
a posse ad esse, From possibility to reality.
a posteriori, From what follows; from effect to cause.
a priori, From what goes before; from cause to effect.
aplestos pithos (Gr.), A cask that will never fill; an endless job. (The allusion is to the Danaïdes, who, for the murder of their husbands, were condemned to draw water in sieves.)
arbiter elegantiarum, A judge or authority in matters of taste.
arcana cœlestia, Celestial secrets.
arcana imperii, State secrets.
ardentia verba, Words that burn; glowing language.
argumentum ad crumenam, (An argument to the purse), An appeal to one's interests.
argumentum ad invidiam, (An argument to envy), An appeal to low passions.
argumentum ad judicium, An argument appealing to the judgment.
argumentum baculinum, (The argument of the cudgel), An appeal to force.
ariston men hudor (Gr.), Water is the chief of the elements i. e., as being the origin of all things. (In classical mythology, Oceanus and Tethys are regarded as the parents of all the deities who preside over Nature.)
ars est celare artem, True art is to conceal art.
ars longa, vita brevis, Art is long, life is short.
artium magister, Master of arts.
asinus ad lyram (lit., an ass at the lyre), An awkward fellow.
at spes non fracta, But hope is not yet crushed.

audi alteram partem, Hear the other side.
aurea mediocritas, The golden mean.
aut Cæsar aut nullus, Either Cæsar or nobody; either in the first place or nowhere.
aut vincere aut mori, To conquer or die; death or victory.
auxilium ab alto, Help from on high.
a verbis ad verbera, From words to blows.
avito viret honore, He flourishes on the honors of his ancestors.
beatæ memoriæ, Of blessed memory.
bella! horrida bella, War! horrid war.
bella matribus detestata, War, so detested by mothers.
bellum internecinum, A war of extermination.
bene orâsse est bene studuisse, To have studied well is to have prayed well.
bis dat qui cito dat, He gives twice who gives quickly or opportunely.
bis peccare in bello non licet, One must not blunder twice in war.
bis pueri senes, Old men are twice boys.
bona fide, In good faith.
bona fides, Good faith.
brevi manu (With a short hand), Offhand; extempore; summarily.
brevis esse laboro, obscurus fio, If I labor to be brief, I become obscure.
cadit quæstio, The question falls; there is no discussion.
cæca est invidia, Envy is blind.
cætera desunt, The rest is wanting.
cæteris paribus, Other things being equal.
candida Pax, White-robed Peace.
cantabit vacuus coram latrone viator, The penniless traveler will sing in the presence of the highwayman; a man who has nothing has nothing to lose.
cantate Domino, Sing unto the Lord. (The opening words of many Psalms. *Vulgate.*)
carpe diem, Usually explained, according to popular ideas of Epicurean philosophy, as — Enjoy the present day; but capable of higher interpretation — Seize the present opportunity; improve time.
casus belli, A cause justifying war; a ground of war.
causa sine qua non, An indispensable cause.
cedant arma togæ, Let arms yield to the gown; let violence give place to law.
chremat 'aner (Gr.), Money makes the man.
circuitus verborum, A circumlocution.
circulus in probando, A circle in the proof; the fallacy of using the conclusion as one of the premises; a vicious circle.
clarior e tenebris, Brighter from obscurity.
clarum et venerabile nomen, An illustrious and venerable name.
cogito, ergo sum, I think, therefore I exist.
comitas inter gentes, Comity between nations.
commune bonum, A common good.
communibus annis, On the annual average; one year with another.
communi consensu, By common consent.
conditio sine qua non, An indispensable condition.
conjunctis viribus, With united powers.
consensus facit legem, Consent makes the law. (If two persons make an agreement in good faith and with full knowledge, the law will insist on its being carried out.)
consilio et animis, By wisdom and courage.
consilio et prudentia, By wisdom and prudence.
constantia et virtute, By constancy and virtue.
consuetudo pro lege servatur, Custom is held as law. (The English common law is based on immemorial usage.)
contra bonos mores, Contrary to good morals.
copia verborum, A plentiful supply of words; flow of language.
coram nobis, In our presence.
coram non judice, Before a person who is not a judge; not before the proper tribunal.
crambe repetita, Cabbage warmed up the second time; hence used proverbially for any tedious repetition of a truism, an old story, etc.
credat Judæus Apella, Let the (superstitious) Jew Apella believe it; tell that to the marines.
crede quod habes, et habēs, Believe that you have it, and you have it.
credo, quia absurdum, (Corrupted from a passage in Tertullian), I believe it, because it is absurd.
credula res amor est, Love is ready to believe.
crescit amor nummi, quantum ipsa pecunia crescit, The love of money grows as our wealth increases.
crescit eundo, It increases as it goes.
crescit sub pondere virtus, Virtue increases under every oppression.
creta an carbone notandum, To be marked with chalk or charcoal. (The Romans marked lucky days with white, and unlucky ones with black.)
crux, A cross; a difficulty; a stumbling-block; a puzzle; *e. g., crux criticorum, crux mathematicorum, crux medicorum*, The puzzle of critics, mathematicians, physicians.
cucullus non facit monachum, The cowl does not make the monk; don't trust to appearances.
cui bono? (A maxim of Cassius, quoted by Cicero), For whose advantage? Generally used, however, as, What is the good of it?
cui Fortuna ipsa cedit, To whom Fortune herself yields.
culpam pœna premit comes, Punishment follows hard on crime.
cum grano, cum grano salis, With a grain of salt; with some allowance or modification.
cum privilegio, With privilege.
cum tacent, clamant, Although they keep silence, they cry aloud; their silence is more expressive than words.
curiosa felicitas, Nice felicity of expression (applied by Petronius Arbiter, cxviii, 5, to the writings of Horace); happy knack.
currente calamo, With a running pen; offhand.
da locum melioribus, Give place to your betters.
damnant quod non intelligunt, They condemn what they do not understand.
dare pondus fumo, To give weight to smoke; to impart value to that which is worthless; to attach importance to trifles.
data et accepta. Expenses and receipts.
date obolum Belisario, Give an obolus to Belisarius. (It is said that this general, when old and blind, was neglected by Justinian, and obliged to beg. Gibbon treats the story as a fable.)
Davus sum, non Œdipus, I am Davus, not Œdipus. I am no conjurer; I am a bad hand at riddles.
dēceptio visus, An optical illusion.
decori decus addit avito, He adds honor to the ancestral honors.
de die in diem, From day to day.
de gustibus non est disputandum, There is no disputing about tastes.
Dei gratia, By the grace of God. [D. G.]
de jure, By the law; by right.
de lana caprina, About goat's wool; hence about any worthless object.
delenda est Carthago, Carthage must be utterly destroyed. (A phrase with which Cato the Elder urged the Roman people to the destruction of Carthage, which he looked on as a dangerous rival to Rome.)
de minimis non curat lex, The law does not concern itself with trifles.
de mortuis nil nisi bonum, Let nothing be said of the dead but what is good.
de nihilo nihil, in nihilum nil posse reverti, From nothing nothing is made, and nothing that exists can be reduced to nothing. (The doctrine of the eternity of matter.)
de novo, Anew.
de omnibus rebus, et quibusdam aliis, About everything, and something more besides. (Applied ironically to an immature literary production, in which very many subjects are treated.)
Deo adjuvante, non timendum, With the help of God, there is nothing to be afraid of.
Deo duce, With God for a leader.
Deo favente, With the favor of God.
Deo gratias, Thanks be to God.
Deo juvante, With the help of God.
Deo monente, God giving warning.
Deo, non fortuna, From God, not from Chance.
Deo volente, God willing.
de profundis, Out of the depths. (The first words of Ps. cxxix— *Vulg.*)
desinit in piscem mulier formosa superne, A woman, beautiful above, has a fish's tail. (A description of an incongruous style.)
dis krambe thanatos (Gr.), Cabbage, twice over, is death; repetition is tedious.
dii majorum gentium, The gods of the superior houses; the twelve superior gods.
dii penates, Household gods.
disjecta membra, Scattered remains.
docendo discimus, We learn by teaching.
Dominus vobiscum, The Lord be with you. (The words in which the priest blesses the people in the Roman Church.)
domus et placens uxor, Home and the good wife.
do ut des, I give that you may give; the principle of reciprocity.
dramatis personæ, The characters of the play.

dulce est dēsipere in loco, It is pleasant to play the fool at times.
dulce et decōrum est pro patriā mori, It is sweet and glorious to die for one's country.
dum spiro, spero, While I breathe, I hope.
dum vivimus, vivamus, Let us live while we live; i. e., Let us enjoy life.
durante vita, During life.
ecce homo, Behold the man. (Indicative of the giving up of Christ to the people by Pilate.)
e flamma cibum petere, To seek food from the flames; to pick the remnants of food from the funeral pyre; to be reduced to the last extremity.
ego et rex meus, My king and I. (An expression attributed to Cardinal Wolsey, and unjustly made the subject of a charge against him, as if he had written "I and my King.")
eheu! fugaces labuntur anni, Alas! our fleeting years pass away.
elapso tempore, The time having elapsed.
en nukti boule (Gr.), In the night there is counsel; sleep on it.
en oino alētheia (Gr.), In wine there is truth.
eo animo, With that design.
eo nomine, By that name.
e pluribus unum, One out of, or composed of, many. (The motto of the United States of America.)
epulis accumbere divūm, To sit down at the banquets of the gods.
e re nata, According to the exigency.
esse quam vidēri, To be, rather than to seem.
est modus in rebus, There is a middle course in all things.
esto perpetua, Let it endure forever.
esto quod esse videris, Be what you seem to be.
e tan, e epi tan (Gr.), Either this, or upon this; either bring this back, or be brought home, dead, upon it. (The words of a Spartan mother when she gave a shield to her son going on military service.)
et cætera, And the rest.
et id genus omne, And everything of the sort.
et sequentes, et sequentia, And those that follow.
et sic de cæteris, And so of the rest.
et sic de similibus, And so of similar things.
et tu, Brute! And thou also, Brutus. (Usually given as the last words of Julius Cæsar, when he saw Brutus amongst his murderers.)
eventus stultōrum magister, Fools must be taught by experience.
ex abundantia, Out of the abundance.
ex adverso, From the opposite side.
ex æquo et bono, According to what is right and good.
ex animo, Heartily; sincerely.
ex capite, From the head; from memory.
ex cathedra, From the chair or pulpit; spoken with authority; by virtue of office.
excelsior, Higher; more elevated.
exceptio probat regulam, The exception proves the rule. (If the case in point were not an exception, there would be no rule.)
exceptis excipiendis, Due exceptions (or allowances) having been made.
ex concesso, From what has been conceded.
ex curia, Out of court.
ex delicto, From the crime.
exegi monumentum ære perennius, I have reared a monument more lasting than brass. (A prophetic estimate by Horace of the value of his poems.)
exempla sunt odiōsa, Examples are offensive.
exempli gratia, By way of example. [E. G.]
exeunt, They go out.
exeunt omnes, All go out.
ex facto jus oritur, The law arises from the fact. (Till the nature of the offense is known, the law cannot be set in motion.)
exit, He (or she) goes out.
exitus acta probat, The result justifies the deed.
ex mera gratia, Through mere favor.
ex mero motu, Of his own free will.
ex necessitate rei, From the urgency of the case.
ex officio, By virtue of office.
ex parte, On one part or side.
ex pede Herculem, You may judge of Hercules by his foot; the whole by the part.
experientia docet stultos, Experience teaches even fools.
experimentum crucis, The experiment of the cross; a decisive experiment; a crucial test.
experto crede, Believe one who has tried it, or who speaks from experience; *experto crēde Roberto*, Believe Robert, who has tried it, or who speaks from experience.
expertus metuit, Having had experience of it, he dreads it; a burnt child dreads the fire.
ex post facto, After the deed is done; retrospective.
expressis verbis, In express terms.
ex quocunque capite, For whatever reason.
ex tacito, Tacitly.
ex tempore, Off hand; without preparation.
extinctus amābitur idem, This same man will be loved after his death.
extra muros, Outside the walls.
ex ungue leōnem, You may tell the lion by his claws.
faber quisque fortunæ suæ, Every man is the architect of his own fortune; hence, *faber fortūnæ suæ*, a self-made man.
facile est inventis addere, It is easy to improve what has been already invented.
facile princeps, The acknowledged chief; one who stands indisputably first.
facilis est descensus Averni, The descent to hell is easy; it is easy enough to get into trouble.
fac simile, An exact imitation.
fæces populi, fæx populi, The scum of the population.
fama clamosa, A current scandal.
fama nihil est celerius, Nothing travels more swiftly than scandal.
fama semper vivat, May his fame last forever.
fas est et ab hoste docēri, It is right to be taught even by an enemy; you may get a hint from the other side.
fata obstant, The Fates oppose.
fata viam invenient, The Fates will find out a way.
fax mentis incendium glōriæ, The passion for glory is the torch of the mind.
felicitas multos habet amīcos, Prosperity has many friends.
felo de se, One who commits self-felony; a suicide.
feræ naturæ, Of a wild nature; applied to wild beasts.
festina lente, Make haste slowly; don't be impetuous.
fiat experimentum in corpore vilī, Let the experiment be made on a body of no value.
fiat justitia ruat cælum, Let justice be done though the heavens should fall.
fiat lux, Let there be light.
fide et amore, By faith and love.
fide et fiducia, By fidelity and confidence.
fide et fortitudine, By fidelity and fortitude.
fidei coticula crux, The cross is the touchstone of faith.
fidei defensor, Defender of the faith.
fide, non armis, By faith, not by force of arms.
fide, sed cui vide, Trust, but see whom you are trusting.
fides et justitia, Fidelity and justice.
fides Punica, Punic faith; treachery. (Among the Romans the bad faith of the Carthaginians was notorious.)
fidus Achates, Faithful Achates (the companion of Æneas); a true friend.
fidus et audax, Faithful and bold.
fieri facias, A legal paper authorizing execution on the goods of a debtor.
filius nullius, A son of nobody; an illegitimate son. (He has no legal rights as a son in respect to the inheritance of property.)
filius terræ. A son of the earth; one of low origin.
finis coronat opus, The end crowns the work.
flagrante bello, While the war was raging; during hostilities.
flagrante delicto, In the commission of the crime; in the very act.
flamma fumo est proxima, Flame is akin to fire; where there's smoke there's fire.
flecti, non frangi, To be bent, not broken.
flosculi sententiarum, Flowers of fine thoughts.
fœnum habet in cornu, He has hay on his horn (the mark put on a bull to show he was savage); beware of him.
fons et origo malorum, The source and origin of our miseries.
forensis strepitus, The clamor of the forum; "Brawling courts, and dusty purlieus of the Law."
forte scutum salus ducum, A strong shield is the safety of leaders.
fortes fortuna juvat, Fortune favors the brave.
forti et fideli nihil difficile, Nothing is difficult to the brave and faithful.
fortiter et recte, With fortitude and rectitude.
fortiter, fideliter, feliciter, Boldly, faithfully, successfully.
fortiter in re, With firmness in action.
fortuna favet fatuis, Fortune favors fools.
fortunæ filius, A spoiled child of Fortune.
frangas, non flectes, You may break me, but you shall not bend me.
fraus pia, A pious fraud.
fronti nulla fides, There is no trusting the features; don't trust to appearances.
fruges consumere nati, Born to consume the fruits of the earth; born only to eat.
fugit irreparabile tempus, Irrecoverable time glides away.
fuimus Trōes, We once were Trojans; we have seen better days.
fuit Ilium, There once was a Troy; Troy was, but is no more; the place is gone.

fumum et opes, strepitumque Romæ, The smoke, the show, the rattle, of the town (Rome).
functus officio, Having discharged his duties; hence, out of office.
furor arma ministrat, Rage provides arms; one uses any weapon in a rage.
furor loquendi, A rage for speaking.
furor poeticus, Poetical fire.
furor scribendi, A rage for writing.
gallice, In French.
gaudeamus igitur, Therefore, let us rejoice. (The burden of a Macaronic song.)
gaudet tentamine virtus, Virtue rejoices in temptation.
genius loci, The genius or presiding spirit of the place.
gens togata, Applied first to Roman citizens, as wearing the toga, the garment of peace; hence, civilians generally.
glaukas eis Athenas (Gr.), Owls to Athens. (The owl was sacred to Minerva, the guardian divinity of Athens; hence, owls were abundant, so that the proverb is like "to carry coals to Newcastle.")
glossa diple, A double tongue.
gloria in excelsis Deo, Glory to God in the highest.
gloria Patri, Glory be to the Father.
gnothi seauton (Gr.), Know thyself. (A precept inscribed in gold letters over the portico of the temple at Delphi. Its authorship has been ascribed to Pythagoras, to several of the wise men of Greece, and to Phemonoë, a mythical Greek poetess. According to Juvenal, this precept descended from heaven.)
gradu diverso, via una, The same road by different steps.
gradus ad Parnassum, A step to Parnassus; aid in writing Latin poetry; a work on Latin verse-making containing rules and examples.
gratia placendi, For the sake of pleasing.
gratis dictum, Mere assertion.
graviora manent, Greater afflictions are in store; the worst is yet to come.
graviora quædam sunt remedia periculis, Some remedies are worse than the disease.
grex venalium, A venal throng.
gutta cavat lapidem, non vi, sed sæpe cadendo, The drop hollows out the stone by frequent dropping, not by force; constant persistence gains the end.
haud longis intervallis, At frequent intervals.
he gloss' omomoch', he de phren anomotos (Gr.), My tongue has sworn, but my mind is unsworn; I have said it, but don't mean to do it.
helluo librorum, A devourer of books; a bookworm.
heu pietas! heu prisca fides, Alas! for piety! Alas! for our ancient faith.
hiatus valde deflendus, A gap or deficiency greatly to be deplored. (Words employed to mark a blank in a work, but often used of persons whose performances fall short of their promises.)
hic et ubique, Here and everywhere.
hic jacet, Here lies; SEPULTUS, buried.
hic labor, hoc opus est, Here is labor, here is toil.
hic sepultus, Here [lies] buried.
hinc illæ lacrimæ, Hence these tears; this is the cause of the trouble.
hodie mihi, cras tibi, It is my lot to-day, yours to-morrow. (A line often found in old epitaphs.)
hoi polloi (Gr.), The many, the common people.
homo factus ad unguem, Usually quoted thus, though the proper form is *ad unguem factus homo*. A highly polished, accomplished man. (The expression is borrowed from the practice in sculptors, who, in modeling, give the finishing touch with the nail; or from joiners, who test the accuracy of joints in wood by the nail.)
homo multarum literarum, A man of many letters; a man of extensive learning.
homo solus aut deus aut dæmon, A man to live alone must be either a god or a devil.
homo sum; humani nihil a me alienum puto, I am a man; and I consider nothing that concerns mankind a matter of indifference to me.
hon hoi theoi philousin apothneskei neos (Gr.), (A fragment from Menander.) He whom the gods love dies young.
honores mutant mores, Honors change manners.
honos habet onus, Honor is burdened with responsibility.
horæ canonicæ, Canonical hours; prescribed times for prayers.
horresco referens, I shudder as I tell the story.
hortus siccus, A dry garden; a collection of dried plants; an herbarium.
hos ego versiculos feci, tulit alter honores (Virgil, on the occasion when some verses he had written on the shows at Rome were unjustly claimed by Bathyllus, who was rewarded for them), I wrote these lines, another has borne away the honor.
humanum est errare, To err is human.
hunc tu caveto, Beware of him.
id genus omne, All that class. (A contemptuous expression for the dregs of the population.)
ignorantia non excusat legem, Ignorance is no plea against the law.
ignoratio elenchi, Ignorance of the point in dispute. (The logical fallacy of arguing to the wrong point.)
ignoti nulla cupido, There is no desire for that which is unknown; our wants are increased by knowledge.
ignotum per ignotius, (To explain) a thing not understood by one still less understood.
Ilias malorum, An Iliad of woes; a host of evils. (From the fact that the siege of Troy lasted ten years.)
imitatores, servum pecus, Ye imitators; a servile herd.
immedicabile vulnus, An incurable wound; an irreparable injury.
imo pectore, From the bottom of one's heart.
impari marte, With unequal military strength.
impedimenta, Luggage; the baggage of an army.
imperium in imperio, A government existing within another. (Said of a power set up against constituted authority.)
implicite, By implication.
impos animi, Of weak mind.
in actu, In the very act; in reality.
in æternum, For ever.
in articulo mortis, At the point of death.
in camera, In the judge's chamber; in secret.
in capite, In chief.
in cælo quies, There is rest in heaven.
incredulus odi, Being incredulous, I cannot endure it.
in curia, In court.
inde iræ, Hence this resentment.
in dubio, In doubt.
in æquilibrio, In equilibrium.
in esse, In being.
in extenso, At length.
in extremis, In very bad circumstances; at the point of death.
infandum, regina, jubes renovare dolorem, You command me, O Queen, to revive unspeakable grief.
in flagrante delicto, In the commission of the act.
in forma pauperis, As a poor man.
infra dig., infra dignitatem, Beneath one's dignity.
in futuro, In future; henceforth.
in hoc signo vinces, In this sign thou shalt conquer. (The motto is said to have been adopted by Constantine after his vision of a cross in the heavens just before his decisive battle with Maxentius, A. D. 312.)
in limine, On the threshold; preliminarily.
in loco, In the place; upon the spot; in the place of.
in loco parentis, In the place of a parent.
in medias res, In the very midst of things.
in memoriam, In memory of.
in nomine, In the name of.
in nubibus, In the clouds; hence, undefined, uncertain, vague.
in nuce, In a nutshell.
in omnia paratus, Prepared for all things.
inopem copia fecit, Abundance has made him poor.
in pace, In peace.
in perpetuam rei memoriam, In everlasting remembrance of the event.
in perpetuum, For ever.
in pleno, In full.
in posse, In possible existence.
in propria persona, In one's own person.
in puris naturalibus, In a state of nature; stark naked.
in re, In the matter of.
in rerum natura, In the nature of things.
in sæcula sæculorum, For ever.
inscitia est adversum stimulum calces, It is mere folly to kick against the spur.
in situ, In its proper position.
in statu quo, In its former state.
in suspenso, In suspense.
in te, Domine, speravi (Ps. xxxi, *Vulg.*), In thee, O Lord, have I put my trust.
inter alia, Among other things.
inter arma leges silent, In the time of war the laws are silent.
inter canem et lupum, Between the dog and the wolf; twilight.
interdum vulgus rectum videt, Sometimes the rabble see what is right.
inter nos, Between ourselves.
inter pocula, At one's cups.
in terrorem, In terror; as a warning.
inter se, Amongst themselves.
inter spem et metum, Between hope and fear.
in totidem verbis, In so many words.
in toto, In the whole; entirely.
intra muros, Within the walls.

in transitu, On the passage; in course of transit.
intra parietes, Within the walls; private.
in usum Delphini, For the use of the Dauphin.
in utroque fidelis, Faithful in both.
in vacuo, In a vacuum.
in verba magistri jurare, To swear to a master's words; to accept opinions upon authority.
inverso ordine, In an inverse order.
in vino veritas, In wine there is truth. (When a person is under the influence of wine he shows himself in his true colors.)
invita Minerva, Minerva (Goddess of Wisdom) being unwilling; hence, without genius.
ipse dixit, He himself has said it; a mere assertion.
ipsissima verba, The identical words.
ipso facto, By the fact itself.
ipso jure, By the law itself.
ira furor brevis est, Anger is a brief madness.
ita est, It is so.
ita lex scripta est, Such is the written law.
italice, In Italian characters.
jacta alea est. (The exclamation of Julius Cæsar when he passed the Rubicon.) The die is cast.
jam redit et Virgo, redeunt Saturnia regna, Now the Virgin and the Saturnian age return. (Of the reign of Astræa, the Goddess of Justice, in the Golden Age.)
januis clausis, With closed doors; in secret.
joci causa, For the sake of a joke.
jubilate Deo (Ps. c. 1), O be joyful in the Lord.
jucundi acti labores, The remembrances of past labor is sweet.
judicium Dei, The judgment of God.
judicium parium aut leges terræ (Magna Charta), The judgment of our peers or the laws of the land.
jure divino, By divine law.
jure humano, By human law.
juris peritus, One learned in the law.
juris utriusque doctor, Doctor of both laws, i. e., of canon and civil laws.
jus canonicum, Canon law.
jus civile, The civil law.
jus divinum, The divine law.
jus et norma loquendi, The law and rule of speech.
jus gentium, The law of nations.
jus gladii, The right of the sword.
jus possessionis, The right of possession.
jus proprietatis, The right of property.
jus summum sæpe summa malitia est, Extreme law is often extreme wrong.
kairon gnothi (Gr.), Know your opportunity. (A saying of Pittacus, one of the Wise Men of Greece.)
kat' exochen (Gr.), Pre-eminently.
labitur et labetur in omne volubilis ævum, It glides on, and will glide on for ever.
laborare est orare, Work is prayer.
labor ipse voluptas, Labor itself is a pleasure.
labor omnia vincit, Labor overcomes all difficulties.
laborum dulce lenimen, The sweet solace of our labors.
lapis philosophorum, The philosopher's stone.
lapsus calami, A slip of the pen.
lapsus linguæ, A slip of the tongue.
lapsus memoriæ, A slip of the memory.
lares et penates, Household gods.
lateat scintillula forsan, Perchance some small spark may lie concealed. (The motto of the Royal Humane Society.)
latine dictum, Spoken in Latin.
laudari a viro laudato, To be praised by a man that is praised, i. e., by an eminent man.
laudationes eorum qui sunt ab Homero laudati, Praises from those who were themselves praised by Homer.
laudator temporis acti, One who praises the good old days.
laudum immensa cupido, An insatiable desire for praise.
laus Deo, Praise to God.
lector benevole, Kind, or gentle, reader.
legatus a latere (A legate from the side [of the Pope]), A papal legate.
lex loci, The law of the place.
lex non scripta, The unwritten law; the common law.
lex scripta, The written or statute law.
lex talionis, The law of retaliation.
lex terræ, The law of the land.
licentia vatum, The license allowed to poets.
limæ labor et mora, The labor and delay of the file; the slow and laborious polish of a literary work.
lis litem generat, Strife begets strife.
litem lite resolvere, To settle strife by strife; to end one controversy by another.
lite pendente, During the trial.
litera scripta manet, The written character remains.
loci communes, Common places.
loco citato, In the place quoted.
locus classicus, A classical passage; the acknowledged place of reference.
locus criminis, The scene of the crime.
locus in quo, The place in which.
longo intervallo, By or with a long interval.
lucidus ordo, A perspicuous arrangement.
lucri causa, For the sake of gain.
lupum auribus teneo, I hold a wolf by the ears; I have caught a Tartar.
lupus est homo homini, Man is a wolf to his fellow-man; one man preys on another.
lupus in fabula, The wolf in the fable; talk of the devil and he will appear.
lusus naturæ, A freak of nature; a deformed animal or plant.
magister ceremoniarum, A master of the ceremonies.
magna civitas, magna solitudo, A great city is a great solitude.
magnæ spes altera Romæ, A second hope of mighty Rome. (Any young man of promise.)
magna est veritas et prævalebit, Truth is mighty, and will prevail.
magna est vis consuetudinis, Great is the power of habit.
magnas inter opes inops, Poor in the midst of great wealth.
magnum bonum, A great good.
magnum opus, A great undertaking; the great work of a man's life.
magnum vectigal est parsimonia, Thrift is itself a good income.
mala fide, With bad faith; treacherously.
mali exempli, Of a bad example.
mali principii malus finis, The bad end of a bad beginning.
malis avibus, With unlucky birds, i. e., with bad omens.
malo modo, In an evil manner.
malus pudor, False shame.
manibus pedibusque, With hands and feet; tooth and nail.
manu forti, With a strong hand.
manu propria, With one's own hand.
mare clausum, A closed sea; a bay.
mars gravior sub pace latet, A more serious warfare is concealed by seeming peace.
materiem superabat opus, The workmanship was more valuable than the raw material.
mediocria firma, Moderate things are surest.
medio tutissimus ibis, You will travel safest in a middle course.
mega biblion mega kakon (Gr.), (Adapted from a maxim of Callimachus), A big book is a big nuisance.
megale polis megale eremia (Gr.), A great city is a great solitude.
meden agan (Gr.), Nothing in excess.
me judice, I being the judge; in my opinion.
memor et fidelis, Mindful and faithful.
memoria in æterna, In eternal remembrance.
mens agitat molem, A mind informs the mass. (Used by Virgil in a pantheistic sense of the world; often applied to an unwieldy, dull-looking person.)
mens sana in corpore sano, A sound mind in a healthy body.
mens sibi conscia recti, A mind conscious of its own rectitude.
meo periculo, At my own risk.
meo voto, At my own wish.
metron ariston (Gr.), Moderation is best. (A favorite saying of the philosopher Cleobulus.)
mia chelidon ear ou poiei (Gr.), One swallow does not make a spring.
mihi cura futuri, My care is for the future.
mirabile dictu, Wonderful to relate.
mirabile visu, Wonderful to see.
modo et forma, In manner and form.
modus operandi, The manner of working.
mollia tempora fandi, The favorable moment for speaking.
more majorum, After the manner of our ancestors.
more suo, In his usual manner.
mors janua vitæ, Death is the gate of [everlasting] life.
mors omnibus communis, Death is common to all men.
mos pro lege, Usage has the force of law.
motu proprio, Of his own accord.
multum in parvo, Much in little.
munus Apolline dignum, A gift worthy the acceptance of Apollo.
mutatis mutandis, The necessary changes being made.
mutato nomine, de te fabula narratur, With a mere change of name the story is applicable to you.
nascimur poetæ, fimus oratores, We are born poets, we become orators by training.
natale solum, The land of one's birth.
naturam expellas furca, tamen usque recurret, Though you may drive out Nature with a pitchfork, she will always come back; inborn character is ineradicable.

[illegible]. Do not yield to misfortunes; on the contrary, go more boldly to meet them.

necessitas non habet legem, Necessity knows no law.

nec mora, nec requies, Neither delay, nor rest; without intermission.

nec pluribus impar, No unequal match for many. (The motto assumed by Louis XIV. when he planned the subjugation of Europe.)

nec precibus nec pretio, Neither by entreaty nor bribery; neither by paying nor praying.

nec scire fas est omnia, We are not allowed to know all things.

nec temere, nec timide, Neither rashly nor timidly.

nefasti dies, (Days on which judgment could not be pronounced nor public assemblies be held.) Unlucky days.

ne fronti crede, Don't trust to appearances.

nemine contradicente, No one contradicting.

nemine dissentiente, No one dissenting.

nemo fuit regente turpissimus, No man becomes a villain all at once.

nemo me impune lacessit, No one provokes me with impunity. (The motto of the Order of the Thistle.)

nemo mortalium omnibus horis sapit, No man is wise at all times; the wisest may make mistakes.

nemo satis sapit, No man is sufficiently wise of himself.

ne quid abs illo absit, Nothing further; the uttermost perfection.

ne quid detrimenti, Do not entrust a sword to a boy.

ne quid res publica detrimenti capiat, Lest the State suffer any injury. (The expression given to the Dictator when invested with supreme authority.)

nervus belli pecunia, Money is the sinews of war.

ne sutor ultra crepidam, The shoemaker should not go beyond his last. (A Latin version of a rebuke said to have been addressed by Apelles to a shoemaker who pointed out some errors in the painting of a slipper in one of the artist's works, and then began to criticise other parts of the picture.)

ne tentes, aut perfice, Do not attempt, or carry it out thoroughly.

nihil tetigit quod non ornavit, He touched nothing without embellishing it.

nil admirari, To be astonished at nothing.

nil conscire sibi, nulla pallescere culpa, To be conscious of no fault, to turn pale at no accusation.

nil desperandum, There is no cause for despair; never despair.

nil nisi crucе, Nothing but by the cross; no reward without suffering.

nimium ne crede colori, Do not trust too much to your good looks.

nisi Dominus, frustra (Ps. cxxvii. 1. *Vulg.*), Unless the Lord is with us, our labor is vain.

nitor in adversum, I strive against opposition.

nobilitas sola est atque unica virtus, Virtue is the true and only nobility.

nolens volens, Whether willing or not.

noli me tangere, Touch me not.

non cuivis homini contingit adire Corinthum, It is not every man's chance to go to Corinth, (the headquarters of luxury and refinement): hence, it is not every man's good fortune to be able to see great things.

non decimum diminuit, What the money lasts.

non est inventus, He is not found.

non ignara mali, miseris succurrere disco, Not unacquainted with misfortune, I learn to succor the wretched.

non libet, It does not please me.

non multa, sed multum, Not many things, but much.

non nobis solum nati sumus, We are not born for ourselves alone.

non omne licitum honestum, Every lawful act is not necessarily honorable.

non omnia possumus omnes, We cannot, all of us, do everything.

non passibus aequis, Not with equal steps. (Sometimes applied to a person who has been outstripped by another in the progress upon which both are engaged, etc.

non quo sed quod, Not what, but which; measures, not men.

non sequitur, It does not follow; an unwarranted conclusion.

non sibi, sed patriæ, Not for himself, but for his native land.

non sum qualis eram, I am not what I once was.

nosce te ipsum, Know thyself.

noscitur a sociis, A man is known by the company he keeps.

nota bene (N. B.), Mark well.

novus homo (lit., a new man), A mushroom; an upstart.

nudis verbis, In plain words.

nullus dies sine linea, No day without a line, i. e., without something done.

nulli secundus, Second to none.

nunc aut nunquam, Now or never.

nunquam minus solus quam cum solus, Never less alone than when alone.

obiit, He (or she) died.

obiter dictum, A thing said incidentally; an unofficial expression of opinion.

obscurum per obscurius, Explaining an obscurity by something still more obscure.

oderint dum metuant, Let them hate so long as they fear. (A favorite saying of Caligula.)

odi profanum vulgus, et arceo, I hate the vulgar rabble, and drive them away.

odium theologicum, The hatred of theologians.

odium generis humani, The hatred of the world.

o fortunatos nimium, sua si bona norint, O more than happy, if they only knew their advantages.

oleum et operam perdidi, Oh! there is now enough.

omne ignotum pro magnifico, Everything unknown is taken for magnificent.

omnem movere lapidem, To turn every stone; to make every exertion.

omne simile est dissimile, Every like is unlike; if there were not unlikeness there would be identity.

omne solum forti patria est, Every land is a brave man's home.

omne tulit punctum qui miscuit utile dulci, He has gained every point who has mixed the useful and the agreeable.

omnia ad Dei gloriam (1 Cor. x. 31. *Vulg.*), All things for the glory of God.

omnia mors aequat, Death levels all distinctions.

omnia mutantur, nos et mutamur in illis, All things are subject to change and we change with them.

omnia vincit amor: nos et cedamus amori, Love conquers all things, let us too yield to love.

omnia vincit labor, Labor conquers all things.

omnis amans amens, Every lover is demented.

operæ pretium est, It is worth while.

opus et labores, Pains and work.

ora pro nobis, Pray for us.

orate pro anima, Pray for the soul (of).

orator fit, poeta nascitur, The orator is made; the poet is born.

ore rotundo, With loud resounding voice.

o tempora, o mores, Alas for the times and the manners.

otiosa sedulitas, Laborious trifling.

otium cum dignitate, Ease with dignity.

otium sine dignitate, Ease without dignity.

pace, By leave of; with the consent of.

pace tua, By your leave.

pacta conventa, The conditions agreed on.

pallida mors aequo pulsat pede pauperum tabernas regumque turres, Pale Death, with impartial foot, knocks at the cottages of the poor and the palaces of kings.

palmam qui meruit ferat, Let him bear the palm who has deserved it.

par negotiis neque supra, Equal to, but not above his business.

par nobile fratrum, A noble pair of brothers; a well-matched pair.

pars pro toto, The part for the whole.

particeps criminis, A partaker in the crime; an accessory.

parturiunt montes, nascetur ridiculus mus, The mountains are in labor; a ridiculous mouse will be born.

parva componere magnis, To compare small things with great ones.

pater familias, The father of the family.

pater noster, Our father.

pater patriæ, The father of his country. (A title bestowed by the Roman Senate on Cæsar Octavianus Augustus.)

pathemata mathemata (Gr.), One learns by suffering.

patres conscripti, The Conscript Fathers; the Roman Senate. (Often jocularly applied to the members of a town council.)

patria est ubi bene est, Every land where a man is successful is his native land.

pax orbis terrarum, The sovereignty of the world. (A legend of frequent occurrence on Roman coins.)

pax Romana, The Roman Empire.

pax vobiscum, Peace be with you.

peithein dora kai theous logos (Gr.), Gifts persuade even the gods, as the proverb says.

per, By, through, by means of.

per ambages, By circuitous ways; with circumlocution.

per angusta ad augusta, Through trial to triumph.

per aspera ad astra, Through rough ways to the stars; through suffering to renown.

per fas et nefas, Through right and wrong.

perfervidum ingenium Scotorum, The intensely earnest character of the Scotch.
per gradus, Gradually.
periculum in mora, There is danger in delay.
per interim, In the meantime.
per mare, per terras, By sea and land.
per saltum, By a leap; by fits and starts.
per se, In itself; for its own sake.
petitio principii, A begging of the question.
placet, It seems right; it is approved of. (The formula by which the members of an Œcumenical Council or a University senate record affirmative votes. The negative formula is non placet.)
poeta nascitur, non fit, The poet is born, not made.
pondere, non numero, By weight, not by number.
pons asinorum, The bridge of asses.
populus vult decipi, decipiatur, The people wish to be deceived, let them be deceived.
post bellum auxilium, Aid after the war.
post equitem sedet atra cura, Black care sits behind the rich man on horseback; riches and high position bring cares.
præmonitus, præmunitus, Forwarned, forearmed.
prima facie, At the first glance.
principia, non homines, Principles, not men.
principiis obsta, Resist the first advances.
prior tempore, prior jure, First in point of time, first by right; first come first served.
pro aris et focis, For our altars and hearths; for our homes.
probatum est, It is proved.
probitas laudatur et alget, Honesty is praised, and left to starve.
pro bono publico, For the public good.
pro Deo et ecclesia, For God and the Church.
pro forma, As a matter of form.
proh pudor, For shame.
pro memoria, As a memorial.
pro rege, lege, grege, For the king, the law, and the people.
pugnis et calcibus, With fists and heels; with might and main.
punica fides, Punic faith; treachery.
quæ fuerunt vitia mores sunt, What were once vices are now in fashion.
quæ nocent, docent, Things which injure, instruct; we are taught by painful experience; what pains us, trains us.
qualis ab incepto processerit et sibi constet, as he begins, let him go on, and be consistent with himself.
qualis rex, talis grex, Like king, like people.
qualis vita, finis ita, As life is, so will its end be.
quamdiu se bene gesserit, As long as he behaves himself; during good behavior.
quandoque bonus dormitat Homerus, Even good Homer nods sometimes; the wisest make mistakes.
quanti est sapere, How valuable is wisdom.
quantum libet, As much as you like.
quantum meruit, As much as he deserved.
quantum mutatus ab illo, How changed from what he was.
quem dî diligunt adolescens moritur, He whom the gods love dies young.
quid faciendum? What is to be done?
quid nunc? What now? what news?
quid pro quo, One thing for another; an equivalent.
quid rides? Why do you laugh?
qui nimium probat, nihil probat, He who proves too much proves nothing.
qui non proficit, deficit, He who does not advance, loses ground.
quis custodiet ipsos custodes? Who shall keep the keepers?
qui tacet consentire videtur, He who keeps silent is assumed to consent; silence gives consent.
qui timide rogat docet negare, He who asks timidly courts denial.
quoad hoc, To this extent.
quo animo, With what intention.
quocunque jeceris stabit, Wherever you throw it, it will stand. (The motto of the Isle of Man.)
quocunque modo, In whatever manner.
quŏcunque nomine, Under whatever name.
quod avertat Deus! God forbid!
quod bene notandum, Which is to be especially noted.
quod erat demonstrandum, Which was to be proved. [Q. E. D.]
quod erat faciendum, Which was to be done. [Q. E. F.]
quod hoc sibi vult? What does this mean?
quod non opus est, asse carum est (a saying of Cato, quoted by Seneca), What is not necessary is dear at a penny.
quod vide [q. v.], Which see.
quo fata vocant, Whither the Fates call.
quo fas et gloria ducunt, Where duty and glory lead.
quorum pars magna fui, Of whom I was an important part.
quos Deus vult perdere, prius dementat (probably altered from a passage in *Euripides*), Those whom God wills to destroy he first deprives of their senses.
quot homines, tot sententiæ, Many men, many minds.
rara avis in terris, nigroque simillima cygno, An extremely rare bird, and very like a black swan (supposed not to exist). The first four words are often used ironically.
ratione soli, According to the soil.
recte et suaviter, Justly and mildly.
rectus in curia, Upright in court; with clean hands.
redolet lucerna, It smells of the lamp. (Said of any labored literary production.)
re infecta, The business being unfinished.
relata refero, I tell the tale as I heard it.
religio loci, The spirit of the place.
rem acu tetigisti, You have touched the matter with a needle; you have described it accurately.
remis velisque, With oars and sails; with all one's might.
requiescat in pace, May he rest in peace.
res angusta domi, Narrowed circumstances at home; limited means.
res est sacra miser, A man in distress is a sacred object.
res gestæ, Things done; exploits.
res judicata, A matter decided; a case already settled.
respice finem, Look to the end.
resurgam, I shall rise again.
ridere in stomacho, To laugh inwardly; to laugh in one's sleeve.
ride si sapis, Laugh if you are wise.
rixatur de lana sæpe caprina, He often quarrels about goats' wool, i. e., trifles.
ruat cælum, Let the heavens fall.
rudis indigestaque moles, A rude and undigested mass.
rus in urbe, A residence in or near town, with many of the advantages of the country.
rusticus expectat dum dēfluat amnis, at ille lābitur, et labetur in omne volubĭlis ævum, The peasant waits till the river shall cease to flow, but it glides on, and will glide on forever.
sal atticum, Attic salt, i. e., wit.
salvo jure, Without prejudice.
salvo pudore, Without offense to modesty.
sapere aude, Dare to be wise.
sat cito, si sat bene, Quickly enough if well enough.
satis eloquentiæ, sapientiæ parum, Eloquence enough, but too little wisdom.
satis superque, Enough, and more than enough.
sat pulchra, si sat bona, Fair enough if good enough; handsome is that handsome does.
secundum artem, According to the rules of art.
semel abbas, semper abbas, Once an abbot, always an abbot.
semel insanivimus omnes, We have all been mad at some time.
semper avarus eget, The avaricious man is always in want.
semper fidelis, Always faithful.
semper idem, Always the same.
semper paratus, Always prepared.
semper timidum scelus, Crime is always fearful.
sequiturque patrem, non passibus æquis, He follows his father, but not with equal steps.
sero venientibus ossa, The bones for those who come late; those who come late get the leavings.
serus in cælum redeas, May it be long before you return to heaven; long life to you.
servare modum, To keep within bounds.
servus servorum Dei, The servant of the servants of God. (One of the titles of the pope.)
sic eunt fāta hominum, Thus go the destinies of men.
sic itur ad astra, Thus do we reach the stars.
sic passim, So in various places.
sic semper tyrannis, Ever thus to tyrants.
sic transit gloria mundi, So the glory of this world passes away. (An exclamatory phrase used at the installations of the popes.)
sicut ante, As before.
sicut patribus, sit Deus nōbis, May God be with us, as he was with our fathers.
sic volo, sic jubeo, stat pro ratiōne voluntas, Thus I will, thus I command, my pleasure stands for a reason.
sic vos non vobis, Thus do ye, but not for yourselves. (The commencement of each of four verses which Virgil wrote, but left incomplete, on the occasion when Bathyllus claimed some lines really written by the poet, who alone was able to complete the verses, and thus prove their authorship. Used of persons by whose labors others have unduly profited.)

si Deus nobiscum, quis contra nos? If God be with us, who shall be against us?
sile et philosophus esto, Hold your tongue, and you will pass for a philosopher.
simile gaudet simili, Like loves like.
similia similibus curantur, Like things are cured by like. (The principle of homœopathy.)
si monumentum requiris, circumspice, If you seek my monument, look around. (The epitaph of Sir Christopher Wren in St. Paul's Cathedral, of which he was the architect.)
simplex munditiis, Simple, in neat attire; neat, not gaudy.
sine cura, Without care or change.
sine dubio, Without doubt.
sine mora, Without delay.
sine præjudicio, Without prejudice.
sine qua non, Without which, not; an indispensable condition.
si parva licet componere magnis, If it be lawful to compare small things with great.
sit tibi terra levis, May the earth lie light upon thee. (An inscription often found on Roman tombstones; frequently abbreviated to S. T. T. L.)
si vis pacem, para bellum, If you wish for peace, prepare for war.
skene pas ho bios (Gr.), Life is a stage.
solitudinem faciunt, pacem appellant, They make a wilderness and call it peace.
sophen de miso (Gr.), I hate a blue-stocking.
spes sibi quisque, Let each man's hope be in himself; let him trust to his own resources.
speude bradeos (Gr.), Make haste slowly. (A favorite saying of Augustus Cæsar.)
splendide mendax, Nobly untruthful; untrue for a good object. (Often used ironically of an unblushing liar.)
sponte sua, Spontaneously; of one's (or its) own accord.
spretæ injuria formæ, The affront offered to her slighted beauty. (In allusion to the resentment of Juno because Paris gave the golden apple to Venus as the prize of beauty.)
stat magni nominis umbra, He stands the shadow of a mighty name.
stat nominis umbra, An adaptation of the preceding, used by "Junius" as the motto of his *Letters*.
status quo, status in quo, statu quo, The state in which.
status quo ante bellum, The state in which the belligerents were before war commenced.
sta, viator, heroem calcas, Stop, traveler, thou treadest on a hero's dust. (The epitaph inscribed by Condé over the grave of his great opponent, Merci.)
stemmata quid faciunt? Of what value are pedigrees?
studium immane loquendi, An insatiable desire for talking.
sua cuique voluptas, Every man has his own pleasures.
suaviter in modo, fortiter in re, Gentle in manner, resolute in execution.
sub colore juris, Under color of law.
sublata causa, tollitur effectus, The effect ceases when the cause is removed.
sub pœna, Under a penalty.
sub rosa, Under the rose; secretly.
sub silentio, In silence; without formal notice being taken.
sub specie Under the appearance of.
sub voce, Under such or such a word.
sui generis, Of its own kind; unique.
summum jus, summa injuria est, The rigor of the law is the height of oppression.
sumptibus publicis, At the public expense.
suo marte, By his own powers or skill.
suppressio veri, suggestio falsi, The suppression of the truth is the suggestion of a falsehood.
surgit amari aliquid, Something bitter arises.
suum cuique, Let each have his own.
suus cuique mos, Every one has his own particular habit.
tangere ulcus, To touch a sore; to reopen a wound.
tantæne animis cœlestibus iræ, Can such anger dwell in heavenly minds?
telum imbelle sine ictu, A feeble dart, devoid of force. (Applied, fig., to a weak argument.)
tempori parendum, We must move with the times.
tempus edax rerum, Time the devourer of all things.
tempus fugit, Time flies.
tempus omnia revelat, Time reveals all things.
tenax propositi, Firm of purpose.
teres atque rotundus, A man polished and complete.
terra cotta, (It.), Baked clay.
terra firma, The firm land; the continent.
terra incognita, An unknown land.
tertium quid, A third something (produced by the union of two different things, or the collision of two opposing forces).
teste, By the evidence of.
timeo Danaos et dona ferentes, I fear the Greeks, even when they bring gifts. (Used of distrusting the kindness of a foe.)
to kalon (Gr.), The beautiful.
to prepon (Gr.), What is becoming or decorous.
tot homines, quot sententiæ, So many men, so many minds.
trahit sua quemque voluptas, Each man is led by his own taste.
transeat in exemplum, Let it pass into a precedent.
tria juncta in uno, Three joined in one (the motto of the Order of the Bath).
trium literarum homo, A man of three letters; a thief (*fur* being Latin for thief).
Troja fuit, Troy was; Troy has perished.
Tros Tyriusve mihi nullo discrimine agetur, Trojan or Tyrian shall have the same treatment from me.
truditur dies die, One day follows hard on another.
uberrima fides, Implicit faith.
ubi bene ibi patria, Where one is well off, there is his country.
ubi jus incertum, ibi jus nullum, Where the law is uncertain, there is no law.
ubi mel ibi apes, Where the honey is, there are the bees.
ubi tres medici, duo athei, Where there are three physicians there are two atheists.
ultima ratio regum, The last argument of kings (engraved on French cannon by order of Louis XIV.).
ultimus Romanorum, The last of the Romans. (Used by Brutus of Cassius.)
unguibus et rostro, With claws and beak.
unguis in ulcere, A nail in the wound, to keep it open.
urbem lateritiam invenit, marmoream reliquit, He found the city (Rome) brick, but left it marble.
usque ad nauseam, To disgust.
usus loquendi, Usage in speaking.
ut infra, As stated or cited below.
uti possidetis, As you now possess. (A diplomatic phrase meaning that at the termination of hostilities the contending parties are to retain whatever territory they may have gained during the war.)
ut supra, As stated or cited above.
vade in pace, Go in peace.
væ victis, Woe to the conquered. (Said to have been the exclamation of Brennus, when he threatened to exterminate the Romans.)
valeat quantum valere potest, Let it pass for what it is worth.
Vare, legiones redde, Varus, give back my legions. (A frequent exclamation of Cæsar Augustus when he thought of the defeat and slaughter of Quinctilius Varus with three legions by the Germans. Often used of a commander who has recklessly sacrificed troops, or of a financier who has wasted funds.)
variæ lectiones, Various readings.
varium et mutabile semper femina, Woman is always a changeable and capricious thing.
veluti in speculum, As in a mirror.
venalis populus, venalis curia patrum, The people and the senators are equally venal.
vendidit hic auro patriam, He sold his country for gold.
venenum in auro bibitur, Poison is drunk out of gold; the rich run more risk of being poisoned than the poor.
venia necessitati datur, Pardon is granted to necessity; necessity has no law.
venienti occurrite morbo, Meet the coming disease; take it in time; prevention is better than cure.
venit summa dies et ineluctabile tempus, The last day has come, and the inevitable doom.
veni, vidi, vici, I came, I saw, I conquered. (The laconic despatch in which Julius Cæsar announced to the Senate his victory over Pharnaces.)
ventis secundis, With favorable winds.
vera incessu patuit dea, She stood revealed, an undoubted goddess in her walk.
verbum sat sapienti, A word is sufficient for a wise man.
veritas odium parit, Truth begets hatred.
veritatis simplex oratio est, The language of truth is simple.
vestigia . . . nulla retrorsum, No signs of any returning, usually translated, no stepping back.
vexata quæstio, A disputed question.
via media, A middle course.
via trita, via tutissima, The beaten path is safest.
victrix causa dis placuit, sed victa Catoni, The winning cause was pleasing to the gods, the conquered one to Cato.
video meliora proboque, deteriora sequor, I see and approve the better course, but I follow the worse.
vidit et erubuit lympha pudica Deum, The modest water saw its God and blushed. (On the miracle at Cana in Galilee.)
vi et armis, By main force.

vilius argentum est auro, virtutibus aurum, Silver is of less value than gold, gold than virtue.
vincet amor patriæ, The love of country will prevail.
vir bonus dicendi peritus, A good man skilled in the art of speaking. (The Roman definition of an orator.)
viresque acquirit eundo, She (Rumor) gains strength as she travels.
Virgilium vidi tantum, I only saw Virgil; I was not intimate with the great man.
virtute officii, By virtue of one's office.
virûm volitare per ora, To hover on the lips of men; to be in everybody's mouth.
vis comica, Comic power or talent.
vis consilii expers mole ruit sua, Force, without judgment, falls by its own weight.
vita hominis sine literis mors est, The life of man without literature is death.
vitam impendere vero, To risk one's life for the truth.
vix ea nostra voco, I scarcely call these things our own.
vixere fortes ante Agamemnona, Brave men lived before Agamemnon.
volenti non fit injuria, No injury is done to a consenting party.
vox clamantis in deserto, The voice of one crying in the wilderness.
vox et præterea nihil, A voice and nothing more; a mere sound; hence, fine words without weight or meaning.
vox faucibus hæsit, His voice died in his throat; he was dumb with amazement.
vox populi, vox Dei (an old proverb quoted by William of Malmesbury in the Twelfth Century), The voice of the people is the voice of God.
vultus animi janua et tabula, The countenance is the portrait and picture of the mind.
zonam perdidit, He has lost his purse; he is in distressed circumstances.

MODERN LANGUAGES

Phrases not designated are from the French; those from other languages are distinguished thus: (Ger.) = German; (It.) = Italian; *and* (Sp.) = Spanish.

à bon marché, Cheap.
absence d'esprit, Absence of mind.
à cheval, On horseback.
a che vuole, non mancano modi (It.), Where there's a will, there's a way.
à compte, On account.
à corps perdu, Headlong; neck or nothing.
à couvert, Under cover; protected; sheltered.
à deux mains (for both hands), Having a double office or employment.
adieu, la voiture, adieu, la boutique (good-bye, carriage; good-bye, shop), All is over.
à discretion, At discretion; unrestrictedly.
a droite, To the right.
affaire d'amour, A love affair.
affaire d'honneur, An affair of honor; a duel.
affaire du coeur, An affair of the heart; a love affair.
à fin, To the end or object.
à fond, To the bottom; thoroughly.
à forfait, By contract; by the job.
à gauche, To the left.
à genoux, On one's knees.
à grands frais, At great expense.
à haute voix, Aloud.
à huis clos, With closed doors; secretly.
aide-toi, et le Ciel t' aidera, Help yourself, and Heaven will help you.
à l'abandon, Disregarded; uncared for.
à la belle étoile, Under the canopy of heaven; in the openair.
à la bonne heure, Well-timed; in good time; favorably.
à l'abri, Under shelter.
à la campagne, In the country.
à la carte, By the card.
à la dérobée, Stealthily.
à la française, In French fashion.
à la grecque, After the Greek fashion.
à la mode, In the fashion; according to the custom or fashion.
à la Tartufe, Like Tartufe (the hypocritical hero of Molière's comedy, *Tartufe*). Hence, hypocritically.
al buon vino non bisogna frasca (It.), Good wine needs no bush.
à l'envi, With emulation.
al fresco (It.), In the open air.
à l'improviste, Unawares; on a sudden.
Alles hat seine Zeit (Ger.), All in good time.
allez-vous en, Away with you; be off.
allons, Come on.
Allzuviel ist ungesund (Ger.), Too much of a good thing.
al piu (It.), At most.
à main armée, By force of arms.
am Anfang (Ger.), At the beginning.
amar y saber no puede ser (Sp.), No one can love and be wise at the same time.
âme de boue (lit., soul of mud), A base-minded person.
amende honorable, Fit reparation; a satisfactory apology.
à merveille, Marvellously; extraordinarily.
ami de cour (lit., a friend of the court), A false friend; one who is not to be depended on.
ami de peuple, Friend of the people.
amour propre, Vanity; self-love.
ancien régime, The former condition of things.
à outrance, To the last extremity.
à pas de géant, With a giant's stride.
à perte de vue, Till out of sight.
à peu près, Nearly.
à pied, On foot.
à point, Just in time; exactly; exactly right.
à prima vista (It.), At the first glance.
à propos, To the point.
à propos de rien (lit., apropos of nothing), Motiveless; for nothing at all.
argent comptant, Ready money.
arrière pensée, Mental reservation; unavowed purpose.
à tort et à travers, At random.
au bon droit, To the just right.
au bout de son Latin, At the end of his Latin; to the extent of his knowledge.
au contraire, On the contrary.
au courant, Well acquainted with: well informed.
au désespoir, In despair.
au fait, Expert.
au fond, To the bottom.
au gratin, With cheese.
au jus, With the natural juice.
au pis aller, At the very worst.
au reste, As for the rest.
au revoir, Till we meet again.
aussitôt dit, aussitôt fait, No sooner said than done.
autant d'hommes, autant d'avis, Many men, many minds.
autre droit, Another's right.
autre fois, Another time.
autre vie, Another's life.
aut vincere aut mori, Victory or death.
aux armes, To arms.
avant propos, Preface; introductory matter.
à volonté, At pleasure.
a vostra salute (It.), To your health.
à votre santé, To your health.
a vuestra salud (Sp.), To your health.
ballon d'essai, A balloon sent up to test the direction of air-currents; hence, anything said or done to gauge public feeling on any question.
bas bleu, A blue-stocking; a woman who seeks a reputation for learning.
beau-idéal, A model of ideal perfection.
beaux esprits, Men of wit, or genius.
bel esprit, A wit; a genius.
benedetto è quel male che vien solo (It.), Blessed is the misfortune that comes alone.
ben-trovato (It.), Well invented.
bête noire (lit., a black beast), A bugbear.
billet doux, or *billet d'amour*, A love letter.
bizarre, Odd; fantastic.
blanc mange (a delicate dessert), White jelly.
blasé, Surfeited.
bon ami, Good friend.
bon bon, A sweet-meat; confectionery.
bon gré, mal gré, With good or bad grace; willing or unwilling.
bonhomie, Good-natured simplicity.
bon jour, Good day; good morning.
bon mot, A witticism.
bonne et belle, Good and handsome. (Of a woman.)
bonne foi, Good faith.
bon soir, Good evening.
bon ton, High fashion; first-class society.
boudoir, A small private apartment.
bouillon, Soup.
breveté, Patented.
cap-à-pie, From head to foot.
carte blanche, Full power.
castello che dà orecchia si vuol rendere (It.), The fortress that parleys soon surrenders.
cela va sans dire, That goes without saying; that is understood.
ce n' est que le premier pas qui coûte, It is only the first step that is difficult.
c' est à dire, That is to say.
c' est une autre chose, That is quite another thing.
chacun à son goût, Everyone to his taste.
chacun tire de son côte, Everyone inclines to his own side or party.

chanson, A song.
chapeau, A hat.
chapeau de bras, A military cocked hat.
chapelle ardente, The chamber where a dead body lies in state.
chateau, A castle.
chauffeur, Driver of an automobile.
chef, Man cook.
chef-d'œuvre, A masterpiece.
chemin de fer (lit., iron road), A railway.
chère amie, A dear (female) friend; a lover.
che sarà, sarà (It.), What will be, will be.
cheval de bataille (lit., a war-horse), Chief dependence or support; one's strong point.
chi tace confessa (It.), He who keeps silent admits his guilt.
ci gît, Here lies. (A common inscription on tombstones.)
comme il faut, Proper; as it should be.
comment vous portez vous, How are you?
compagnon de voyage, A traveling companion.
compte rendu, An account rendered; a report.
con amore (It.), With affection; very earnestly.
concours, Competition (as for a prize); contest.
con diligenza (It.), With diligence.
con dolore (It.), With grief; sadly.
conseil de famille, A family council or consultation.
conseil d'état, A council of state; a privy council.
consommé, A clear soup.
contretemps, An awkward mishap.
cordon sanitaire. A line of sentries to prevent, as far as possible, the spread of contagion or pestilence. (Used also of other precautionary measures.)
couleur de rose, Rose color.
coup, A stroke.
coup de grâce, A finishing-stroke. (Formerly applied to the fatal blow by which the executioner put an end to the torments of a culprit broken on the wheel.)
coup de main, A sudden attack, enterprise, or undertaking.
coup de maître, A master-stroke.
coup d' essai, A first attempt.
coup d' état, A stroke of policy; a sudden and decisive blow (usually inflicted by unconstitutional means).
coup d' oeil, A rapid glance.
coup de pied, A kick.
coup de plume, A literary attack.
coup de soleil, A sunstroke.
coup de théâtre, A theatrical effect.
courage sans peur, Fearless courage.
coute que coute, Cost what it may.
cuisine, A kitchen; cookery.
dame d'honneur, A maid of honor.
Das geht Sie Nichts an (Ger.), That does not concern you.
de bonne augure, Of good omen.
de bonne grâce, With good will; willingly.
débris, Refuse.
début, First appearance.
débutante, A young lady just entering society.
décolleté, Open-breasted.
dégagé, Free, easy, without constraint.
de gaieté de coeur, In sport; sportively.
déjeûner à la fourchette, A meat breakfast.
de mal en pis, From bad to worse.
demi-tasse, A small cup.
dénouement, An unraveling or winding up.
dérnier ressort, The last resource.
désagrément, Something disagreeable or unpleasant.
détour, A circuitous march.
di buona volontà sta pieno l'inferno (It.), Hell is full of good intentions.
Dieu est toujours pour les plus gros bataillons, God is always on the side of the largest battalions; the largest army has the best chance.
Dieu et mon droit, God and my right.
Dieu vous garde, God protect you.
di grado en grado (It.), Step by step; gradually.
Dios me libre de hombre de un libro (Sp.), God deliver me from a man of one book.
di salto (It.), By leaps.
di tutti novello par bello (It.), Everything new seems beautiful.
dolce far niente (It.), Sweet idleness.
dorer la pilule, To gild the pill.
double entente, Double meaning.
douceur, A bribe.
eau de cologne, Cologne water.
eau de vie, The water of life — applied usually to brandy.
éclat, Splendor, brilliancy.
édition de luxe, A splendid edition of a book, handsomely bound, and usually well illustrated.
Ehrlich währt am längsten (Ger.), Honesty is the best policy.
Eile mit Weile (Ger.), The more haste the less speed.
Eine Schwalbe macht keinen Sommer (Ger.), One swallow does not make a summer.
Ein gebranntes Kind scheut das Feuer (Ger.), A burnt child dreads the fire.
élite, A select body of persons.
embonpoint, Roundness; good condition.
en ami, As a friend.
en arrière, In the rear; behind.
en attendant, In the meantime.
en avant, Forward.
en badinant, In sport; jestingly.
en cueros, en cueros vivos (Sp.), Naked; without clothing.
Ende gut, Alles gut (Ger.), All's well that ends well.
en déshabillé, In undress; in one's true colors.
en Dieu est ma fiance, My trust is in God.
en Dieu est tout, In God are all things.
en effet, Substantially; really; in effect.
en famille, With one's family; at home.
enfant gâté, A spoilt child.
enfants perdu (lit., lost children), A forlorn hope.
enfant trouvé, A foundling.
enfin, In short; finally; at last.
en flûte, Carrying guns on the upper deck only.
en grande tenue, In full official, or evening, dress.
en masse, In a body or mass.
ennui, Weariness.
en passant, In passing; by the way.
en plein jour, In open day.
en queue, Immediately after; in the rear. Used specially of persons waiting in line, as at the door of a theater, at the ticket-office of a railway station, etc.
en rapport, In harmony, relation, or agreement.
en règle, Regular, regularly; in order.
en revanche, In return; as a compensation for.
en route, On the way.
ensemble, The whole.
en suite, In company; in a set.
en tasse, In a cup.
entente cordiale, A good understanding, especially between two states.
entourage, Surroundings.
entre deux feux, Between two fires.
entre deux vins (lit., between two wines), Half-drunk.
entrée, Entry; first course.
entremets, Small and dainty dishes set between the principal ones at table.
entre nous, Between ourselves; in confidence.
en vérité, In truth; really.
Es fehlt mir Nichts (Ger.), Nothing is the matter with me.
Es freut mich sehr (Ger.), I am very glad.
Es ist nicht Alles Gold, was glänzt (Ger.), All is not gold that glitters.
esprit de corps, The animating spirit of a collective body of persons, e. g., of a regiment, the bar, the clergy, etc.
esprit des lois, Spirit of the laws.
esprit fort, A daring investigator; a free-thinker.
Es thut mir sehr leid (Ger.), I am very sorry.
Ewigkeit (Ger.), Eternity.
façon de parler, Manner of speaking; phrase; locution.
faire bonne mine, To put a good face on the matter.
faire l'homme d'importance, To give oneself airs.
faire sans dire, To act without ostentation or boasting.
faire son devoir, To do one's duty.
fait accompli, An accomplished fact.
faux pas, A false step; an act of indiscretion.
femme couverte, A married woman.
femme de chambre, A chambermaid.
femme de charge, A housekeeper.
femme galante, A gay woman; a prostitute.
femme sole, An unmarried woman.
fendre un cheveu en quatre, To split a hair in four; to make subtle distinctions.
fête, A feast, festival; holiday.
fête champêtre, A rural out-of-door feast; a festival in the fields.
feu de joie, A bonfire, or discharge of firearms as a sign of rejoicing.
fille de chambre, A chambermaid.
fille de joie, A gay woman; a prostitute.
fille d'honneur, A maid of honor.
fin de siècle, The end of the century.
fleur-de-lis, The flower of the lily.
flux de bouche, Inordinate flow of talk; garrulity.
frà Modesto non fu mai priore (It.), Friar Modest never became prior.
frisch begonnen, halb gewonnen (Ger.), Well begun is half done.
front à front, Face to face.
fuyez les dangers de loisir, Fly from the dangers of leisure.

gaieté de coeur, Gaiety of heart.
garage, A place where automobiles are stored and kept in order.
garçon, A lad, a waiter.
garde à cheval, A mounted guard.
garde du corps, A body guard.
garde mobile, A body of troops liable to be called out for general service.
garde royale, Royal guard.
gardez, Take care; be on your guard.
gardez-bien, Take good care; be very careful.
gardez la foi, Keep the faith.
Gehen sie Ihres Weges (Ger.), Go your way.
gens d'armes, Men-at-arms; military police.
gens de condition, People of rank.
gens d'église, The clergy; clerics.
gens de guerre, Military men.
gens de lettres, Literary men.
gens de lois, Lawyers.
gens de même famille, People of the same family; birds of a feather.
gens de peu, The lower classes.
gentilhomme, A gentleman.
gibier de potence, A gallows-bird; one who deserves hanging.
giovine santo, diavolo vecchio (It.), A young saint, an old devil.
gitano (Sp.), A gipsy.
Gleich und gleich gesellt sich gern (Ger.), Birds of a feather flock together.
gli assenti hanno torto (It.), The absent are in the wrong.
goutte à goutte, Drop by drop.
gouvernante, A governess; housekeeper.
grâce à Dieu, Thanks be to God.
grande chère et beau feu, Good fare and a good fire; comfortable quarters.
grande parure, grande toilette, Full dress.
grand merci, Many thanks.
grosse tête et peu de sens, A big head and little sense.
guerra a cuchillo (Sp.), War to the knife.
guerra, cominciata, inferno scatenato (It.), War begun, hell unchained.
guerre à mort, War to the death.
guerre à outrance, War to the uttermost.
Haben Sie Geld bei sich? (Ger.), Have you any money about you?
haut et bon, Great and good.
haut goût, High flavor; elegant taste.
haut ton. Highest fashion.
homme d'affaires, A man of business; an agent.
homme de bien, A good man; an upright man.
homme de fortune, A fortunate man.
homme de robe, A person in a civil office.
homme d'esprit, A wit; a genius.
homme d'état, A statesman.
honi soit qui mal y pense, Shame be to him who thinks evil of it. (The motto of the Order of the Garter.)
hors de combat, Disabled; unfit to continue a contest.
hors de la loi, Outlawed.
hors de propos, Wide of the point; inapplicable.
hors de saison, Out of season; unseasonable.
hors d'oeuvre, Out of course; out of accustomed place. (Used substantively of small appetizing dishes served usually at the beginning of a meal.)
hôtel de ville, A town-hall.
hôtel Dieu, A hospital.
hôtel garni, Furnished lodgings.
hurtar para dar por Dios (Sp.), To steal in order to give to God.
Ich dien (Ger.), I serve.
idée fixe, A fixed idea; intellectual monomania.
ignorance crasse, Gross ignorance.
i grandi dolore sono muti (It.), Great griefs are silent.
il a le diable au corps, The devil is in him.
il faut de l'argent, Money is wanting.
il n'a ni bouche ni éperon, He has neither mouth nor spur; he has neither wit nor courage.
il ne faut jamais défier un fou, One should never provoke a fool.
il n'est sauce que d'appétit, Hunger is the best sauce.
il penseroso (It.), The pensive man. (The title of one of Milton's poems.)
il sent le fagot, He smells of the faggot; he is suspected of heresy.
impoli, Unpolished; rude.
in bianco (It.), In blank; in white.
in un giorno non si fe 'Roma (It.), Rome was not built in a day.
ir por lana, y volver trasquilado (Sp.), To go for wool, and come back shorn.
jamais bon coureur ne fut pris, A good runner is not to be taken; old birds are not to be caught with chaff.
je maintiendrai le droit, I will maintain the right.
je ne sais quoi, I know not what. (Used adjectively of something indefinable, or very difficult to define.)
je n'oublierai jamais, I will never forget.
je suis prêt, I am ready.
jet d'eau, A fountain; a jet of water.
jeu de mots, A play upon words; a pun.
jeu d'esprit, A witticism.
jeu de théâtre, A stage trick; clap-trap.
je vis en espoir, I live in hope.
kein Kreuzer, kein Schweizer (Ger.), No money, no Swiss.
la critique est aisée, l'art est difficile, Criticism is easy enough, but art is difficult.
Lade nicht Alles in ein Schiff (Ger.), Do not ship all in one vessel: do not put all your eggs into one basket.
l'adversité fait les hommes, et le l'bonheur les monstres, Adversity makes men, and prosperity monsters.
la fortuna aiuta i pazzi (It.), Fortune helps fools.
la Fortune passe partout, Fortune passes everywhere; all men are subject to the vicissitudes of Fortune.
laissez faire, To let alone.
laissez nous faire, Let us act for ourselves; let us alone.
l'allegro (It.), The merry man. (The title of one of Milton's poems.)
l'amour et la fumée ne peuvent se cacher, Love and smoke cannot be hidden.
langage des halles, The language of the markets; Billingsgate.
la patience est amère, mais son fruit est doux, Patience is bitter, but its reward is sweet.
la povertà è la madre di tutte le arti (It.), Poverty is the mother of all the arts.
l'argent, Silver; money.
lasciate ogni speranza voi, che'ntrate (It.), All hope abandon ye, who enter here.
Lassen Sie mich gehen (Ger.), Let me alone.
l'avenir, The future.
la vertu est la seule noblesse, Virtue is the sole nobility.
le beau monde, The world of fashion; society.
le bon temps viendra, There's a good time coming.
le coût en ôte le goût, The expense takes away the pleasure.
le demi-monde, Women of equivocal reputation bordering between courtesanship and respectability.
le grand monargue, The grand monarch. (A title applied to Louis XIV. 1643–1715.)
le grand oeuvre, The great work; the search for the philosopher's stone.
le jeu n'en vaut pas la chandelle, The game is not worth the candle (by the light of which it is played); the object is not worth the trouble.
le monde est le livre des femmes, The world is woman's book.
le mot d'enigme, The solution of the mystery.
l'empire des lettres, The empire of letters.
le parole son feminine, e i fatti son maschi (It.), Words are feminine, and deeds are masculine.
le pas, Precedence.
le point de jour, Daybreak.
le roi et l'état, The king and the state.
le roi le veut, The king wills it.
les absents ont toujours tort, The absent are always wrong.
lèse majesté, High treason.
les extrêmes se touchent, Extremes meet.
les murailles ont des oreilles, Walls have ears.
les plus sages ne le sont pas toujours, The wisest are not always wise.
l'étoile du nord, The star of the north.
le tout ensemble, The whole taken together.
lettre de cachet, A sealed letter containing orders; a royal warrant, usually authorizing the imprisonment, without trial, of a person named therein.
lettre de change, Bill of exchange.
lettre de créance, Letter of credit.
le vrai n'est pas toujours vraisemblable, Truth is not always probable; truth is stranger than fiction.
l'homme propose, et Dieu dispose, Man proposes and God disposes.
l'inconnu, The unknown.
l'incroyable, The incredible; the marvelous. (The word incroyable was applied substantively to the fops of the Directory period in the great French Revolution.)
lingerie, Linen goods; also, collectively, all the linen, cotton, and lace articles of a woman's wardrobe.
littérateur, A literary man.
lo barato es caro (Sp.), A bargain is dear.
l'occhio del padrone ingrassa il cavallo (It.), The master's eye fattens the horse.
loyauté m'oblige, Loyalty binds me.
ma chère, My dear (fem.).
mademoiselle, A young unmarried lady.
maestro di color che sanno (It.), Master of those that know. (Applied by Dante to Aristotle.)
ma foi, Upon my faith; upon my word.

maintien le droit, Maintain the right.
maison de campagne, A country house.
maison de santé, A private asylum or hospital.
maison de ville, A town hall.
maître des basses œuvres, A nightman.
maître des hautes œuvres, An executioner; a hangman.
maître d'hôtel, A house steward.
maladie du pays, Home-sickness.
mal à propos, Out of place; ill suited.
mal de dents, Toothache.
mal de mer, Sea-sickness.
mal de tête, Headache.
mal entendre, A misunderstanding; a mistake.
malgré nous, In spite of us.
malheur ne vient jamais seul, Misfortunes never come singly.
mardi gras, Shrove Tuesday.
mariage de conscience, A private marriage.
mariage de convenance, A marriage of convenience; or from interested motives.
matinée, A reception, or a musical or dramatic entertainment, held in the daytime.
mauvaise honte, False modesty.
mauvais goût, False taste.
mauvais sujet, A worthless fellow.
mayonnaise, A kind of salad dressing made with oil.
medecin, guéris-toi toi-même, Physician, heal thyself.
menu, Bill of fare.
Mir ist Alles einerlei (Ger.), It's all the same to me.
mise-en-scène, The staging of a play.
mon ami, My friend.
mon cher, My dear (fellow).
monsieur, Sir; master; gentleman.
mot du guet, A watchword.
mots d'usage, Words in common use.
muraglia bianca, carta di matto (It.), A white wall is the fool's paper.
naïve, Having unaffected simplicity.
naïveté, Native simplicity.
née, Born.
negligé, A morning dress.
Neue Besen kehren gut (Ger.), A new broom sweeps clean.
ni l'un ni l'autre, Neither the one nor the other.
n'importe, It is of no consequence.
noblesse oblige, Nobility imposes obligations; much is expected from persons of good position.
nom de guerre, A war-name; an assumed name; a pseudonym.
nom de plume, An assumed title.
non mi ricordo (It.), I do not remember.
non obstant clameur de haro, Despite the hue and cry.
non ogni fiore fa buon odore (It.), It is not every flower that smells sweet.
non vender la pelle dell' orse prima di pigliarlo (It.), Don't sell the bearskin before you have caught the bear.
Noth kennt kein Gebot (Ger.), Necessity knows no law.
Notre Dame, Our Lady, the Virgin Mary.
n'oubliez pas, Don't forget.
nous avons changé tout cela, We have changed all that.
nous verrons, We shall see.
nouvelles, News.
nouvellette, A short tale or novel.
nul bien sans peine, No pains, no gains.
nulla nuova, buona nuova (It.), No news is good news.
ogni bottega ha la sua malizia (It.), Every shop has its trick; there are tricks in all trades.
olla podrida (Sp.), A heterogeneous mixture.
on connait l'ami au besoin, A friend is known in time of need.
on dit, They say.
oro è che oro vale (It.), That is gold which is worth gold; all is not gold that glitters.
oublier je ne puis, I can never forget.
ouï-dire, Hearsay.
ouvrage de longue haleine, A long-winded business.
ouvrier, A workman; an artisan.
par ci, par là, Here and there.
par excellence, Pre-eminently.
par exemple, For instance.
parole d'honneur, Word of honor.
partout, Everywhere.
parvenu, An upstart.
pas a pas, Step by step.
passé, Worn out.
paté de foie gras, A pie made (in Strassburg) from the livers of geese.
peine forte et dure, Very severe punishment; a kind of judicial torture.
penchant, Inclination; liking.
pensée, A thought expressed in terse vigorous language.
per (It.), For; through; by.
per contante (It.), For cash.
per contra (It.), On the contrary.
père de famille, The father of the family.
perdu, Lost.
per mese (It.), By the month.
per più strade si va a Roma (It.), There are many roads to Rome.
petit, Small.
petit coup, A small mask; a domino.
petit maître, A little master; a fop.
peu-à-peu, Little by little; by degrees.
pied à terre, A resting-place; a temporary lodging.
pigliar due colombi a una fava (It.), To catch two pigeons with one bean; to kill two birds with one stone.
pis aller, The worst or last shift.
poco a poco (It.), Little by little; by degrees.
point d'appui, Prop; point of support.
pommes de terre, Potatoes (apples of the earth).
pot-pourri, A medley.
pour acquit, Paid: settled. (The usual form of receipt.)
pour faire rire, To excite laughter.
pour faire visite, To pay a visit.
pour passer le temps, To while away the time.
pour prendre congé, To take leave. (Usually abbreviated to P. P. C.)
prendre la lune avec les dents, To seize the moon in one's teeth; to aim at impossibilities.
presto maturo, presto marcio (It.), Soon ripe, soon rotten.
prêt d'accomplir, Ready to accomplish.
prêt pour mon pays, Ready for my country.
preux chevalier, A brave knight.
prima donna, Leading lady singer in an opera.
protégé, One protected by another.
purée, A thick soup.
purée aux croutons, A thick soup with small cubes of toasted bread.
quelque chose, Something; a trifle.
qui a du bien, The tippler will go on tippling; it is hard to break off bad habits.
quien poco sabe, presto lo reza (Sp.), He who knows little soon tells it.
quien sabe? (Sp.), Who knows?
qu'il soit comme il est désiré, Let it be as desired.
qui m'aime aime mon chien, Love me, love my dog.
qui n'a santé, n'a rien, He who has not health, has nothing.
qui va là? Who goes there?
qui vive? Who goes there?
raison d'état, A state reason.
raison d'être, The reason for a thing's existence.
régime, Mode or style of rule or management.
rendezvous, A place of meeting.
répondez s'il vous plait (r. s. v. p.), Reply if you please.
répondre en Normand, To answer in Norman; to speak evasively.
résumé, A summing up.
rete nuova non piglia uccello vecchio (It.), A new net won't catch an old bird.
revenons à nos moutons, Let us return to our sheep; let us come back to our subject.
rien n'est beau que le vrai, There is nothing beautiful but truth.
rira bien qui rira le dernier, He laughs well who laughs last.
rire entre cuir et chair, rire sous cape, To laugh in one's sleeve.
robe de chambre, A dressing-gown; a morning-gown.
robe de nuit, A night-dress.
rôle, A part in a performance.
rouge, Red coloring for the skin.
ruse de guerre, A military stratagem.
sanan cuchilladas, mas no malas palabras (Sp.), Wounds from a knife will heal, but not those from the tongue.
sans cérémonie, Without ceremony.
sans peur et sans reproche, Fearless and stainless.
sans rime et sans raison, Without rhyme or reason.
sans souci, Free from care.
sauve qui peut, Save yourselves.
savant, A man of science.
savoir faire, Tact.
savoir vivre, Good breeding.
sdegno d'amante poco dura (It.), A lover's anger is short-lived.
séance, A sitting.
selon les règles, According to rule.
sempre il mal non vien per nuocere (It.), Misfortune is not always an evil.
si non è vero, è ben trovato (It.), If it is not true, it is cleverly invented.
Sie sehen gut aus (Ger.), You look well.
soirée, An evening party.
souffler le chaud et le froid, To blow hot and cold.
so viel ich weiss (Ger.), As far as I know.

Sturm und Drang (Ger.), Storm and stress.
table d'hôte, Table of the host.
tâche sans tache, A work without a stain.
tant mieux, So much the better.
tant pis, So much the worse.
tel maître, tel valet, Like master, like man.
tête-à-tête, A conversation between two parties.
tiens à la vérité, Maintain the truth.
tiens ta foi, Keep thy faith.
toujours perdrix, Always partridges; the same thing over and over again.
toujours prêt, Always ready.
tour de force, A feat of strength or skill.
tourner casaque, To turn one's coat; to change sides.
tout-à-fait, Wholly; entirely.
tout-à-l'heure, Instantly.
tout au contraire, On the contrary.
tout-à-vous, Entirely yours.
tout bien ou rien, All or nothing.
tout-de-suite, Immediately.
tout ensemble, The whole.
tout le monde est sage après le coup, Everybody is wise after the event.
traduttori, traditori (It.), Translators are traitors.
trousseau, Wedding outfit.
tutte le strade conducono a Roma (It.), All roads lead to Rome.
Uebung macht den Meister (Ger.), Practice makes perfect.
un bienfait n'est jamais perdu, A kindness is never lost.
un sot à triple étage, A consummate fool.
un "tiens" vaut mieux que deux "tu l'auras," One "take it" is worth two "you shall have it"; A bird in the hand is worth two in the bush.
valet de chambre, An attendant.
vedi Napoli e poi muori (It.), See Naples and then die.
vérité sans peur, Truth without fear.
Viele Händ'machen bald ein End' (Ger.), Many hands make quick work.
vi et armis, By force of arms; by violence.
vigueur de dessus, Strength from on high.
vino dentro, senno furore (It.), When the wine is in, the wit is out.
vis à vis, Face to face.
vive la bagatelle, Success to trifles.
vive le roi, Long live the king.
voilà, See there; there is; there are.
voilà tout, That's all.
voilà une autre chose. That's quite another thing.
voir le dessous des cartes, To see the face of the cards; to be in the secret.
vous y perdrez vos pas, You will have your walk for nothing; you will lose your labor over it.
Was fehlt Ihnen? (Ger.), What is the matter with you?
Wie die Arbeit, so der Lohn (Ger.), As the labor, so the reward.
Zeitgeist (Ger.), The spirit of the age.

WORDS OFTEN MISPRONOUNCED

It is in the delicate but firm utterance of the unaccented vowels with correct sound that the cultured person is most surely distinguished from the uncultured.—*Richard Grant White.*

KEY TO PRONUNCIATION

ă, as in farm, father; *å*, as in ask, fast; *ă*, as in at, fat; *ā*, as in day, fate; *â*, as in care, fare; *a* (unmarked) represents the sound as neutral or obscure, as in final, infant. *ĕ*, as in met, set; *ē*, as in me, see; *ẽ*, as in her, ermine; *e* (unmarked) represents the sound as neutral or obscure, as in novel. *ĭ*, as in pin, ill; *ī*, as in pine, ice. *ŏ*, as in not, got; *ō*, as in note, old; *ô*, as in for, fought; *o͝o*, as in cook, look; *o͞o*, as in moon, spoon; *o* (unmarked) represents the sound as neutral or obscure, as in combine. *ŭ*, as in cup, duck; *ū*, as in use, amuse; *û*, as in fur, urge; *u* (unmarked) represents the sound as neutral or obscure, as in circus.

ü cannot be exactly represented in English. The English sound of u as in *luke* and *duke* resembles the original sound of *ü*. TH, as in the, though. N represents the nasal tone (as in French) of the preceding vowel, as in encore (*ăN'-kōr'*). K represents ch as in German ich, ach.

abdomen, *ăb-dō'-mĕn.*
Abruzzi, *ä-bro͞ot'-sē.*
abstemious, *ăb-stē'-mĭ-us.*
acclimate, *a-klī'-māt.*
accompaniment, *a-kŭm'-pa-nĭ-ment.*
acetylene, *a-sĕt'-ĭ-lēn.*
acts, *ăkts.*
Adige, *ä'-dē-jā.*
address, *a-drĕs'.*
adjourn, *a-jûrn'.*
adult, *a-dŭlt'.*
adventure, *ăd-vĕn'-tūr.*
adverse, *ăd'-vẽrs.*
aeroplane, *ā'-ẽr-ō-plān.*
again, *a-gĕn'.*
agile, *ăj'-ĭl.*
Aïda, *ä-ē'-da.*
Aisne, *ân.*
Alabama, *ăl-a-bă'-ma*; *ăl-a-băm'-a.*
Alamo, *ä'-lä-mō.*
alas, *a-lȧs'.*
Albuquerque, *ăl-bū-kûr'-kē*; Sp., *äl-bo͞o-kĕr'-kā.*
Alcott, *ôl'-kut.*
algebra, *ăl'-jē-bra.*
alias, *ā'-lĭ-as.*
alien, *āl'-yen.*
allies, *a-līz'.*
allopathist, *a-lŏp'-a-thĭst.*
alma mater, *ăl'-ma mā'-tẽr.*
Alma-Tadema, *ăl-ma-tăd'-ē-ma.*
almond, *ä'-mund*; *ăl'-mund.*
alpaca, *ăl-păk'-a.*
alterative, *ôl'-tẽr-ā-tĭv.*
alternately, *ăl-tûr'-nāt-lĭ.*
ameliorate, *a-mēl'-yō-rāt.*
amenable, *a-mē'-na-b'l.*
ammonia, *a-mō'-nĭ-a.*
ampère, *ăm-pâr'*; *ăN'-pâr'.*
anarchist, *ăn'-ar-kĭst.*
anchor, *ăng'-kẽr.*
annihilate, *a-nī'-hĭ-lāt.*
antarctic, *ănt-ärk'-tĭk.*
Antilles, *ăn-tĭl'-ēz.*
anxiety, *ăng-zī'-ē-tĭ.*
anxious, *ăngk'-shus.*
Anzac, *ăn'-zăk.*
Apache, *a-pä'-chā.*
aperient, *a-pē'-rĭ-ent.*
aperture, *ăp'-ẽr-tūr.*
apparatus, *ăp-a-rā'-tus.*
appendicitis, *a-pĕn-dĭ-sī'-tĭs.*
appreciation, *a-prē-shĭ-ā'-shun.*
apricot, *ā'-prĭ-kot*; *ăp'-rĭ-kot.*
apropos, *ăp-rō-pō'.*
aqua, *ā'-kwa.*
aquarium, *a-kwā'-rĭ-um.*
aqueduct, *ăk'-wē-dŭkt.*
Arab, *ăr'-ab.*
archangel, *ärk'-ān'-jel.*
archbishop, *ärch'-bĭsh'-up.*

archipelago, *är-kĭ-pĕl′-a-gō.*
architect, *är′-kĭ-tĕkt.*
arctic, *ärk′-tĭk.*
area, *ā′-rē-a.*
aria, *ä′-rĭ-a; ā′-rĭ-a.*
arid, *ăr′-id.*
Arkansas City (Kan.), *är-kăn′-zas.*
armada, *är-mā′-da.*
Arras, *a′-rȧs′.*
ascetic, *a-sĕt′-ĭk.*
Asia, *ā′-sha; ā′-zha.*
ask, *ȧsk.*
askance, *a-skȧns′.*
asphalt, *ăs′-fălt.*
atheneum, *ăth-ē-nē′-um.*
athletics, *ăth-lĕt′-ĭks.*
attaché, *ȧ′-tȧ′-shā′.*
audience, *ô′-dĭ-ens.*
au gratin, *ō′grȧ′-tăN′.*
Augustine, *ô-gŭs′-tĭn; ô′-gus-tĭn.*
aunt, *ănt.*
au revoir, *ō′rē-vwȧr′.*
aurora borealis, *ô-rō′-ra bō-rē-ā′-lĭs.*
automobile, *ô-tō-mō′-bĭl; ô-tō-mō-bēl′.*
Auxerre, *ō′-sȧr′.*
auxiliary, *ôg-zĭl′-ya-rĭ.*
aviator, *ā′-vĭ-ā-tĕr.*
Avignon, *ȧ′-vē′-nyôN′.*
avoirdupois, *ăv-ĕr-du-poiz′.*
Avon (Eng.), *ā′-von.*
Avon (U. S.), *ăv′-on.*
Baal, *bā′-al.*
bacillus, *ba-sĭl′-us.*
bade, *băd.*
Baluchistan, *bȧ-lōō-chĭ-stān′.*
Bancroft, *băn′-krŏft.*
banquet, *băng′-kwĕt; băng′-kwĭt.*
bargain, *bär′-gĕn; bär′-gĭn.*
barrage, *bär′-āj;* Fr., *bȧ′-rāzh′.*
barrel, *băr′-el.*
basin, *bā′-s'n.*
basket, *bȧs′-kĕt; bȧs′-kĭt.*
bath, *bȧth.*
bayou, *bī′-ōō.*
Bayreuth, *bī-roit′.*
because, *bē-kôz′.*
bedstead, *bĕd′-stĕd.*
Beelzebub, *bē-ĕl′-zē-bŭb.*
been, *bĭn.*
Beethoven, van, *vän bā′-tō-ven.*
begonia, *bē-gō′-nĭ-a.*
believe, *bē-lēv′.*
belles-lettres, *bĕl-lĕt′-r'.*
bellows, *bĕl′-ōz; bĕl′-us.*
beloved (adj.), *bē-lŭv′-ĕd; bē-lŭvd′.*
beloved (part.) *bē-lŭvd′.*
beneficent, *bē-nĕf′-ĭ-sent.*
betrothal, *bē-trŏth′-al; bē-trōTH′-al.*
bicycle, *bī′-sĭ-k'l.*
biennial, *bī-ĕn′-ĭ-al.*
bijou, *bē-zhōō′; bē′-zhōō.*
billet-doux, *bĭl-ĕ-dōō′.*
bindery, *bīn′-dĕr-ĭ.*
biography, *bī-ŏg′-ra-fĭ.*
biology, *bī-ŏl′-ō-jĭ.*
biparous, *bĭp′-a-rus.*
bismuth, *bĭz′-muth; bĭs′-muth.*
Bizet, *bē′-zĕ′.*
blackguard, *blăg′-ärd.*
blanch, *blȧnch.*
blanc mange, *bla-mänzh′; bla-mäNzh′.*
blasé, *blȧ′-zā′.*
blasphemous, *blȧs′-fē-mus.*
blast, *blȧst.*
blessed (adj.), *blĕs′-ĕd; blĕs′-ĭd.*
blessed (part.), *blĕst; blĕs′-ĕd.*
Boche, *bōsh.*
Bohême, La, *lā bō-ĕm′.*
Boise City, *boi′-zā.*
boisterous, *bois′-tĕr-us.*
bolero, *bō-lā′-rō.*
boll weevil, *bōl wē′-v'l.*
Bolsheviki, *bōl-shĕ-vē-kē′.*
bona fide, *bō′-na fī′-dē.*
Bonheur (Rosa), *bō′-nûr′.*
bon marché, *bôN′ mȧr′-shā′.*
bonnet, *bŏn′-ĕt; bŏn′-ĭt.*
borrow, *bŏr′-ō.*
boudoir, *bōō′-dwär.*
Boulogne, *bōō-lōn′;* Fr., *bōō′-lōn′-y′.*
bouquet, *bōō-kā′.*
Bourbon (island and dynasty), *bōōr′-bun.*
bovine, *bō′-vīn; bō′-vĭn.*
Bowdoin, *bō′-d'n.*
bow-legged, *bō′-lĕg-ĕd; bō′-lĕgd.*
brassière, *brȧ′-syȧr′.*
bristle, *brĭs′-'l.*
brochure, *brō-shür′.*
bronchitis, *brŏng-kī′-tĭs.*
Bruges, *brōō′-jĕz;* Fr., *brüzh.*
bungalow, *bŭng′-ga-lō.*
bureaucracy, *bū-rŏ′-kra-sĭ.*
burlesque, *bûr-lĕsk′.*
business, *bĭz′-nĕs.*
butcher, *bŏŏch′-ĕr.*
Cabot, *kăb′-ut.*
cache, *kȧsh.*
Cædmon, *kăd′-mun; kȧd′-mun.*
café, *kȧ′-fā′.*
cafeteria, *kăf-ē-tē′-rĭ-a; kä-fā-tā-rē′-ȧ.*
Caius, *kā′-yus.*
Calais, *kăl′-ā, kăl′-ĭs;* Fr., *kȧ′-lĕ′.*
calf, *kăf.*
caliph, *kā′-lĭf; kăl′-ĭf.*
calliope, *ka-lī′-ō-pē.*
calm, *kăm.*
calve, *kăv.*
calyx, *kā′-lĭks; kăl′-ĭks.*
camembert, *kȧ′-măN′-bâr′.*
campanile, *kăm-pä-nē′-lā.*
cancel, *kăn′-sel.*
candelabra, *kăn-dē-lā′-bra.*
canine, *ka-nīn′; kā′-nīn.*
cañon, *kăn′-yun.*
cantilever, *kăn′-tĭ-lē-vĕr; kăn′-tĭ-lĕv-ĕr.*
cantonment, *kăn′-ton-ment; kăn-tōōn′-ment.*
capitulate, *ka-pĭt′-ū-lāt.*
carafe, *ka-rȧf′.*
carburetor, *kär′-bū-rĕt-ĕr.*
caricature, *kăr′-ĭ-ka-tūr.*
Carnegie (Andrew), *kär-nĕg′-ĭ.*
cartridge, *kär′-trĭj.*
cashmere, *kăsh′-mēr; kăsh-mēr′.*
casino, *ka-sē′-nō.*
catalogue, *kăt′-a-lŏg.*
catalpa, *ka-tăl′-pa.*
catch, *kăch.*
catchup, *kăch′-up.*
catsup, *kăt′-sup.*
Cavalleria Rusticana, *kä-väl-lā-rē′-a rŭs-tē-kā′-na.*

caveat, *kā'-ȳē-ăt.*
celestial, *sē-lĕs'-chal.*
cello, *chĕl'-ō.*
celluloid, *sĕl'-ū-loid.*
cemetery, *sĕm'-ē-tĕr-ĭ.*
centennial, *sĕn-tĕn'-ĭ-al.*
century, *sĕn'-tū-rĭ.*
ceramic, *sē-răm'-ĭk.*
cerebrum, *sĕr'-ē-brum.*
Cesarean, *sē-zā'-rĭ-an.*
champagne, *shăm-pān'.*
chaos, *kā'-ŏs.*
chaperon, *shăp'-ēr-ōn; shăp'-ēr-ŏn.*
Chapultepec, *chä-pōōl-tā-pĕk'.*
chassis, *shà'-sē.*
chasten, *chās'-'n.*
chastise, *chăs-tīz'.*
chastisement, *chăs'-tĭz-ment.*
chauffeur, *shō'-fûr'.*
chef, *shĕf.*
chemise, *shē-mēz'.*
chemisette, *shĕm-ĭ-zĕt'.*
chenille, *shē-nēl'.*
chestnut, *chĕs'-nŭt.*
cheviot (cloth), *chĕv'-ĭ-ut; chē'-vĭ-ut.*
Cheyenne, *shī-ĕn'.*
chic, *shēk.*
chicken, *chĭk'-ĕn; chĭk'-ĭn.*
chiffon, *shĭf'-ŏn;* Fr., *shē'-fôN'.*
chiffonier, *shĭf-ō-nēr'.*
Chihuahua, *chē-wä'-wä.*
children, *chĭl'-dren.*
Chile, *chē'-lā.*
chiropodist, *kī-rŏp'-ō-dĭst.*
chisel, *chĭz'-el.*
chocolate, *chŏk'-ō-lāt.*
Chopin, *shō'-păN'.*
chorister, *kŏr'-ĭs-tĕr.*
chorus, *kō'-rus.*
cinchona, *sĭn-kō'-na.*
circuitous, *sĕr-kū'-ĭ-tus.*
citadel, *sĭt'-a-del.*
civil, *sĭv'-ĭl.*
clairvoyant, *klâr-voi'-ant.*
clandestine, *klăn-dĕs'-tĭn.*
clapboard, *klăp'-bōrd.*
cleanly (adj.), *klĕn'-lĭ.*
cleanly (adv.), *klēn'-lĭ.*
clematis, *klĕm'-a-tĭs.*
Cleopatra, *klē-ō-pā'-tra.*
clique, *klēk.*
clothes, *klōTHz.*
cocaine, *kō'-ka-ĭn; kō'-ka-ēn.*
coccyx, *kŏk'-sĭks.*
codeine, *kō-dē'-ĭn; kō'-dē-ēn.*
Coeur d' Alene, *kûr da-lān'.*
coffee, *kŏf'-ĭ.*
cognac, *kō'-nyak.*
cognomen, *kŏg-nō'-mĕn.*
coiffure, *kwà'-für'; koif'-ūr.*
colander, *kŭl'-an-dĕr.*
colosseum, *kŏl-o-sē'-um.*
column, *kŏl'-um.*
comeliness, *kŭm'-lĭ-nĕs.*
comely, *kŭm'-lĭ.*
commiserate, *ko-mĭz'-ĕr-āt.*
commune (n.), *kŏm'-ūn.*
commune (vb.), *ko-mūn'.*
comparable, *kŏm'-pa-ra-b'l.*
complex (n. and adj.), *kŏm'-plĕks.*
complex (vb.), *kom-plĕks'.*
comport, *kom-pōrt'.*
compromise, *kŏm'-prō-mīz.*
comptroller, *kon-trōl'-ĕr.*
concrete (n. and adj.), *kŏn'-krēt.*
concrete (vb.), *kon-krēt'.*
condolence, *kon-dō'-lens.*
conduit, *kŏn'-dĭt.*
confidant, *kŏn-fĭ-dànt'; kŏn'-fĭ-dànt.*
congenial, *kon-jēn'-yal.*
congregate, *kŏng'-grē-gāt.*
congress, *kŏng'-grĕs.*
connoisseur, *kŏn-ĭ-sûr'; kŏn-ĭ-sūr'.*
conquest, *kŏng'-kwĕst.*
conscientious, *kŏn-shĭ-ĕn'-shus.*
considerable, *kon-sĭd'-ĕr-a-b'l.*
consignee, *kŏn-sī-nē'; kŏn-sĭ-nē'.*
constable, *kŭn'-sta-b'l.*
consul, *kŏn'-sul.*
contemplative, *kon-tĕm'-pla-tĭv.*
continuity, *kŏn-tĭ-nū'-ĭ-tĭ.*
contractor, *kon-trăk'-tĕr.*
conversant, *kŏn'-vĕr-sănt.*
coquet, *kō-kĕt'.*
coral, *kŏr'-al.*
cordial, *kôr'-jal; kôrd'-yal.*
cornet, *kôr'-nĕt; kŏr-nĕt'.*
corolla, *kō-rŏl'-a.*
corps, *kōr.*
cortège, *kôr'-tĕzh'.*
Cortez (Fernando), *kôr'-tĕz.*
cosmetic, *kŏz-mĕt'-ĭk.*
cotillion, *kō-tĭl'-yun.*
coupé, *kōō'-pā'.*
coupon, *kōō'-pŏn.*
courteous, *kûr'-tē-us; kōrt'-yus.*
cousin, *kŭz'-'n.*
covetous, *kŭv'-e-tus.*
craunch, *kränch; krônch.*
crèche, *krĕsh.*
credence, *krē'-dens.*
credulous, *krĕd'-ū-lus.*
creek, *krēk.*
cuisine, *kwē-zēn'.*
culinary, *kū'-lĭ-nā-rĭ.*
cupboard, *kŭb'-ērd.*
cupola, *kū'-pō-la.*
curator, *kū-rā'-tĕr.*
cycle, *sī'-k'l.*
daguerreotype, *da-gĕr'-ō-tīp.*
damage, *dăm'-āj.*
Damrosch, *dăm'-rŏsh.*
Danish, *dān'-ĭsh.*
data, *dā'-ta.*
daub, *dôb.*
deaf, *dĕf.*
débris, *dā'-brē'; dā'-brē.*
début, *dā'-bū'; dē-bū'.*
débutante, *dā'-bū'-tänT'; dĕb-ū-tănt'.*
decade, *dĕk'-ād.*
decent, *dē'-sent.*
décolleté, *dā'-kŏ'-l'-tā'.*
deficit, *dĕf'-ĭ-sĭt.*
deign, *dān.*
delirious, *dē-lĭr'-ĭ-us.*
Delsarte, *dĕl-särt'.*
de luxe, *dē lŭks'.*
depths, *dĕpths.*
despicable, *dĕs'-pĭ-ka-b'l.*
dessert, *dē-zûrt'.*

destine, *dĕs'-tĭn.*
detail (n.), *dē-tāl'*; *dē'-tāl.*
detail (vb.), *dē-tāl'.*
detour, *dē-tōōr'.*
different, *dĭf'-ẽr-ent.*
digitalis, *dĭj-ĭ-tā'-lĭs.*
diphtheria, *dĭf-thē'-rĭ-a.*
diploma, *dĭ-plō'-ma.*
direct, *dĭ-rĕkt'.*
discern, *dĭ-sûrn'.*
discourse, *dĭs-kōrs'.*
discretion, *dĭs-krĕsh'-un.*
disease, *dĭ-sēz'.*
dispersion, *dĭs-pûr'-shun.*
disputant, *dĭs'-pū-tant.*
district, *dĭs'-trĭkt.*
diverge, *dĭ-vûrj'.*
divulge, *dĭ-vŭlj'.*
domain, *dō-mān'.*
donkey, *dŏng'-kĭ.*
douche, *dōōsh.*
drama, *drä'-ma.*
drawer, *drô'-ẽr.*
drought, *drout.*
drowned, *dround.*
Eames (Emma), *āmz.*
eau de cologne, *ō dẽ kō-lōn'.*
eczema, *ĕk'-sē-ma.*
Edam, *ē'-dăm.*
Eden, *ē'-d'n.*
Edinburgh, *ĕd'-ĭn-bûr-ō.*
education, *ĕd-ū-kā'-shun.*
Eiffel, *ĕ-fĕl'.*
eleven, *ẽ-lĕv'-'n.*
Elgin, *ĕl'-gĭn.*
élite, *ā'-lēt'.*
elongate, *ẽ-lŏng'-gāt*; *ē'-lŏng-gāt.*
enchant, *ĕn-chănt'.*
encore, *äng-kōr'*; *äng'-kōr.*
engine, *ĕn'-jĭn.*
entente, *äN'-täNt'.*
entrée, *äN'-trā'.*
epitome, *ẽ-pĭt'-ō-mē.*
equitable, *ĕk'-wĭ-ta-b'l.*
era, *ē'-ra.*
erasure, *ẽ-rā'-shūr.*
erysipelas, *ĕr-ĭ-sĭp'-ẽ-las.*
etiquette, *ĕt'-ĭ-kĕt.*
Eustachian, *ū-stā'-kĭ-an.*
exaggeration, *ĕg-zăj-ẽr-ā'-shun.*
examine, *ĕg-zăm'-ĭn.*
example, *ĕg-zăm'-p'l*; *ĕg-zämp'-p'l.*
exist, *ĕg-zĭst'.*
exit, *ĕk'-sĭt.*
exogenous, *ĕk-sŏj'-ẽ-nus.*
expedient, *ĕks-pē'-dĭ-ent.*
exquisite, *ĕks'-kwĭ-zĭt.*
extant, *ĕks'-tant.*
ex-tempore, *ĕks-tĕm'-pō-rē.*
extraordinary, *ĕks-trôr'-dĭ-nā-rĭ*; *ĕks-tra-ôr'-dĭ-nā-rĭ.*
Eyre (Jane), *âr.*
factory, *făk'-tō-rĭ.*
falcon, *fô'-k'n*; *fôl'-k'n.*
family, *făm'-ĭ-lĭ.*
faucet, *fô'-sĕt*; *fô'-sĭt.*
Faust, *foust.*
favorite, *fā'-vẽr-ĭt.*
fecund, *fē'-ŭnd*; *fē'-kŭnd.*
fellow, *fĕl'-ō.*
feminine, *fĕm'-ĭ-nĭn.*
fête, *fāt.*
fiancé (masc.), *fē'-äN'-sā'.*
fiancée (fem.), *fē'-äN'-sā'.*
fibril, *fī'-brĭl.*
film, *fĭlm.*
finale, *fē-nä'-lā.*
finance, *fī-năns'*; *fī-năns'.*
financier, *fĭn-an-sẽr'*; *fī-năn'-sĭ-ẽr.*
florid, *flŏr'-ĭd.*
florin, *flŏr'-ĭn.*
forbade, *fŏr-băd'.*
forehead, *fŏr'-ĕd.*
forest, *fŏr'-ĕst.*
forum, *fō'-rum.*
fragile, *frăj'-ĭl.*
franchisement, *frăn'-chĭz-ment.*
frappé, *frà'-pā'.*
friends, *frĕndz.*
friendship, *frĕnd'-shĭp.*
frontier, *frŏn'-tĕr*; *frŭn'-tẽr.*
fuel, *fū'-el.*
fungi, *fŭn'-jī.*
furniture, *fûr'-nĭ-tūr.*
gala, *gā'-la.*
gallery, *găl'-ẽr-ĭ.*
Gallipoli, *gāl-lē'-pō-lē.*
gangrene, *găng'-grēn.*
garage, *gà'-räzh'*; *găr'-äj.*
gaseous, *găs'-ē-us.*
gastritis, *găs-trī'-tĭs.*
gather, *găTH'-ẽr.*
gazetteer, *găz-e-tẽr'.*
geisha, *gā'-sha.*
generally, *jĕn'-ẽr-al-ĭ.*
Genoa, *jĕn'-ō-a.*
gentleman, *jĕn'-t'l-man.*
genuine, *jĕn'-ū-ĭn.*
geranium, *jē-rā'-nĭ-um.*
gerund, *jĕr'-und.*
get, *gĕt.*
ghastly, *gàst'-lĭ.*
Gila, *hē'-la.*
Gioconda, La, *lä jō-kōn'-da.*
gist, *jĭst.*
Gladstone, *glăd'-stun.*
glycerin, *glĭs'-ẽr-ĭn.*
gneiss, *nīs.*
Goethals, *gō'-thalz.*
Goethe, von, *fŏn gû'-tẽ.*
golf, *gòlf.*
Goliath, *gō-lī'-ath.*
gondola, *gŏn'-dō-la.*
gone, *gŏn.*
government, *gŭv'-ẽrn-ment.*
granary, *grăn'-a-rĭ.*
granddaughter, *grănd'-dô-tẽr.*
grasp, *gràsp.*
gratis, *grā'-tĭs.*
grimace, *grĭ-mās'.*
grimy, *grīm'-ĭ.*
grisly, *grĭz'-lĭ.*
Guadalajara, *gwä-THä-lä-hä'-rä.*
guardian, *gär'-dĭ-an.*
guayule, *gwä-yōō'-lä.*
guillotine (n.), *gĭl'-ō-tēn.*
guillotine (vb.), *gĭl-lō-tēn'.*
gyroscope, *jī'-rō-skōp.*
hæmoglobin, *hē-mō-glō'-bĭn.*
handbook, *hănd'-bŏŏk.*

handkerchief, *hăng'-kĕr-chĭf.*
Hawaii, *hä-wī'-ē.*
Hawaiian, *hä-wī'-yan.*
hearth, *härth.*
height, *hīt.*
heinous, *hā'-nus.*
Helena (Mont.), *hĕl'-ē-na.*
helm, *hĕlm.*
Hiawatha, *hī-a-wô'-tha.*
highwayman, *hī'-wā-man.*
Himalaya, *hĭ-mä'-la-ya.*
history, *hĭs'-tō-rĭ.*
hoist, *hoist.*
homeopathist, *hō-mē-ŏp'-a-thĭst*; *hŏm-ē-ŏp'-a-thĭst.*
homestead, *hōm'-stĕd.*
honest, *ŏn'-ĕst.*
Honolulu, *hō-nō-lōō'-lōō.*
honorable, *ŏn'-ēr-a-b'l.*
hoof, *hōōf.*
horrid, *hŏr'-ĭd.*
horseradish, *hôrs'-răd-ĭsh.*
hospitable, *hŏs'-pĭ-ta-b'l.*
hovel, *hŏv'-el.*
Huerta, *wĕr'-tä.*
hundred, *hŭn'-dred.*
hydraulics, *hī-drô'-lĭks.*
hypocrisy, *hĭ-pŏk'-rĭ-sĭ.*
idea, *ī-dē'-a.*
idiosyncrasy, *ĭd-ĭ-ō-sĭng'-kra-sĭ.*
ignoramus, *ĭg-nō-rā'-mus.*
impious, *ĭm'-pĭ-us.*
importune, *ĭm-pŏr-tūn'*; *ĭm-pôr'-tūn.*
impotent, *ĭm'-pō-tent.*
inaugurate, *ĭn-ô'-gū-rāt.*
incomparable, *ĭn-kŏm'-pa-ra-b'l.*
indisputable, *ĭn-dĭs'-pū-ta-b'l.*
industry, *ĭn'-dŭs-trĭ.*
infamous, *ĭn'-fa-mus.*
innocent, *ĭn'-ō-sent.*
inquiry, *ĭn-kwīr'-ĭ.*
insatiable, *ĭn-sā'-shĭ-a-b'l*; *ĭn-sā'-sha-b'l.*
instead, *ĭn-stĕd'.*
interesting, *ĭn'-tĕr-ĕst-ĭng.*
intermezzo, *ĭn-tĕr-mĕd'-zō.*
international, *ĭn-tĕr-năsh'-un-al.*
inundate, *ĭn'-ŭn-dāt*; *ĭn-ŭn'-dāt.*
Iowa, *ī'-ō-wa.*
irrevocable, *ĭ-rĕv'-ō-ka-b'l.*
isinglass, *ī'-zĭng-glăs.*
Israel, *ĭz'-rā-ĕl.*
Italian, *ĭ-tăl'-yan.*
italic, *ĭ-tăl'-ĭk.*
ivory, *ī'-vō-rĭ.*
jardinière, *zhär'-dē'-nyâr'.*
Java, *jä'-va.*
Jekyll (Dr.), *jē'-kĭl.*
Joaquin, *wä-kēn'.*
jocund, *jŏk'-und.*
Joffre, *zhō'-fr'.*
Joliet, *jō'-lĭ-ĕt*; Fr., *zhō'-lyā'.*
jostling, *jŏs'-lĭng.*
judgment, *jŭj'-ment.*
jugular, *jōō'-gū-lar.*
jujutsu, *jōō'-jōōt-sōō.*
just, *jŭst.*
kaleidoscope, *ka-lī'-dō-skōp.*
kept, *kĕpt.*
kettle, *kĕt'-'l.*
khaki, *kä'-kē.*
Khiva, *Kē'-vȧ.*
Kiel, *kēl.*
kiln, *kĭl*; *kĭln.*
kitchen, *kĭch'-ĕn*; *kĭch'-ĭn.*
kumiss, *kōō'-mĭs.*
laboratory, *lăb'-ō-ra-tō-rĭ.*
laborer, *lā'-bĕr-ĕr.*
Lachine, *la-shēn'.*
L'Allegro, *läl-lā'-grō.*
lamentable, *lăm'-en-ta-b'l.*
language, *lăng'-gwāj.*
laryngitis, *lăr-ĭn-jī'-tĭs.*
larynx, *lăr'-ĭngks.*
Las Vegas, *läs vā'-gȧs.*
Latin, *lăt'-ĭn.*
laudanum, *lô'-da-num*; *lŏd'-'n-um.*
laugh, *lăf.*
lava, *lä'-va.*
lavallière, *là'-vàl'-yâr'.*
Lead (S. D.), *lēd.*
learned (adj.), *lûr'-nĕd.*
learned (part.), *lûrnd.*
legate, *lĕg'-āt.*
length, *lĕngth.*
leper, *lĕp'-ĕr.*
lettuce, *lĕt'-ĭs.*
library, *lī'-brā-rĭ.*
licorice, *lĭk'-ō-rĭs.*
lief, *lēf.*
Liége, *lē-ĕzh'.*
lilac, *lī'-lak.*
Lille, *lēl.*
Limoges, *lē'-mōzh'.*
lingerie, *lăN-zh'-rē'.*
linotype, *līn'-ō-tīp*; *lĭn'-ō-tīp.*
Liszt (Franz), *lĭst.*
literature, *lĭt'-ĕr-a-tūr.*
lithographer, *lĭ-thŏg'-ra-fĕr.*
longevity, *lŏn-jĕv'-ĭ-tĭ.*
long-lived, *lŏng'-līvd.*
Louisiana, *lōō-ē-zē-ăn'-a.*
Louvre, *lōō'-vr'.*
Lusitania, *lū-sĭ-tā'-nĭ-a.*
lyceum, *lī-sē'-um.*
Lys, *lēs.*
mackerel, *măk'-ĕr-el.*
magazine, *măg-a-zēn'.*
magna charta, *măg'-na kär'-ta.*
magnolia, *măg-nō'-lĭ-a.*
Malaga, *măl'-a-ga.*
malign, *ma-līn'.*
mallow (marsh), *măl'-ō.*
malpractice, *măl-prăk'-tĭs.*
mandamus, *măn-dā'-mus.*
mange, *mānj.*
mania, *mā'-nĭ-a.*
maniacal, *ma-nī'-a-kal.*
manufactory, *măn-ū-făk'-tō-rĭ.*
Mardi gras, *mär-dē grä'.*
maritime, *măr'-ĭ-tīm*; *măr'-ĭ-tĭm.*
marquis, *mär'-kwĭs.*
Marseilles, *mär-sālz'.*
masculine, *măs'-kū-lĭn.*
mask, *mȧsk.*
massage, *ma-säzh'.*
Massenet, *mȧ'-s'-nĕ'.*
masseur, *mȧ'-sûr'.*
masseuse, *mȧ'-sûz'.*
matron, *mā'-trun.*
mattress, *măt'-rĕs.*

mausoleum, *mô-sō-lē'-um.*
mauve, *mōv.*
mayonnaise, *mā-o-nāz'.*
measure, *mĕzh'-ūr.*
medieval, *mē-dĭ-ē'-val; mĕd-ĭ-ē'-val.*
megrim, *mē'-grĭm.*
mêlée, *mā'-lā'.*
memory, *mĕm'-ō-rĭ.*
meningitis, *mĕn-ĭn-jī'-tĭs.*
menu, *mĕn'-ū.*
Mephistopheles, *mĕf-ĭs-tŏf'-ē-lēz.*
meringue, *mē-răng'.*
mesmerism, *mĕz'-mĕr-ĭz'm.*
metric, *mĕt'-rĭk.*
mezzo, *mĕd'-zō.*
Mignon, *mĭn'-yŏn*; Fr., *mē'-nyôN'.*
migraine, *mī-grān'*; *mī'-grān.*
milch, *mĭlch.*
mirage, *mē-räzh'.*
mischievous, *mĭs'-chĭ-vus.*
misconstrue, *mĭs-kŏn'-strōō*; *mĭs-kon-strōō'.*
miserable, *mĭz'-ĕr-a-b'l.*
Misérables, Les, *lā mē-zā-rā'-b'l.*
mitten, *mĭt'-en.*
Mobile, *mō-bēl'.*
moderate, *mŏd'-ĕr-āt.*
modiste, *mō'-dēst'.*
Modjeska, *mo-jĕs'-ka.*
Mohican, *mō-hē'-kan.*
moiré, *mwȧ-rā'*; *mō'-rā.*
Mona Lisa, *mō'-nä lē'-zä.*
monologue, *mŏn'-ō-lŏg.*
monomania, *mŏn-ō-mā'-nĭ-a.*
morale, *mō-răl'*; *mō-răl'.*
municipal, *mū-nĭs'-ĭ-pal.*
museum, *mū-zē'-um.*
musicale, *mū-zĭ-kăl'.*
muskellunge, *mŭs'-ke-lŭnj*; *mŭs-ke-lŭnj'.*
muskmelon, *mŭsk'-mĕl-un.*
mustache, *mus-tăsh'.*
mystery, *mĭs'-tĕr-ĭ.*
mythology, *mĭ-thŏl'-ō-jĭ.*
nasal, *nā'-zal.*
natural, *năt'-ū-ral.*
nature, *nā'-tūr.*
nausea, *nô'-shē-a*; *nô'-sē-a.*
Nazimova, *nȧ-zē'-mō-vȧ.*
necessarily, *nĕs'-e-sā-rĭ-lĭ.*
née, *nā.*
negligee, *nĕg-lĭ-zhā'*; *nĕg'-lĭ-zhā.*
nephritis, *nē-frī'-tĭs*; *nĕf-rī'-tĭs.*
nervine, *nûr'-vēn*; *nûr'-vīn.*
Neufchâtel, *nû'-shȧ'-tĕl'.*
neuralgia, *nū-răl'-jĭ-a.*
New Orleans, *nū ôr'-lē-anz*
Nice, *nēs.*
nicety, *nī'-sē-tĭ.*
niche, *nĭch.*
Nobel, *nō-bĕl'.*
nom de plume, *nôN dĕ plüm'.*
nominative, *nŏm'-ĭ-na-tĭv.*
nonchalant, *nŏn'-sha-lant*; Fr., *nôN'-shȧ'-läN'.*
nonpareil, *nŏn-pa-rĕl'.*
noxious, *nŏk'-shus.*
nuisance, *nū'-sans.*
nuptial, *nŭp'-shal.*
nymph, *nĭmf.*
oaths, *ōTHz.*
oatmeal, *ōt'-mēl.*
Oaxaca, *wä-hä'-kä.*
obeisance, *ō-bā'-sans*; *ō-bē'-sans.*
obelisk, *ŏb'-ē-lĭsk.*
obesity, *ō-bĕs'-ĭ-tĭ.*
octave, *ŏk'-tāv.*
office, *ŏf'-ĭs.*
often, *ŏf'-'n.*
Oise, *wȧz.*
Oklahoma, *ō-kla-hō'-ma.*
olden, *ōl'-d'n.*
oleander, *ō-lē-ăn'-dēr.*
oleomargarine, *ō-lē-ō-mär'-ga-rēn*; *ō-lē-ō-mär'-ga-rĭn.*
olfactory, *ŏl-făk'-tō-rĭ.*
opponent, *o-pō'-nent.*
orange, *ŏr'-ĕnj*; *ŏr'-ĭnj.*
orchid, *ôr'-kĭd.*
ordeal, *ôr'-dē-al*; *ôr'-dēl.*
ordinarily, *ôr'-dĭ-nā-rĭ-lĭ.*
oriental, *ō-rĭ-ĕn'-tal.*
overalls, *ō'-vĕr-ôlz.*
pacifist, *păs'-ĭ-fĭst.*
Pagliacci, I, *ē päl-yät'-chē.*
pajama, *pa-jä'-ma.*
palatial, *pa-lā'-shal.*
Pall Mall, *pĕl mĕl'*; *păl măl'.*
palmistry, *päm'-ĭs-trĭ*; *păl'-mĭs-trĭ.*
panacea, *păn-a-sē'-a.*
panorama, *păn-ō-rä'-ma.*
papier-mâché, *pa'-pyā'-mä'-shā'*; *pa'-pyā-mä'-shā.*
papyrus, *pa-pī'-rus.*
Pará, *pa-rā'.*
parasol, *păr'-a-sŏl*; *păr-a-sŏl'.*
parliament, *pär'-lĭ-ment.*
Parsifal, *pär'-sĭ-făl.*
participle, *pär'-tĭ-sĭ-p'l.*
partner, *pärt'-nēr.*
partridge, *pär'-trĭj.*
passé, *pä'-sā'.*
Pasteur, *pȧs'-tûr'.*
pathos, *pā'-thŏs.*
patriot, *pā'-trĭ-ot*; *păt'-rĭ-ot.*
patron, *pā'-trun.*
pecan, *pē-kăn'*; *pē-kän'.*
Pecos, *pā'-kōs.*
pedagogue, *pĕd'-a-gŏg.*
pedometer, *pē-dŏm'-ē-tēr.*
penal, *pē'-nal.*
penchant, *pĕn'-chant*; Fr., *päN'-shäN'.*
peony, *pē'-ō-nĭ.*
pergola, *pûr'-gō-la.*
perhaps, *pĕr-hăps'.*
peritonitis, *pĕr-ĭ-tō-nī'-tĭs.*
perpetuity, *pûr-pē-tū'-ĭ-tĭ.*
persist, *pĕr-sĭst'.*
perspicuity, *pûr-spĭ-kū'-ĭ-tĭ.*
perspiration, *pûr-spĭ-rā'-shun.*
peso, *pā'-sō.*
petite, *pē-tēt'.*
Petrograd, *pyĕ-trŏ-grät'.*
pharyngitis, *făr-ĭn-jī'-tĭs.*
phial, *fī'-al.*
photogravure, *fō-tō-gra-vūr'*; *fō-tō-grā'-vūr.*
physicist, *fĭz'-ĭ-sĭst.*
pianist, *pĭ-ăn'-ĭst*; *pē'-a-nĭst.*
piano, *pĭ-ăn'-ō.*
picture, *pĭk'-tūr.*
Pinchot (Gifford), *pĭn'-shō.*
Piqua (Ohio), *pĭk'-wa.*
piqué, *pē-kā'.*
Pisa, *pē'-sä*; *pē'-zä.*

plague, *plāg.*
plait, *plāt.*
poem, *pō′-ĕm.*
poignant, *poin′-ant*; *poin′-yant.*
poilu, *pwȧ′-lü′.*
Poincaré, *pwĂN′-kȧ′-rā′.*
poinsettia, *poin-sĕt′-ĭ-a.*
Poitiers, *pwȧ′-tyā′.*
portière, *pōr′-tyâr′.*
posthumous, *pŏs′-tū-mus*; *pŏst′-hū-mus.*
potato, *pō-tā′-tō.*
precedence, *prē-sēd′-ens.*
precedent (adj.), *prē-sēd′-ent.*
precedent (n.), *prĕs′-ē-dent.*
predicament, *prē-dĭk′-a-ment.*
preface, *prĕf′-ās.*
preferable, *prĕf′-ĕr-a-b'l.*
prelate, *prĕl′-āt.*
premier, *prē′-mĭ-ĕr*; *prĕm′-yĕr.*
preparatory, *prē-păr′-a-tō-rĭ.*
president, *prĕz′-ĭ-dent.*
pretense, *prē-tĕns′.*
pretty, *prĭt′-ĭ.*
prima donna, *prē′-ma dŏn′-a.*
prodigious, *prō-dĭj′-us.*
produce (n.), *prŏd′-ūs.*
produce (vb.), *prō-dūs′.*
program, *prō′-grăm.*
promenade, *prŏm-ē-nād′.*
propinquity, *prō-pĭng′-kwĭ-tĭ.*
pro rata, *prō rā′-ta.*
prosperous, *prŏs′-pĕr-us.*
protégé, *prō′-tā′-zhā′.*
protein, *prō′-tē-ĭn.*
Przemyśl, *pshĕ′-mĭshl-y'.*
psalm, *sām.*
pseudonym, *sū′-dō-nĭm.*
psychic, *sī′-kĭk.*
publicist, *pŭb′-lĭ-sĭst.*
Puccini, *pōōt-chē′-nē.*
pumpkin, *pŭmp′-kĭn.*
purée, *pü′-rā′.*
quarrel, *kwŏr′-el.*
queue, *kū.*
qui vive, *kē vēv′.*
quoit, *kwoit.*
quorum, *kwō′-rum.*
raceme, *ra-sēm′*; *rā-sēm′.*
radish, *răd′-ĭsh.*
ragout, *rȧ-gōō′.*
Rainier, Mt., *rā-nēr′.*
rajah, *rȧ′-ja.*
rancor, *răng′-kĕr.*
ransack, *răn′-săk.*
recipe, *rĕs′-ĭ-pē.*
reconnaissance, *rē-kŏn′-ā-sans.*
reconnoiter, *rĕk-o-noi′-tĕr.*
referable, *rĕf′-ĕr-a-b'l.*
referee, *rĕf-ĕr-ē′.*
regalia, *rē-gā′-lĭ-a.*
régime, *rā′-zhēm′.*
relict (n.), *rĕl′-ĭkt.*
relict (adj.), *rē-lĭkt′.*
renaissance, *rĕn-ĕ-sänNs′*; *rē-nā′-sans.*
rendezvous, *rän′-dĕ-vōō*; *rŏng′-dĕ-vōō*; *rĕn′-dĕ-vōō.*
reparable, *rĕp′-a-ra-b'l.*
répertoire, *rĕp′-ĕr-twär.*
replica, *rĕp′-lĭ-ka.*
reputable, *rĕp′-ū-ta-b'l.*
requiem, *rē′-kwĭ-em*; *rĕk′-wĭ-em.*
research, *rē-sûrch′.*
reservoir, *rĕz′-ĕr-vwôr*; *rĕz′-ĕr-vwär.*
residue, *rĕz′-ĭ-dū.*
resource, *rē-sōrs′.*
respite, *rĕs′-pĭt.*
restaurant, *rĕs′-tō-rant*; *rĕs′-tô-rant.*
résumé, *rā′-zü′-mā′.*
revocable, *rĕv′-ō-ka-b'l.*
Rheims, *rēmz*; Fr., *răNs.*
rheumatism, *rōō′-ma-tĭz′m.*
Riga, *rē′-gȧ.*
rind, *rīnd.*
rinse, *rĭns.*
robust, *rō-bŭst′.*
Roentgen, *rûnt′-gĕn*; *rĕnt′-gĕn.*
roil, *roil.*
roof, *rōōf.*
Roosevelt, *rō′-zĕ-vĕlt* (almost *rōz′-vĕlt*).
root, *rōōt.*
roquefort, *rōk′-fōr′*; *rōk′-fôrt.*
roseate, *rō′-zē-āt.*
rostrum, *rŏs′-trum.*
route, *rōōt.*
rutabaga, *rōō-ta-bā′-ga.*
sachem, *sā′-chem.*
sacrament, *săk′-ra-ment.*
sacrilegious, *săk-rĭ-lē′-jus.*
sagacious, *sa-gā′-shus.*
said, *sĕd.*
salary, *săl′-a-rĭ.*
salmon, *săm′-un.*
salve (ointment), *säv.*
sanatorium, *săn-a-tō′-rĭ-um.*
sanguine, *săng′-gwĭn.*
San Jose (Cal.), *săn hō-sā′.*
San Juan, *săn hwän′.*
Santa Claus, *săn′-ta klôz.*
Santa Fe (N. M.), *săn′-ta fā′.*
sarcophagus, *sär-kŏf′-a-gus.*
sarsaparilla, *sär-sa-pa-rĭl′-a.*
satin, *săt′-ĭn.*
Sault Sainte Marie, *sōō sānt mā′-rĭ.*
savage, *săv′-āj.*
savant, *sȧ′-väN′.*
says, *sĕz.*
scared, *skârd.*
scenario, *shā-nä′-rĭ-ō.*
schism, *sĭz′m.*
séance, *sā′-äns*; *sā′-äNs′.*
secretary, *sĕk′-rē-tā-rĭ.*
seidlitz, *sĕd′-lĭts.*
semiannual, *sĕm-ĭ-ăn′-ū-al.*
senile, *sē′-nīl*; *sē′-nĭl.*
separable, *sĕp′-a-ra-b'l.*
separate, *sĕp′-a-rāt.*
sequin, *sē′-kwĭn*; *sĕk′-ĭn.*
sesame, *sĕs′-a-mē.*
several, *sĕv′-ĕr-al.*
signora, *sē-nyō′-rä.*
since, *sĭns.*
sinecure, *sī′-nē-kūr.*
sirup, *sĭr′-up.*
ski, skiing, *skē*, *skē′-ĭng.*
sleek, *slēk.*
slept, *slĕpt.*
snout, *snout.*
sofa, *sō′-fa.*
soften, *sŏf′-'n.*
soirée, *swȧ′-rā′*; *swä-rā′*; *swŏ-rā′.*
Soissons, *swȧ′-sôN′.*

solace, *sŏl′-ās.*
solarium, *sō-lā′-rĭ-um.*
solemn, *sŏl′-em.*
sonata, *sō-nä′-ta.*
soprano, *sō-prä′-nō.*
souvenir, *sōō-vē-nēr′; sōō′-vē-nēr.*
specie, *spē′-shĭ-ē.*
specie (coin), *spē′-shĭ.*
spirit, *spĭr′-ĭt.*
Spokane, *spō-kăn′.*
spouse, *spouz.*
status, *stā′-tus.*
steady, *stĕd′-ĭ.*
stoicism, *stō′-ĭ-sĭz′m.*
stomach, *stŭm′-uk.*
strata, *strā′-ta.*
submarine, *sŭb-ma-rēn′.*
subpœna, *sŭb-pē′-na.*
suburb, *sŭb′-ûrb.*
suède, *swād;* Fr., *swĕd.*
suite, *swēt.*
sumac, *sū′-măk; shōō′-măk.*
Sumatra, *sōō-mä′-tra.*
superfluous, *sū-pûr′-flōō-us.*
supple, *sŭp′-′l.*
suppose, *su-pōz′.*
surprise, *sur-prīz′.*
swept, *swĕpt.*
syndicate, *sĭn′-dĭ-kāt.*
Synge, *sĭng.*
synod, *sĭn′-ud.*
syringe, *sĭr′-ĭnj.*
table d'hôte, *tà′-bl′ dōt′.*
Tagore (Rabindranath), *tà-gōr′.*
Taj Mahal, *täj ma-häl′.*
tallyho, *tăl′-ĭ-hō.*
Tannhäuser, *tän′-hoi-zĕr.*
Tchaikovsky, *chī-kôf′-skĭ.*
technique, *tĕk′-nēk′.*
temperament, *tĕm′-pĕr-a-ment.*
temperature, *tĕm′-pĕr-a-tūr.*
temporarily, *tĕm′-pō-rā-rĭ-lĭ.*
tenet, *tĕn′-ĕt.*
tepid, *tĕp′-ĭd.*
tête-à-tête, *tāt-à-tāt′; tĕ-tà-tât′.*
Thais, *thā′-ĭs;* Fr., *tà′-ēs′.*
Thames (River in England), *tĕmz.*
theater, *thē′-a-tĕr.*
thermostat, *thûr′-mō-stăt.*
Thoreau, *thō′-rō; thō-rō′.*
thresh, *thrĕsh.*
Tolstoy, *tōl-stoi′.*
tongs, *tŏngz.*
tonsillitis, *tŏn-sĭl-lī′-tĭs.*
Toul, *tōōl.*
toward, *tō′-ĕrd; tōrd.*
transmigrate, *trănz′-mĭ-grāt.*
traveler, *trăv′-el-ĕr.*
traverse (n., adj., vb.), *trăv′-ĕrs.*
traverse (adv.), *trăv′-ĕrs; tra-vûrs′.*
Traviata, La, *lä trä-vyä′-ta.*
tribune, *trĭb′-ūn.*
trichina, *trĭ-kī′-na.*
trousseau, *trōō′-sō′.*
Trovatore, Il, *ēl trō-vä-tō′-rā.*
Tucson, *tōō-sŏn′.*
Tuileries, *twē′-lĕr-ĭz;* Fr., *twēl′-rē′.*
turnip, *tûr′-nĭp.*
Udine, *ōō′-dē-nā.*
Ukraine, *ū′-krān.*
ukulele, *ōō-kōō-lā′-lā.*
ultimatum, *ŭl-tĭ-mā′-tum.*
umbrella, *ŭm-brĕl′-a.*
undersigned, *ŭn-dĕr-sīnd′.*
uninterested, *ŭn-ĭn′-tĕr-ĕs-tĕd.*
unprecedented, *ŭn-prĕs′-ē-dĕn-tĕd.*
untoward, *ŭn-tō′-ĕrd; ŭn-tôrd′.*
used, *ūzd.*
usually, *ū′-zhū-al-lĭ.*
usurp, *ū-zûrp′.*
vagary, *va-gā′-rĭ.*
vagrant, *vā′-grant.*
vanquish, *văng′-kwĭsh.*
vase, *vās; vāz.*
vaudeville, *vōd′-vĭl.*
vehement, *vē′-hē-ment.*
veinous, *vān′-ŭs.*
velvet, *vĕl′-vĕt; vĕl′-vĭt.*
venous, *vē′-nus.*
ventriloquist, *vĕn-trĭl′-ō-kwĭst.*
Vera Cruz, *vā′-rä krōōs′; vĕr′-a krōōz′.*
version, *vûr′-shun.*
veterinary, *vĕt′-ĕr-ĭ-nā-rĭ.*
vicar, *vĭk′-ĕr.*
vice versa, *vī′-sē vûr′-sa.*
victim, *vĭk′-tĭm.*
Vimy (Ridge), *vē′-mē′.*
vis-à-vis, *vē-zà-vē′.*
vitriol, *vĭt′-rĭ-ul.*
Vladivostok, *vlà-dyĭ-vŏs-tôk′.*
volatile, *vŏl′-a-tĭl.*
volume, *vŏl′-ūm.*
voluntarily, *vŏl′-un-tā-rĭ-lĭ.*
Vosges, *vōzh.*
waft, *wȧft.*
wainscot, *wān′-skŏt; wān′-skot.*
was, *wŏz.*
wash, *wŏsh.*
wasp, *wŏsp.*
whisk, *hwĭsk.*
whole, *hōl.*
whooping (cough), *hōōp′-ĭng.*
widow, *wĭd′-ō.*
Willamette, *wĭ-lăm′-ĕt.*
window, *wĭn′-dō.*
wistaria, *wĭs-tā′-rĭ-a.*
women, *wĭm′-ĕn; wĭm′-ĭn.*
wondering, *wŭn′-dĕr-ĭng.*
wont (custom), *wŭnt.*
wrath, *răth; rȧth.*
wrestler, *rĕs′-lĕr.*
yolk, *yōk; yōlk.*
Youghiogheny, *yŏk-ō-gā′-nĭ.*
Ypres, *ē′-pr′.*
Ysaye, *ē-zȧ′-yē.*
zodiacal, *zō-dī′-a-kal.*

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LITERATURE

History and literature are kindred sciences; both are the written story of life which has been lived. History places before us the life of action, and the heroes of history are chiefly pioneers, statesmen, soldiers, merchants, inventors, leaders of industry. Literature presents the inner life of thought and emotion and ideals. Its pages are written for us by historians and novelists and poets and philosophers. Both through deed and word, history and literature reveal to us the life of a nation.

But the life of a nation is not an individual thing. There is an intercourse of nations, as well as an interdependence. Literature, as well as history, reveals the influence of this universal contact. It is only by a survey of all literatures that any single literature can be appreciated or understood. The following tables and discussions present such a survey:

COMPARATIVE VIEW OF ANCIENT ORIENTAL LITERATURES

2000 B. C. TO 1500 B. C.

INDIA. Earliest Vedic hymns in Sanskrit. These Vedic hymns were probably sung or repeated for a thousand years before they were committed to writing.

PERSIA. Earliest metrical hymns.

CHINA. Development of ideo-phonetic writing. Odes, hymns, laws, historic documents preserved by imperial decree.

HEBREW. Age of Abraham and the patriarchs. Book of Job.

BABYLONIA AND ASSYRIA. Cuneiform inscriptions on stone slabs, and on brick and clay tablets, delicate inscriptions on glass and metal. Chaldean account of the deluge compiled about 2000 B. C.

Golden age of Babylonian literature and rise of Assyrian literature.

ARABIA. War-loving tribes roving over the table lands of Arabia produced an oral literature of pastorals, rude songs, and triumphal odes.

EGYPT. Hieroglyphic inscriptions on monuments and papyri. Hermetic books (treatises on alchemy, magic, etc.).

Book of the Dead, Ptah-Hotep's moral treatise.

1500 B. C. TO 1000 B. C.

INDIA. Collection of Vedic hymns, embodying the system of philosophy; The Institutes of Manu, regulating moral and social life.

PERSIA. Age of Zoroaster. Compilation of the Zend, the only existing monument of a once extensive literature.

CHINA. The Five Great Classics of Antiquity; the most important of these is the Book of Changes.

HEBREW. The Age of Moses and the Pentateuch. Hebrew anthems and elegies and wisdom literature, culminating in the psalms of David and proverbs of Solomon.

BABYLONIA AND ASSYRIA. Preservation of records in royal libraries.

Inscriptions elaborately wrought on stone and terra cotta. Chief cities made depositories of royal libraries. Babylonian literature rich in fiction, astrology, law, grammar, history, mathematics, etc.

ARABIA. Inscriptions on walls, tombs, dikes, and bronze tablets.

EGYPT. Great library founded. Golden Age of Rameses. Literature rich in epic poetry, odes, ballads, hymns, romances, fables, history, science, etc.

1000 B. C. TO 500 B. C.

INDIA. Ancient Vedic translations contained in great epics and lyrics. The Ramayana and the Mahabharata are called the Iliad and the Odyssey of the Sanskrit. Dramas, tales, fables, and epigrams abound.

PERSIA. Preservation and enlargement of books of sacred literature. Compilation of the Zend-Avesta.

CHINA. Age of Confucius. A period of great literary activity. Compilation of the sacred learning of the Chinese by Confucius and the introduction of higher ethical ideals.

HEBREW. Songs of lamentation and prophetic books of the period of the captivity. The Idylls of Ruth and Esther.

ASSYRIA. Decline of Babylonia and revival of arts and sciences in Assyria.

ARABIA. Increase of learning among the Arabs. Development of language and literature. Three poets, Amru-el-Kais, Tarafah, and Antar.

EGYPT. Age of decline. Simplified form of writing introduced.

LITERATURE OF INDIA

The literature of India is vast beyond all comprehension. The library of one of the kings is said to have contained so many books that a hundred Brahmans were employed in taking care of it, and a thousand dromedaries were required to convey it from place to place. Literary activity in India is as great to-day as in the past, and vast stores of learning are accumulated there.

The most ancient of Hindu literatures is the Sanskrit, a branch of the Indo-European group of languages, which includes the Persian, Greek, Latin, Teutonic, Slavonic, Celtic, and Scandinavian. The Sanskrit is supposed to bear the closest resemblance to the primitive language, from which all this group of languages sprung. It is the sacred language of the Brahmans, and, although classed to-day among the dead languages, it is kept alive in the conversation and writings of the priestly caste. It has furnished a rich storehouse for European scholars.

Sanskrit appears in its most ancient form in the Vedas, which date, at least, one thousand years before Christ; these Vedic hymns were probably sung and recited many hundred years before they were committed to writing. The history of Sanskrit literature divides into two periods, the Vedic and the classic. These periods partly overlap each other, but the later Vedic works are distinguished by the subjects with which they deal and by their archaic style.

The word Veda means "knowledge," books of knowledge. These sacred books of the Brahmans are divided into four classes: (1) Rig-Veda, or lore of praise (hymns); (2) Yajur-Veda, lore of prayer (sacrificial rites); (3) Sama-Veda, or lore of tunes (chants); and (4) Atharva-Veda, devotional services (incantations), to be used in sacrifices and other religious offices. The last three Vedas are medley extracts from the Rig-Veda. Each Veda is divided into two parts, the first consisting of prayers, and the second of commandments. Six branches of Vedic science are included under the term Vedanga, namely, phonetics, music, grammar, etymology, astronomy, ceremonials. These books also contain legends and philosophical

and scientific discussions, as well as religious teachings, for the Sanskrit literature belongs to an imaginative and creative, as well as to a serious and thoughtful, people.

An ancient Hindu work of great importance is the Code of Manu, dating at least one thousand years before the Christian era. The institutes of Manu regulated the moral and social life of the people, and prescribed punishments. Purity of life was strictly enjoined.

Two interesting epic poems belong to the classic period, the Mahabharata, a semi-historical poem, treating of ancient rivalries and wars, and the Ramayana, a religious poem, describing the incarnation of Vishnu. The later Sanskrit, dating about one hundred before Christ, is varied in its theme; however, it lacks the dignity of thought which characterizes the early Sanskrit.

Many speculative philosophies have had their birth in India, some of them in strict opposition to the teaching of the Vedas. Five centuries before the Christian era a newer and purer religion was taught by a monk of royal birth. He was afterwards known as Buddha, the Enlightened One. He taught his people to live in charity, one with another, to practice truth and morality, to overthrow caste, and to abolish Brahman sacrifices. The sacred books of Buddha are called the Tripitaka; one of them is metaphysical, one disciplinary, and one contains the discourses of Buddha. They are written in a dialect of the later Sanskrit, and are very voluminous, containing more than five times as much matter as in both the New and the Old Testament. The followers of Buddha are said to number over three hundred millions. Buddhism is not only one of the great religions of India, but it has millions of followers in Thibet, China, Japan, Corea, and all the countries of the far East. It would be impossible to acknowledge the full indebtedness of Western literatures to the literary thought of India. We have borrowed from every department, but nowhere have we found richer treasures than in romance and fairy tale. Stories written in far-away India have been the delight of our story-tellers; many of the fairy tales of our nurseries were first written for the joy of some Hindu child. India is rich in literary treasures, and we are richer because we have borrowed from these treasures.

PERSIAN LITERATURE

The earliest language of Persia is the Zend, which is closely allied to the Sanskrit. The Vedic Aryans and the Zend-speaking Aryans originally belonged to one community, and spoke one language. Both language and literature reveal this unity of origin. We find similarities in their cuneiform inscriptions. Like the Sanskrit of India, the earliest literature of Persia is preserved for us in the sacred writings. These are known as the Zend-Avesta, or commentary and text.

The Avesta is among the most important of the sacred writings found in the whole range of Indo-European literatures. These writings are attributed by the Persians to Zoroaster, who lived probably twelve or fifteen centuries before the Christian era. Little is known of Zoroaster, but it is said that like Buddha he was the great teacher who reformed the religious system of his country. The Parsees, or Fire-Worshipers of India and Persia, are to-day the followers of Zoroaster.

The Avesta, though attributed to Zoroaster, is not the work of a single man, but, like the Vedas, is made up from fragments, which had been repeated orally, and thus brought down through generations. It is a collection of professed revelations, instructions concerning ways of living, prayers and confessions made to some Supreme Being and to inferior gods, simple hymns, some of which are grand, both in word and thought. The Avesta recognizes One Supreme Being, and exhorts to a pure way of living. "Forsake the wrong," says Zoroaster, "and choose one of the two spirits, Good or Base; you cannot serve both."

Besides the Zend-Avesta, there are two other sacred books, one a book of prayers and hymns, and the other prayers to the Genii of the days. The religion of Zoroaster prevailed for many years in Persia. The Greeks adopted some of the ideas into their philosophy, and through them its influence was extended over Europe.

When the Greeks under Alexander (331 B. C.) conquered Persia and burned the capital at Persepolis, they destroyed many inscriptions and valuable records in the great library, which had been collected by the Persian kings. After the Greek conquest, the Persian language was forced to give place to the language of their conquerors, first the Greek, and then the Arabic speech of the Mohammedans.

In the Ninth Century, A. D., native dynasties were restored, and from this time dates modern Persian literature, which flourished for nine centuries. But the literature of modern Persia is very unlike that of the ancient Empire. Greek thought, together with the arts and sciences of Arabia and the religion of Mohammed, had transformed the life and spirit of the people, and we find an entirely different literature in this later period. Satires, love ditties, songs, and religious hymns appeared; many names of minstrels who belonged to the Tenth Century are found. The first Persian poet who impressed his stamp upon every form of poetry was Rudagi. About 1000 A. D., Prince Cabus is quoted as the author of the "Perfection of Rhetoric" and also of poems. A generation later Anvari wrote much verse in honor of the king. To these same centuries belong Dakiki and Firdausi, court poets; Tabari, court historian; Sadi, the great moral teacher; Hafiz, the writer of love lyrics and pleasure songs; Omar Khayyam, well known from the excellent translations of his quatrains into English.

CHINESE LITERATURE

The literature of China leads us back to the remotest past in an almost unbroken line of writings. The prose writings of the Chinese philosophers, the plain, grave, and concise rendering of moral maxims, and the primeval poetry, including the oldest temperance ode in the world, were preserved in the Sacred Books, edited by Confucius.

The first published book on record in China is the "Book of Changes," dating originally about 1150 B. C. Little is known of this mysterious book, but it was evidently a treatise on philosophy; centuries later it became the foundation for a book of divination. The "Book of History" is a compilation made by Confucius from old manuscripts, records of years between 2400 B. C. and 700 B. C. The "Book of Rites," the real guide of Chinese life, was also compiled from ancient sources and is said to be the work of a duke living sometime between 1200 B. C. and 1100 B. C. This "Book of Rites" is still the ceremonial which is the soul of the Chinese. These are the most important of the books known as the "Five Classics." Following these are the "Four Books," all by followers and pupils of Confucius. Together they form a body of records or annals, written in brief paragraphs with no literary form; they are simple statements of fact or doctrine. They might be considered mere curiosities of literature, but for their unbounded influence over a great nation. This influence is easily understood upon closer acquaintance for the recorded sayings, or conversations, contain the essence of wisdom. The educated classes committed to memory pages from the Classical Books, while the wise maxims became as familiar to the people as nursery songs. The aim of all these writings was to build lofty principles of thought and action which should govern men in every relation of life. "The Great Learning," based upon the older teachings, shows political knowledge and judgment in its suggestions. These great books directed the people with such words as:

"The ancients, wishing to order the empire, first ordered well their own states. Wishing to order well their states, they first regulated their families. Wishing to regulate their families, they first cultivated their persons. Wishing to cultivate their persons, they first rectified the heart."

"What a man dislikes in his superiors, let him not display in the treatment of his inferiors."

"Learn the past, and you will know the future."

Commentaries by the thousands have been written on these books, and form a great body in Chinese libraries.

Mencius (372 B. C.), the last and greatest apostle of Confucius, has been called the Plato of his nation. He was the first to maintain the goodness of human nature unmolded by education. The spirit inherent in the Chinese classics was, "Walk in the trodden paths and seek wisdom from ancient teachings." Mencius threw his influence into society about him, insisted upon changes in his degenerate age, and used humor and satire to sharpen his discussions.

Printing was invented in China about 600 A. D., and was then chiefly used in publication of chronicles of information or history. Each dynasty has its official chronicle, making a history of the nation from the Third Century B. C. to the middle of the Seventeenth Century.

The system of Chinese education has tended to compress the minds of the students into a narrowness of thought, but this helped observation of detail and may account for the value of their topographical works, which are scarcely equaled in any other literature. Historical and literary encyclopedias are well arranged and have been closely studied by European authors, who speak highly in their praise.

The first great thoughts of this seemingly prosaic and practical people were put in the form of poetry, and their songs and ballads date back beyond any knowledge of authors. In the time of Confucius (551–478 B. C.) there was an official collection of some 3,000 songs, which he arranged, and from which he made his "Book of Odes." The subjects of these odes are from the everyday life and simple ways of antiquity. They are written in rhyme and give most pleasing pictures with delicate touches. Epic poetry, conspicuous in India, is wholly lacking in China, the historical romance taking its place. Dramas abound, but in very primitive form, while didactic poems are common, official documents being sometimes issued in this form.

In China is found the philosophy of Confucius, prominently ethical; the philosophy of Tao, almost purely material; and the philosophy of Buddha, preëminently metaphysical. These seem to hold a joint power over the people; effects of this mixture can be traced in their literature. Many discussions in moral philosophy are popular among Chinese scholars. The Chinese have, also, romances of all kinds, light poetry, and works on history, geography, and travel. They are a reading people. Translators are bringing books out from their hoard of treasures, helped by a well-executed dictionary of the Chinese language.

The countries of Burmah, Siam, and Thibet are related to China by having the same monosyllabic language. To each of these nations belongs, also, a valuable literature, reaching back to antiquity.

HEBREW LITERATURE

Hebrew literature stands first among the literatures of antiquity. A universal significance has been given to it on account of the remarkable influence it has had in forming the thought of Christian and Mohammedan nations. From it we get our Bible, which gives us our revelation of God and our fundamental ideas of worship. Hebrew literature reaches back to remote antiquity. It is the story of a people who believed themselves selected by God to be the conservators of His revelation. It is the marvelous story of a race, which for thousands of years endured captivity, dispersion, wars, and persecution of every kind, and yet preserved its nationality, its peculiarities of worship, its laws and language, traditions and literature. In its deep religious spirit, in its credibility, and in the vigor of its poetry, it far surpasses the literature of any other nation of antiquity. It constitutes a remarkable monument of the early history and spiritual development of the human race. Hebrew law has been studied and imitated by lawmakers of every nation and, like their literature, is unsurpassed in originality and vigor of expression.

Only a small part of the great mass of Hebrew writing has come down to us. Of this, the most important is that contained in the Hebrew

Scriptures. The composition of the books of the Old Testament Scriptures extends from the time of David to the Maccabees, a period of at least 900 years. Before this, like all ancient peoples, the Hebrews by oral tradition handed down their sagas, songs, fragments of history, inscriptions, laws, and priestly registers.

The prevalent idea of Hebrew literature is Monotheism. The Hebrews believe they are a peculiar people, chosen of God, hence their passionate enthusiasm for independence and the preservation of their nationality. While other nations were creating their divinities marred by human passions, and were painting them in the glowing colors of their poetry, as engaged in wars and feasting, sensuous love or hate, revenge or revelry, the Hebrew poets pictured their God in the most sublime language, simple, just, severe. "God is a Spirit, and they that worship Him must worship Him in spirit and in truth." Love and wisdom are His attributes; power and majesty are His, and yet paternal care and wisdom. In this contemplation of Jehovah the Hebrews reached the very source of enthusiasm, which caused their poets so fervently to utter the denunciations and promises of the Eternal in a tone suited to the inspired of God. Under whatever form they wrote, law, prophecy, history, lyric poetry, philosophy, or speculation, God and His providences are their special theme.

The simplest divison of the literature of the Hebrews is into the four following periods:

The first period extends from remote antiquity to the time of David. It includes all the records of patriarchal civilization transmitted by tradition previous to the age of Moses, and contained in the Pentateuch, with the book of Joshua added. The earliest literature belonging to this period seems to have been lyrics and laws circulated from mouth to mouth without the aid of written copies, and thus handed down as oral tradition from generation to generation. As early as the reign of David a scribe was attached to the royal court, and from that time on we have written records.

The second period extends from the time of David to the death of Solomon. To this period we refer the Psalms of David, the Songs of Solomon, the Proverbs, Ecclesiastes, Joshua, Judges, Samuel, Kings, and Chronicles.

The third period extends from the death of Solomon to the return from the Babylonian captivity, and to this age belong the writings of the prophets of the captivity and the book of Esther.

The fourth period extends from the return from the Babylonian captivity to the present time. To this time belong the writings of the New Testament, the writings of Josephus, of Philo of Alexandria, and the rabbinical literature.

The epoch of the captivity marks the beginning of Jewish literature properly so called as distinct from the earlier Hebrew. It is founded on the earlier and more creative Hebrew. It retains the fundamental religious thought, but both language and imagination are modified by contact with Persian, Greek, and Roman civilization, and by the forms of Arabic poetry and scientific study as introduced from Europe.

Since the return from exile, Jewish literature has contributed richly toward the cultivation of the human mind, and in the writings of the Jews, known as rabbinical literature, lie concealed the richest treasures of centuries.

The most important of this later literature is the Talmud. The word Talmud signifies learning; the work itself is a vast storehouse of learning and of speculation. It treats of every conceivable subject and depicts incidents in the life of the people, not only of the Jews, but of other nations as well. There are separate works on civil and criminal law, religious philosophy, psychology, education, mathematics, medicine, magic, gardening, music, astrology, zoölogy, geography, etc. It is enlivened by parables, jests, fairy tales, ethical sayings, and proverbs. It is a great wilderness of themes in the midst of which are precious treasures.

The Talmud is divided into two great divisions, which are kept distinct, (1) the laws and regulations designated as Mishna, and (2) the discussion of the laws designated as Gemara. The language of the Mishna is Hebrew; that of the Gemara, which is of later composition, is Aramaic. The Aramaic, both in Palestine and Babylonia, drove out the Hebrew as the popular speech.

A remarkable correspondence exists between parts of the Talmud and the gospel writings. The authority of the Talmud was long considered second only to the Bible.

It was not until the second century A. D. that the writings contained in the Talmud were systematized into a code. In the Fifth Century, A. D., the Babylonian rabbis composed new commentaries known as the Babylonian Talmud.

Sayings taken from the Talmud:

"Even when the gates of heaven are shut to prayer they are open to tears."

"Turn the Bible and turn it again for everything is in it."

"Teach thy tongue to say, 'I do not know.'"

"Thy friend has a friend, and thy friend's friend has a friend: be discreet."

"The soldiers fight, and the kings are heroes."

During the middle ages rabbinical learning flourished. Schools were established in Spain, Portugal, France, Italy, Germany, to which flocked the scholars of the world. In the Sixteenth Century there was a great revival of interest in the study of Hebrew language and literature, and again in the Nineteenth Century. At the present time there are several schools for the study of rabbinical literature. Among the most celebrated of these schools are the seminaries at Padua, Berlin, and Metz.

BOOKS OF THE BIBLE ANALYZED

BOOKS OF THE OLD TESTAMENT

PENTATEUCH

Genesis. Account of creation, early history of the human race, and story of the patriarchs.

Exodus. Account of the exodus and the giving of the moral law by Moses.

Leviticus. Development of the nation and institution of priestly law.

Numbers. Further development and institution of social and political law.

Deuteronomy. Recapitulation of history and law.

HISTORIC BOOKS

Joshua. Conquest of Canaan, and separation of the tribes.

Judges. History of Israel under the administration of thirteen Judges.
Ruth. An Idyll of Jewish life in the period of the judges.
Samuel. Establishment of the kingdom under Saul and David.
Kings. Political history of the kingdoms of Judah and Israel.
Chronicles. Priestly history of the kingdoms of Judah and Israel.
Ezra. Continuation of Chronicles. Priestly restoration after the captivity.
Nehemiah. Continuation of Ezra. The political restoration.
Esther. A story of the Hebrew captivity.

POETRY

Job. A drama of the soul.
Psalms. Book of hymns.
Songs of Solomon. Hebrew pastoral poems.

DIDACTIC POETRY OR BOOKS OF WISDOM

Proverbs. Practical moral maxims.
Ecclesiastes. Practical moral reflections.

MAJOR PROPHETS

Isaiah. The Messianic prophet.
Jeremiah. The prophet of sorrow.
Ezekiel. The priestly prophet.
Daniel. The apocalyptic prophet.

MINOR PROPHETS

1. Hosea.
2. Joel.
3. Amos.
4. Obadiah.
5. Jonah.
6. Micah.
7. Nahum.
8. Habakkuk.
9. Zephaniah.
10. Haggai.
11. Zechariah.
12. Malachi.

BOOKS OF THE NEW TESTAMENT

Biography. Life of Christ as found in the four gospels, Matthew, Mark, Luke, John.
Historical. History of the Apostolic Church as given in the Acts of the Apostles.
Epistles. Continuation of the history of the Apostolic Church as given in the

PAULINE EPISTLES

Romans,
Corinthians I and II,
Galatians,
Ephesians,
Philippians,
Colossians,
Thessalonians I and II,
Timothy I and II,
Titus,
Philemon,
Hebrews.

GENERAL EPISTLES

James,
Peter I, II,
John I, II, III,
Jude.

Prophetical. The Apocalypse or Book of Revelation.

ASSYRIO-BABYLONIAN LITERATURE

The ancient language and literature of Assyria and Babylonia were rediscovered and opened to modern readers in the 19th century. This achievement was a triumph of devoted scholarship. In 1835 Henry C. Rawlinson, an English officer, found at Behistun, in Persia, a long inscription on the smoothed face of a high rock. The writing was in three languages, old Persian, Elamite, and Babylonian-Assyrian. Although these tongues belong to different families of language, the cuneiform characters were used for all. Rawlinson was able to decipher the old Persian, and during the next twenty years he, with other scholars, penetrated the secrets of the other two inscriptions. Thus we were given the means of studying the culture and literature of Babylonia in its records on rocks, walls, and vast collections of clay tablets.

The cuneiform writing, which consists of wedge-shaped characters placed at various angles and in groups of from two to thirty, was originated by the Sumerians, possibly as early as 7000 B. C. This people is the earliest we know of in the Tigris valley. Their original home is unknown, but at least as early as 4000 B. C. they had developed a high state of civilization. Most of the inscriptions found in the temple libraries at Telloh and Nippur are in the Sumerian language. Education seems to have been widely diffused among these people, both men and women learning to read and write. "He who would excel in the school of the scribes must arise with the dawn," said a Sumerian proverb. The Semitic immigrants, who, during the 4th and the 3d millenium B. C., gradually supplanted the Sumerians and became the Babylonians, continued this tradition of culture. They translated much from the Sumerian language, adapting it especially to the uses of their own religion. For many centuries the two languages survived side by side, and scholars had to be familiar with both.

The great Babylonian period lasted from about the 23d to the 13th century B. C. After this time, the Assyrians, a people of warriors, succeeded to power. With the Assyrians, education was confined to a limited class, and their literary work shows no originality. They copied the Babylonian works and preserved much in libraries, notably that of Sardanapalus II. (668-626 B. C.) at Nineveh, which contained about thirty thousand clay tablets. While these libraries are rich in works on ethics, religion, astrology, astronomy, law, mathematics, language, history, and stories, including fables, their principal literary treasures are the great mythological epics of the Babylonians. One of the most valuable historical documents that have been discovered is the Law Code of Hammurabi, king of Babylonia about 2300 B. C.

Up to the present time, about 150,000 tablets and inscriptions have been discovered in Babylonia. Comparatively few of these have been deciphered.

ARABIAN LITERATURE

The historical period of Arabian literature is very short. There are no traces of written Arabic until the century preceding Mohammed (6th century A. D.), and the great productive use of the language ceased after the 14th century. Yet in this short period Arabic writers produced a large body of poetry and an even larger mass of prose writing in philosophy, science, and history. The *Koran* furnishes the subject matter and the basis for most of this prose writing, for Mohammedans were very diligent during several centuries in gathering together the traditions of the prophet and interpreting the utterances of the *Koran* upon all matters of human conduct and society. Long before the days of written literature the nomad Arabian tribes had their singers and skillful reciters of tribal stories. Their songs and tales were handed down by word of mouth from one singer to another. Many fragments of these early Arabic short poems, satires, and epigrams, praising or condemning the tribe, have survived in collections and works of grammar.

After the time of Mohammed, when cities and courts developed, these early literary forms which had sprung out of wandering tribal life

were for a time retained, but in the atmosphere of the cities they became artificial, so that, in the 8th century, poets began to employ new forms and treat new subjects. In this century Abu Nuwas is the most distinguished name in poetry. The period beginning with the 8th century is rich in the production of verse and prose, frequently of an extravagant and fantastic sort. Arabic writers drew largely upon outside sources. For instance, the fables of Bidpai were translated from the Persian and many stories were drawn from the Indian languages. The usual collection of stories familiar to Western readers as the *Arabian Nights* is a mere fragment of a great body of many hundreds of such stories that were circulated in different versions, no two of which agree either in the titles or the contents of the tales.

From the 10th century to the 15th, Arabia fell under various conquerors and dynasties. But in spite of these conditions diligent Arabic scholars produced works in all branches of learning, and their universities and libraries, scattered all the way from Aleppo to Cordova, were centers of light in a dark world.

A very interesting form of Arabic literature is the rimed prose work called the *Maqama* (assembly), which originated in the scholars' custom of meeting for the purpose of contending in speeches to show their knowledge of the language. The Maqama is, therefore, a combination of legend and story in which the writer tells how in various places he meets a wandering scholar who puts all his rivals to shame. Hamadhani, in the 10th century, is the originator, and Hariri, in the 11th century, is ranked as the most brilliant writer of the Maqama.

Under Turkish rule, Arab literature declined, but the 19th century saw many attempts to revive literary activity and brought an increasingly frequent contact of Arabic and Western writers and thinkers. Beyrout and Lebanon have been important centers in this activity.

EGYPTIAN LITERATURE

The literary remains of ancient Egypt relate chiefly to its history or its religion. Such remains consist of papyrus manuscripts, sculptures, inscriptions, and tablets found in the tombs temples, and in the ruins. The earliest characters used in writing are the hieroglyphic inscriptions. The earliest of these date as far back as twenty-five centuries B. C., and the latest as recent as 250 A. D. Two other simpler forms of writing, the hieratic and the demotic, succeeded the hieroglyphic. The difficulty of reading those ancient symbols made it impossible for modern scholars to study the literature of ancient Egypt, but the discovery of the Rosetta stone, in 1799, furnished a key for the unlocking of these treasures.

Many inscriptions have been deciphered by aid of the Rosetta stone, but from a literary point of view they have disappointed expectations. The variations are meager and broken, and, with a few exceptions, there is very little beauty of language or color to the imagination. There is no progressive development, but a sameness of style pervades all periods up to the age of Rameses II., at whose court Moses was brought up "in all the learning of the Egyptians."

The ancient Egyptians are spoken of by Herodotus as "surpassing all others in the reverence they paid their gods." The most important religious work is the funeral ritual or "Book of the Dead," one of the many sacred books sometimes called the "Hermetic Books." The "Book of the Dead" contains a collection of prayers of a magical character and refers to the future condition of the disembodied soul. Similar to the "Book of the Dead" is the "Book of the Lower Hemisphere." The "Book of the Breath of Life" treats of the resurrection and the subsequent existence of the soul.

One of the most ancient inscriptions, Ptah-Hotep's famous treatise on piety and filial obedience, recalls the proverbs of Solomon. A few hymns to Egyptian deities have been preserved. These are inferior to the Arabic, but have some beauty. There are extant copies of an epic poem by Pentaur, a writer of the age of Rameses II., a papyrus on geometry dated about 1100 B. C., and a few papyri containing medical treatises. "The Tale of Two Brothers," by Enna, dates more than four thousand years ago. It is perhaps the oldest fairy story in the world. Legal documents, letters, histories, biographical sketches, travels, fables, parables, are all found in these fragments of ancient Egyptian literature.

GREEK LITERATURE

Time	Author	Representative Works
Lived sometime between 1100 and 850 B. C.	Homer,	Iliad, Odyssey.
Lived about 800 B. C.	Hesiod,	Works and Days, Theogony.
Lived about 700 B. C.	Tyrtæus,	Elegies.
Lived about 600 B. C.	Sappho,	Lyrics.
Dates B. C.		
640–546	Thales,	Astronomy, Geometry.
620–564	Æsop,	Fables.
582–500	Pythagoras,	Philosophy.
563–478	Anacreon,	Lyrics.
556–468	Simonides,	Elegy, Epigrams, etc.
525–456	Æschylus,	Prometheus Bound. Seven Against Thebes. Agamemnon.
522–443	Pindar,	Odes.
500–428	Anaxagoras,	Astronomy.
495–406	Sophocles,	Tragedy, Antigone, Electra, etc.

GREEK LITERATURE—Continued

Time	Author	Representative Works
484–424	Herodotus,	History.
480–406	Euripides,	Tragedy, { Iphigenia, Hecuba, etc.
471–400	Thucydides,	History, Peloponnesian War, etc.
444–380	Aristophanes,	Comedy, { The Birds, The Frogs.
434–355	Xenophon,	History, { Memorabilia, Cyropædia, Anabasis, etc.
429–347	Plato,	Dialogues, { Republic, Phædrus, etc.
385–322	Demosthenes,	Orations, { Philippics, On the Crown, etc.
384–322	Aristotle,	Philosophy, Organon.
372–287	Theophrastus,	Philosophy.
342–270	Epicurus,	Philosophy.
287–212	Archimedes of Syracuse,	Science, Philosophy.
Lived about 300 B. C.	Theocritus,	Lyrics, { Death of Daphnis, Festival of Adonis.

The beginning of the literature of the Greeks is lost in a mass of fables, from their curious habit of personifying every feeling or experience.

Nothing definite is known of their poets before Homer. The most ancient traditional poet was Olen, followed by Linus, Orpheus, and others, but the poems left under their names cannot be relied upon as genuine.

In the poetical legends of the twelve labors of Hercules, the voyage of Theseus and the expedition of the Argonauts are the first traces of historical facts, preserved, distorted, and obscured by fables. The story of Cadmus bringing the alphabet to Greece makes one of the early tales. These stories were a part of Greek education, every one believed them, and they made up the national religion. All this has become a part of the literature of Europe.

The Trojan War was the greatest event of the first, or heroic, age, and this was of more importance to art and poetry than to history. The poems of the first Grecian bards were written to celebrate the heroes of this war, and with these began the Epic age of Greek literature. From this time date the two great poems of Homer, the Iliad and the Odyssey, which have come down to the present day with several hymns and epigrams of which he was author. Writing was unknown; these poems were first circulated orally, and parts of them were committed to memory and recited by wandering singers. Even later, when they had been collected in writing, they were impressed upon the memory and used to excite patriotism, religious feeling, and love for the beautiful.

The poems of Homer became the foundation of all Grecian literature, and after him a class of poets endeavored to connect their work with his, calling themselves the Cyclic poets, and in their works can be found the whole cycle of tradition and mythology. They recite the birth of the gods, the creation of the world, and all the adventures of ancient times. From these poems have come the tales of the Argonauts and of Hercules, the events of the Trojan War, and mythical legends telling the fate of the Greeks after the fall of Troy.

Some authorities make Hesiod contemporary with Homer, others place him two or three generations later. His poetry has nothing of the fancy which lights up the lines of Homer; its object is to give knowledge. His poem, "Works and Days," relates the events of common life in practical fashion, interspersed with moral maxims, and is, in fact, an agricultural poem. His "Theogony" is of great importance, as it contains the religious faith of Greece. Through this poem the Greeks first found a religious code.

Until the beginning of the 7th century B. C. epic poetry was the only form in use except the early songs or hymns, and noble families were charmed by the recital of the deeds of their heroes in these epics. When republican movements began, these families lost something of power and privilege, a development of individuality began, and a poet dared to put his own thoughts or feelings into verse. These poems, at first, took the form of elegy or epigram. The elegies of Solon (638–559 B. C.) were pure expressions of his political feelings.

To add to the pleasures and amusements sought after by the Greeks, lighter poems were written intended to be sung to accompany the lute, hence called lyrics. All lyrical poetry originally consisted in cheerful songs, praises of love and wine, and exhortations to enjoy life. In this style, Anacreon was the most celebrated. In her Odes, a form of lyrics, Sappho became an object of admiration and Alcman roused valor by his martial lines. The culmination of lyric poetry is marked by two great names, Simonides of Ceos and Pindar. Pindar was the greatest of the Greek lyric poets.

Æsop's name appears about 570 B. C., and among his well-known fables have been collected those from other sources. No metrical version of these fables is known to belong to early times.

The philosophers of this time took up practical affairs, and among them were the often quoted Seven Wise Men of Greece. Epimenides of Crete stands high on this list, closely followed by Solon and Thales, and their fame was earned by wise judgment and skill shown in their management of the offices over which they ruled. Their sayings also form the body of many maxims applied to daily practical living. As the nation grew intellectually, a habit of speculative thought also grew, and this became the

period of scientific Greek literature. Thales headed the school of Ionic philosophy which taught the material origin of the Universe. The best-known advocates of this philosophy were Pherecydes, Anaxagoras, and Diogenes of Apollonia.

Pythagoras was the founder of another school known under his name, explaining another origin of all things and wandering far in speculative discussions. Xenophanes, the founder of the Eleatic school, adopted an ideal system in contrast to the principle of the Ionic school, founded on experience. Parmenides, also, belonged to this school; by excluding the idea of creation he fell into pantheism. Zeno, a pupil of Parmenides, was the earliest prose writer among the Greek philosophers.

Toward the end of the Age of Seven Sages, some writers of history appeared, telling of distant times and events; the first Greek to collect a well-written narrative of facts was Herodotus (484–424 B. C.) His work comprehends a history of nearly all the nations of the world at that time. Thucydides, historian of the Peloponnesian War, was also a philosopher, considering all events in a grave manner, and expressing himself in strong condensed sentences. The charming narration of Xenophon stands in strong contrast to this energetic sternness, and in his simple, tranquil style is found the greatest beauty of Greek prose. Of these three historians, Herodotus has been called the first artist in historical writing and Thucydides the first thinker. Xenophon combined the literary with the practical, he wrote of men of the past, and of affairs of his own time. His Anabasis is a modest account of his own leadership of the Ten Thousand in their retreat after the battle of Cunaxa.

Grecian drama was formed from popular festivals at which rustic worshipers, gathering around the altar of some god, sang a hymn in his honor, especially to Dionysius, the God of Wine. Those songs soon developed into dialogue form, making the elements of the drama. Æschylus (525–456 B. C.) is known as the founder of dramatic art; he divided the song, brought skillful actors, and gave to each a part. The three greatest writers of Greek tragedy were Æschylus, Sophocles, and Euripides. Aristophanes holds the highest place as writer of comedy.

In this same period the prose literature of Greece rose to its highest culture. Public speaking had been common in Greece, and, among the orators of Athens, Pericles, aided by the rhetorical studies of the Sophists, exerted great influence upon the Greek mind. Lysias gave the new form of plain style, Isocrates established a school of political oratory, and Demosthenes excelled all, using the common language of his own age and country, and appealing to the feelings and sentiments of his listeners. Æschines was the rival of Demosthenes.

When Socrates came into philosophy he gave it a new direction, taking the study of human nature, or psychology, in place of theories and speculations. He left no written record but his genius worked on his followers and among them Plato best expressed his principles. The writings of Plato still stand first in philosophical literature, showing beauty of diction as well as power in handling thought. Aristotle, a pupil of Plato's, holds a place equal to that of his teacher. His science of reasoning has been taught in all later schools. He put into form the thoughts of Plato and Socrates, and worked out a complete system of philosophy. Epicurus, born about six years after the death of Plato, established what is known as the Epicurean School of Philosophy. He gathered about him a remarkable group of men and women and taught the practical art of living. His followers became rivals of the Stoic School.

The practical mind of the Greeks found expression in mathematics and engineering. In the Third Century B. C., Euclid laid the foundations for our modern geometry, and a generation later Archimedes demonstrated the principles which underlie all engineering.

In 146 B. C., Greece fell under the rule of her conquerors, and her living literature died with her political independence. A few poets continued to sing, and philosophers and historians continued to write, as Menander, Strabo, Plutarch, Epictetus, Lucian; but her glory is in the past, and it is of her early poets, dramatists, philosophers, we speak, when we recall Greek literature.

LATIN LITERATURE

Time	Author	Representative Works
B. C.		
254–184	Plautus,	Comedy, { Aulularia, Captivi, Pseudolus, etc.
239–169	Ennius,	Annales, Thyestes, etc.
234–149	Cato the Elder,	De Re Rustica, Origines.
220–130	Pacuvius,	Tragedy.
185–159	Terence,	Comedy, { Andria, Phormio, Adelphi, etc.
148–103	Lucilius,	Satires.
116– 27	Varro,	On Agriculture.
106– 43	Cicero,	Orations, Essays, Letters.
100– 44	Cæsar, Julius,	Commentaries.
95– 55	Lucretius,	De Rerum Natura.
87– 54	Catullus,	Lyrics.
86– 34	Sallust,	History, { Conspiracy of Catiline, War with Jugurtha, Memoirs.
70– 19	Virgil,	Georgics, Æneid.
65– 8	Horace,	Odes, Satires, Letters.
Lived in first century B. C.	Nepos,	History, Biographies.

LATIN LITERATURE—Continued

Time	Author	Representative Works
B. C. A. D.		
59 17	Livy,	History of Rome.
43 18	Ovid,	Heroides, Metamorphoses, etc.
4 65	Seneca,	Investigations, Moralistic Essays
A. D.		
23– 79	Pliny the Elder,	Natural History.
35– 95	Quintilian,	Rhetoric, Criticisms.
39– 65	Lucan,	Pharsalia.
55–117	Tacitus,	Germany, History, Annals, etc.
60–140	Juvenal,	Satire.
61–115	Pliny the Younger,	Epistles.
70–140	Suetonius,	Lives of the Cæsars.
475–525	Boethius,	De Consolatione Philosophiæ. Translations

The first name in Latin, commonly called Roman, literature is that of Livius Andronicus, date about 240 B. C. Some germs of poetry may be found in the traditional songs belonging to a more ancient time, but these had little influence on real literature. The Roman mind turned to practical living and study of science and law. In other nations the first literature has been put in the form of poetry; among the Romans the first literary effort was history. These original historical documents were a simple record of facts with no touch of opinions or sentiments.

The greatest change in the intellectual condition of the Romans came through influence of the Greek captives, who were employed to teach their own language, which soon became a part of the education of a Roman noble. In the year 241 B. C., following the First Punic War, Livius Andronicus, one of the Greek slaves, substituted a drama in place of the medley of songs used in public amusements or games. He made the first Latin translation of Greek in these plays, which he himself wrote and acted. His words became text-books in Roman schools and were used until the time of Virgil. His immediate successor, Nævius, also adapted plays from the Greek, but the tastes of his audience and the condition of the language, developed through business and action, made comedy his choice. After him, Plautus and Terence were the two great comic poets of Rome.

Ennius (239–169 B. C.) is known as the "father of Latin song"; he gave a new direction to Roman literature, closely following Greek models, and, turning from the commonplace to the heroic, he borrowed greatly from Homer. His Annals, a poetical history of Rome, was for two centuries the national poem. Ennius was the inventor of the name, satire, but the sharp, fierce satires of Lucilius, written at this time against the vices and follies of the Romans, were more noted; fragments of them still exist. Not one of these poets was born in Rome.

The name of Cato belongs partly to this same generation, and he represented the pure, native element; prose belonged far more to the genius of Rome than poetry. Cato heads the list of Roman historians whose works belong to literature; his greatest work, "Origines," was a history of all Italy from earliest times. His De Re Rustica was a commonplace book on agriculture and domestic economy, written in rude and unpolished style, but clear in statement and striking in illustration. He filled many high offices, and was known as an able pleader; he was the first to publish his speeches, ninety of which have come down to this day.

The chief representatives of the next age are Cicero, Cæsar, Sallust, Lucretius, and Catullus, whose names still rank among classical writers. Cicero gave a fixed character to the Latin language and through him oratory at Rome took on a new form; he was both orator and critic. To him philosophy also owes much, especially the philosophy adapted to practical application; in his letters he pictures Roman life of his day and with it Roman history. The most important work of Cæsar is his commentaries, sketches made in the midst of action. The histories of Sallust are of more value in an artistic way than as trustworthy narrative, but they rank high as political studies.

An entirely new spirit, arising from the new political life of the nation, entered into the literature of Rome during the time known as the Augustan Age, the most remarkable period of Roman literature. The earliest and greatest poet of this age was Virgil, who idealizes national glory in his Æneid, and the simple, hardy life of Italy in his "Bucolics" and "Georgics." Horace, the second poet of his time, shows the ways of living and of thinking in his "Epistles," "Epodes," and "Satires." The great historical work of Livy is, however, the most systematic record of the national life. Phædrus, in his fables, gave lessons suggested by those times; but with his observations he had little imagination.

In the century following the Augustan Age the antagonisms between the government and the makers of literature gave rise to the satires of Juvenal and to the somber history of Tacitus. In this time we also find Quintilian, the great teacher of rhetoric, Seneca, the author of treatises on ethics, and Pliny the Elder, with his wonderful natural history. The doctrines of the Stoics suited the stern Romans: Seneca studied the Stoic philosophy; but his treatises are records of precepts rather than explanations of principles. To this age, Juvenal, the satirist, belongs. With these names the term classical, signifying pure literature, is lost. The Romans began again to write in Greek, and to this Greek influence was soon added that of foreign nations. Roman literature, as one of the great literatures of the world, ended.

The Latin Fathers of the Church followed the philosophy of Plato, adapting it to Christianity. Among these were Tertullian, St.

Ambrose, and Lactantius, best known by his work "Divine Institutes." St. Augustine (354–430 A. D.), left his record in his "City of God." St. Jerome made a Latin version of the Old Testament.

Legal writers were many, and from them came the "Digest," "Code," "Institutes," etc., the foundation of what is now known as the Roman Law.

SCANDINAVIAN LITERATURE

The scant allusions to Scandinavians found in classical literature refer to the people of Denmark and the southern part of Sweden. The languages of the different countries comprising Scandinavia are closely allied, for the old Scandinavian, or Icelandic, was the literary language of all these lands until about the year 1100.

The northern sea rovers, in the Viking days, had settled along the coasts of the Western Islands; when Iceland was discovered, in the middle of the Ninth Century, these people, headed by a widow of a king of Dublin, became settlers in the new land. From these colonies came a poetry which in beauty and power was not equaled in any Teutonic language for centuries. This poetry took the form of lays, dirges, battle songs, and songs of praise. In the mass are also found genealogical and mythological poems which seem to have been written in honor of one famous family. To a certain shrewdness, plain straightforwardness, and a stern way of looking at life was added a complex form and a regularity of rhythm, caught from the Latin and the Celtic poetry. Scarcely a name among the authors of this poetry is known; the exact dates of the writings cannot be found; but these poems were the result of the spirit of the old Vikings who led lives of wild adventure, in war and storm, coming into contact with the cultivated imagination of the more civilized races. The Saga, or prose epic, was also a form of literary expression in those early days.

It has been said that in Iceland the art of poetry took the place of music and that a mocking or a laudatory verse was common writing. The first generation of Icelandic poets has been likened to the troubadours of other lands; nearly all were of Celtic ancestry; they attached themselves to the kings and earls of neighboring lands, shared their adventures, and made verse in which they praised their victories and recorded their deaths. The Saga was the outgrowth of this verse and is the story of some hero. In its purest form it belongs to the days of the Eleventh Century when the descendants of heroes recited the exploits of their ancestors and of the great kings of Denmark and Norway. The later Sagas show Irish influence. When these had been transmitted orally through two or three generations they were written down and this became the form followed by all scholars. In the Thirteenth Century the Saga was lost in plain biography. A work known as the "Sagas of the Norwegian Kings" gives a connected series of biographies of the kings of Norway to the middle of the Twelfth Century. This was composed by the Icelandic historian Snorri Sturluson(1179–1241),the greatest author known in old Scandinavian literature. During this century the Norwegian kings employed Icelanders in translating the French romances of Charlemagne and of Arthur which made the "Romantic Sagas."

Two remarkable collections in this old literature are known under the title of "Edda," the translation of the word, or title, being "great-grandmother." The "Elder" or poetic "Edda" was collected in Iceland. The poems belong to the Eighth or Ninth Centuries, and treat of the earliest Scandinavian legends. From the "Eddas" comes our knowledge of Scandinavian mythology and ancient religious faith. In the one known as the "Prose or Younger Edda" is a strange sort of history of the gods or mythical kings. This was probably written during the last half of the Twelfth Century, and completed by Snorri Sturluson in the year 1222.

"Annals" are the sole material for the early history of Iceland and these end with the year 1430. Of many theological works the one most noted was "John's Book," written late in the Seventeenth Century, plain in style and much read. Proverbs and folk-tales were plentiful, and have come down to the present day.

Among earlier languages we find no Swedish, and no literature of Sweden existed before the Thirteenth Century. The oldest form in which it is found as a written language is in a series of manuscripts known as the "Common Laws." Another code, "On Conduct of Kings," a handbook of morals and politics, was collected. Both of these belong to the Thirteenth Century. The name of St. Bridget, or Birgitta, an interesting character in history, is found in connection with religious works, the most important being a collection known as "Revelations," a record of her visions and meditations to which her father-confessor added a version of the first five books of Moses. The translation of the Bible was continued by the monk Budde, who died in 1484.

The earliest specimens of Swedish poetry are the folk-songs of uncertain date. The first book printed in the Swedish language appeared in the year 1495. Neither the Renaissance nor the Reformation much influenced literature in Scandinavia. The Carmelite monks, the two brothers Petri, studied theology under Luther and went back to Sweden to teach the new faith. They wrote psalms and plays; Olaus Petri found time to add an historical "Chronicle."

The last half of the Sixteenth Century was a blank save for the literature connected with the University of Upsala, which had been founded in the year 1477; but under the reign of Charles IX. (1604–1611) literature gained life with the general prosperity of the country. Buræus, the royal librarian, studied all known sciences and made a jumble of his own convictions, recording them in several unreadable volumes. Through his patient study, however, he roused interest in a knowledge of Scandinavian language and mythology. The Swedish drama began during these years, the greatest dramatist being Messenius (1579–1636), whose lyrics have something of the charm of the old ballads. His first historical comedy was "Disa," and his first tragedy "Signill." He planned to write the history of his land in fifty plays, but

he finished only six. He later plotted against the government, was sentenced to prison for life, and wrote much while in prison, including a history of Sweden written in Latin. Contemporaneous with Messenius was Stjernhjelm, who has borne the title of "Father of Swedish Poetry." He traveled over Europe, was made a noble by Gustavus Adolphus, and later attached to the court in Stockholm as a sort of poet-laureate. His writings had much influence on the language itself, molding it into smoothness. He left works on philology and wrote out the letter "A" in the first Swedish dictionary. His work shows German influence, and his greatest poem, "Hercules," is an allegory written in musical verse with Oriental phrasing and imagery. He was followed by poets who wrote after French models, but the majority took Stjernhjelm himself as guide and lost all independence.

Gustavus Adolphus (1594–1632) wrote polished prose and his "Speeches" hold an important place in the literature of the Seventeenth Century. In the next age was Rudbeck (1630–1702), a genius in learning, who became famous through all Europe for his discoveries in physiology before he was twenty-five. He also did much toward the practical improvement of the University of Upsala, where he spent most of his life. The object of his great work, "Atland," written in Swedish and Latin, was to prove that the fabled Atlantis had been found in the Swedish nation. It has been said of these volumes that they make "a monstrous hoard or cairn of rough-hewn antiquarian learning, now often praised, sometimes quoted from, and never read."

The Eighteenth Century saw Swedish literature take solid shape. The influence of France and England crowded out German and Italian tastes, and in Dalin, a leader of his time, the effect is plain. His "Swedish Argus" was modeled on Addison's "Spectator," and his "Thoughts About Critics" on the writings of Pope; his epic, "Swedish Freedom," and his comedy, "The Envious Man," show admiration of the French. His songs and shorter poems are specimens of skilled workmanship. The only poet who compared with Dalin at this time was Charlotta Nordenflycht, whose lyrics, collected in 1743 under the title, "The Sorrowing Turtledove," became very popular. She settled in Stockholm, presided over a literary salon, and was called "The Swedish Sappho."

Among other poets are Bellman, a writer of odes, Franzén, who left some noted lyrics, and Wallin, archbishop of Upsala, publisher of the national hymn book.

In the year 1786 the Swedish Academy was formed after the manner of the French Academy, but with eighteen members, instead of forty. In 1811 the younger men of Stockholm founded the Gothic Society, intended for improvement in literary work by means of the study of Scandinavian antiquity. Two great lights in this new school were Tegnér, the famous verse writer, and Geijer, more noted for his prose. Stagnelius has been compared with Shelley and his mysterious death in 1823 gave a romantic interest to his name. Runeberg (1804–1877) divides honors with Tegnér, and King Oscar II. (1829–1907) was a genuine poet. Fredrika Bremer, also a writer of verse, is better known through her stories which have been translated into many languages.

As a historian of Swedish literature, Wieselgren is much quoted. Anders Fryxell (1795–1881) wrote the great history of the country which appeared in parts, taking nearly sixty years in the construction, and Schlyter, born 1795, was the legal historian. Rydberg, belonging a generation later, was author of historical tales. The general revival of letters, coming at the end of the great wars of the world, was slow in Sweden.

SWEDISH LITERATURE

Time	Author	Prose	Poetry and Drama
		Common Laws	
		On conduct of Kings	
1302?–1373	St. Bridget,	Her "revelations"	
1484	Johannes Budde,	Translation of Bible	
1497–1552	Olaus Petri,	Chronicle of Swedish History	Mystery Play.
1499–1573	Laurentius Petri,		Psalms.
1579–1636	Johannes Messenius,	History of Sweden	Poems, Lyrics.
1594–1632	Gustavus Adolphus,	Speeches	
1598–1672	Georg Stjernhjelm,	Philology	Hercules, Masques.
1630–1702	Olof Rudbeck,	Atland, Physiology	
1688–1772	Emanuel Swedenborg,	Philosophy	
1707–1780	Johan Ihre,	Dictionary (Swedish)	
1708–1763	Olof Dalin,	History of Sweden	Swedish Freedom, Poems, Dramas.
1714–1763	Jakob Henrik Mörk,	Novels	
1718–1763	Charlotta Nordenflycht,		Lyrics.
1740–1795	Karl M. Bellman,		Odes.
1754–1817	Anna Maria Lenngren,		Household Poems.
1759–1808	Thomas Thorild,	Criticisms	
1772–1847	Frans Franzén,		Lyrics.
1779–1839	Johan Olof Wallin,		National Hymns.
1782–1846	Esaias Tegnér,		Poems (most noted).
1783–1847	Erik Gustaf Geijer,	History, Philology	
1793–1823	Erik Johan Stagnelius,		Dramas, Lyrics, Sonnets.
1793–1866	Karl J. L. Almqvist,	Novels (Thorn Rose, etc.)	
1795–1881	Anders Fryxell,	History	
1800–1877	Per Wieselgren,	History of Swedish Literature	
1801–1865	Fredrika Bremer,	Novels	
1804–1877	Johan Ludvig Runeberg,		Poems.
1829–1895	Viktor Rydberg,	Historical Novels	
1849–1912	August Strindberg,	The Swedish People	Dramas.
1858–	Selma Lagerlöf,	Novels, Tales	
1859–	Verner von Heidenstam,	Novels, Essays	Poems.

DANISH LITERATURE

Time	Author	Prose	Poetry and Drama
		Younger Edda	Elder Edda.
	Neils of Soro.		History of Denmark (rhyme).
	Mikkel of St. Albans.		Sacred Poems.
1480–1554	Christian Pedersen.	Tales, Translation of Bible.	
1542–1616	A. S. Vedel.	Saxon Grammar.	
	Alfred Hoitfeld.	Chronicles of Denmark.	
1607	Hieronymus Ranch.		Tragedies (Biblical).
1545–1623	Peder Clausen.	Description of Norway.	
1546–1601	Tycho Brahe.	Astronomy.	
1587–1637	Anders Arrebo.		World's First Week.
1616–1678	Erik Pontoppidan.	Danish Grammar.	
1634–1703	Thomas Kingo.		Psalms and Hymns.
1684–1754	Ludvig Holberg.	History of the World.	
1694–1764	Hans Adolph Brorson.		Hymns.
1728–1798	Peter Frederik Suhm.	History.	
1736–1806	Johan Clemens Tode.	Medicine.	
1742–1785	Johan Herman Wessel.		Poems.
1743–1781	Johannes Ewald.		King Christian, Lyrics, Tragedies.
1744–1812	Werner Abrahamson.	Criticisms.	
1751–1833	Neils Treschow.	Philosophy.	
1760–1830	Knud Lyne Rahbek.	Novels, Essays.	Dramas, Songs.
1764–1826	Jens I. Baggesen.		Poems (humorous).
1764–1827	O. C. Olufsen.	Geography, Political Economy.	
1769–1826	Adolph Schack-Staffeldt.		Lyrics.
1773–1856	Countess Gyllembourg.	Novels.	
1775–1854	Bishop Mynster.	Theology.	
1777–1817	Peter Thun Fœrson.		Translation of Shakespere.
1779–1850	A. G. Oehlenschläger.	Romances	Hakon, Jarl, Aladdin.
1783–1872	Nikolai F. S. Grundtvig.	Theology, Politics.	Poems.
1783–1857	Christian Molbech.	Dictionary.	
1787–1832	Rasmus C. Rask.	Grammars.	
1789–1852	Joachim F. Schouw.	Geography of Plants.	
1789–1862	Bernhard S. Ingemann.	Novels (Popular).	
1791–1860	Johan Ludwig Heiberg.		Lyrics, Dramas
1791–1862	Neils M. Petersen.	History, etc.	
1798–1870	Henrik Hertz.		Lyrics, Satire, Dramas.
1805–1875	Hans Christian Andersen.	Fairy Tales, Only a Player, etc.	
1809–1876	Frederik P. Müller.		Dramas, Poems.
1813–1842	Salomon Dreier.	Zoölogy.	
1840–	T. F. Troels-Lund.	History, Biography.	
1842–	Georg Brandes.	Main Currents, Criticism.	
1857–	Henrik Pontoppidan.	Novels.	Plays.

By the oldest authorities the early Scandinavian language is referred to as the "Danish tongue," and what has been noted as the most precious legacy of the middle ages, historical and poetical, is a collection of some 500 poems known as the Danish ballads. The language in which these poems were preserved is that of the sixteenth and seventeenth centuries, but they are supposed to have been composed between the years 1300 and 1500. The university of Copenhagen was founded in 1479 and the printing press set up in the city in 1490.

Referring back to the earliest days, the "Eddas" are counted on lists of Danish literature, and the story of Iceland is part of the history of Denmark. The years between 1530 and 1680 have been named as the fourth period in the development of the Danish language; here real Danish literature begins and it was the Reformation that first gave to it the living spirit. In this connection was Christian Pedersen, who worked up into their present form some half mythical stories, including that of Ogier, the Dane, and made a translation of the Bible; this work was carried on later by Vedel.

The first original dramatist was Ranch, who wrote some biblical tragedies; Peder Clausen, a Norwegian by birth, left the noted "Description of Norway," and Alfred Hoitfeld made a beginning in historical writing by his "Chronicles of Denmark," printed in ten volumes between the years 1595 and 1604. Anders Arrebo, writer of psalms and hymns, has been called the founder of Danish poetry. Other hymns were written by Kingo, a Scotchman by descent, who applied Scotch vigor to his work; his "Winter Psalter" is considered a copy of fine lyrical writing. Another writer, Brorson, published a psalm-book in 1740, in which he added the best of Kingo's to his own. With these names we reach the end of the seventeenth century.

Holberg, born in 1684, and Oehlenschläger, who dates nearly a century later, were the authors who had the strongest personal influence on Danish writings. Attention was first called to Holberg by the marked style in his "History of the World," and he was soon made professor in the university of Copenhagen. He wrote comedies in prose and verse which still have freshness in matter as well as in style. Oehlenschläger created a new form in writing and roused in the people a sense of their nationality through his treatment of Scandinavian mythology. Between these authors are many noted names—Wessel and Ewald, both men of genius, and the German poet and dramatist, Klopstock, who settled in Stockholm, and had great German influence on Danish letters.

Early in the nineteenth century, the modern fabulist, Hans Christian Andersen, who seems to belong to the world, was born in Denmark. In the year 1835 appeared his first collection of "Fairy Tales" and from that time almost every year until his death, in 1875, he published one or more of these unique stories. He traveled much about Europe and in a series of memoirs

he recorded his interesting impressions. During this century Neils Petersen translated many of the sagas; Molbech edited the first good Danish dictionary; Schouw, an eminent botanist, Dreier and Japetus, well-known zoölogists, wrote on these sciences; Kierkegaard left philosophical works, and Nikolai de Saint Aubain published some charming romances. Georg Brandes, belonging to the last half of the century, stands conspicuous in his country as an advocate of liberal culture and speculation.

Norwegian and Danish literatures are connected in much the same way as the literatures of England and America; there was the same desire of a new nation to express local emotions and condition, though using the old language. The founding of the university in Christiania in the year 1811 and the separation of Norway from Denmark in 1814 led to intellectual as well as political independence. If all Norse writers were taken from Danish literature, the close connection between the two would be more plainly marked, for many of the noted names belong to Norway.

The first book printed in Norway was an almanac brought out in 1643 by a wandering printer who carried types from Copenhagen. The earliest purely Norwegian writer who could claim originality was the wife of the pastor Hardenbech (1634-1716), who wrote several volumes of religious poetry, morbidly devotional, which became very popular. A few real Norwegians were distinguished in science: Gunnerus, the botanist; Schöning, the historian; and Ström, the zoölogist. But these authors also wrote in Latin and Danish. In the year 1772 the Norwegian poets were so strong in Copenhagen that they formed a Norwegian society; there is no notice of anyone counted among Danish authors who was born in Norway since the year 1800. The first independent form taken in Norwegian literature seems to be what was called the poetry of the seventeenth of May, the date on which Norway proclaimed her king.

The acknowledged creator of this new literature was the poet Wergeland (1808-1845), who urged the worth of individual liberty and national independence, but he was imaginative and lacking in knowledge, and his writings were coldly received by critics; a volume of his patriotic poems, however, attracted readers and resulted in making him a power in politics. A more wholesome influence was that of Welhaven (1807-1873), whose first publications were directed against Wergeland, and raised a controversy that became the topic of the day. Welhaven preached conservatism in a collection of satirical sonnets called "The Dawn of Norway;" his advice was soon appreciated and drew attention to a wider field. He did good work both as poet and critic. Contemporary with these poets, but taking no part in the feud, was Andreas Munch. Two of his historical dramas became quite popular. Another poet, Landstad, was employed by the government to prepare a national hymn-book which was published in the year 1861.

The collection of old Norse folk-tales made by Asbjörnsen and Bishop Moe is prominent in Norwegian literature. They began by writing down the stories of the peasants, and publishing at first in form for children's reading. The entire collection was gathered, during many years, from minstrels, boatmen, and wanderers of all sorts, and thus they preserved the ancient and historical legends.

Old Norwegian laws, Runic inscriptions and documents dealing with the mediæval history of the country have also been studied by other writers, who have published the results in different forms.

Ibsen and Björnson were the most prominent writers in their generation, confining their work almost entirely to the drama and the novel. The name of Björnson was made famous by his "Synnove Solbakken," which appeared in 1857, and "Arne" following in the next year. These are romantic and yet realistic stories of life among mountain peasants written in singularly attractive style. He wrote other novels and several dramas, among them a little comedy, "The Newly Married Couple," which gained immediate success, the drama, "Sigurd Slembe," also adding to his fame. Of Ibsen's dramas "Brand" and "Peer Gynt," studies of modern life, and "The Doll's House," "Ghosts," and others are well known. Norway has also historians, theologians, and scientific men, who made their mark in the literary world of the nineteenth century.

GERMAN LITERATURE

Time	Author	Representative Works	
		Prose	Poetry
	Ulfilas,	Gothic Bible.	
	Conrad,		Rolandslied.
	Wolfram von Eschenbach,		Parsifal.
	Unknown,		Nibelungenlied.
	Unknown,		Gudrun.
1170–1235	Hartmann von Aue,		Der arme Heinrich.
1483–1546	Martin Luther,	German Bible.	
1488–1523	Ulrich von Hutten,		Satirical Verse.
1494–1576	Hans Sachs,		Poems.
1575–1624	Jacob Boehme,	Mysticism.	
1607–1676	Paul Gerhardt,		Poems, Hymns.
1609–1640	Paul Fleming,		Poems.
1655–1728	Christian Thomasius,	First German Periodical (Ed.).	
1708–1777	Albrecht Haller,	Scientific.	
1715–1769	Christian Gellert,	Fables (moral),	Poems.
1717–1768	Johann Winckelmann,	History of Ancient Art.	
1720–1797	Hieronymus K. F. Baron von Münchhausen,	Fiction.	

GERMAN LITERATURE

Time	Author	Representative Works	
		Prose	Poetry and Drama
1724–1803	F. G. Klopstock,		Dramas, Messiah, etc.
1724–1804	Immanuel Kant,	Philosophy, Critique of Pure Reason.	
1729–1812	C. G. Heyne,	Criticisms, Archæology.	
1729–1781	G. E. Lessing,	Laokoon, etc.	Minna von Barnhelm, etc.
1733–1813	Ch. M. Wieland,	Agathon	Oberon.
1744–1803	Johann G. von Herder,	Philosophy	Voices of the People.
1747–1794	G. A. Bürger,		Lenore, etc.
1749–1832	Johann Wolfgang Goethe,	Wilhelm Meister Elective Affinities, etc.	Faust, Tasso, Lyrics, etc.
1751–1826	Johann Voss,	Criticisms	Translation of Iliad, etc., Idyl Luise.
1759–1805	Friedrich von Schiller,	History of the Thirty Years' War	The Robbers, William Tell, Wallenstein.
1761–1819	August von Kotzebue,		Comedies.
1762–1814	Johann Gottlieb Fichte,	Philosophy.	
1763–1825	Jean Paul Richter,	Hesperus, Titan, etc.	Poems.
1767–1835	Wilhelm von Humboldt,	Criticisms	
1768–1834	F. D. Schleiermacher,	Philosophy	
1769–1860	Ernst M. Arndt,	History, Science	Patriotic Songs, etc.
1769–1859	Alexander von Humboldt,	Science, Kosmos, etc., Travels.	
1770–1831	Georg W. F. Hegel,	Philosophy, Leben Jesu.	
1772–1829	Friedrich von Schlegel,	History of Literature, Lucinde.	
1776–1831	Barthold Niebuhr,	History of Rome, etc.	
1776–1861	F. C. Schlosser,	Universal History	
1777–1843	Karl de la Motte Fouqué,	Undine, etc.	
1779–1859	Karl Ritter,	Geography (noted).	
1781–1830	Johann R. Wyss (Swiss),	Swiss Family Robinson.	
1781–1838	Adelbert von Chamisso,	Peter Schlemihl	Poems.
1785–1863	Jakob Grimm,	German Mythology, etc.	
1786–1859	Wilhelm Grimm,	Household Tales (with J.Grimm).	
1786–1862	A. J. Kerner,		Lyrics.
1787–1862	Ludwig Uhland,		Ballads.
1788–1860	Arthur Schopenhauer,	Philosophy.	
1789–1850	Johann Neander,	History of the Church.	
1791–1813	Karl Theodor Körner,		Lyre and Sword, etc.
1799–1856	Heinrich Heine,	Sketches	Poems.
1799–1890	Johann J. Döllinger,	Theology, History.	
1802–1884	Johann P. Lange,	Commentaries, Theology.	
1805–1871	G. G. Gervinus,	Criticisms, Shakespere, etc.	
1806–1884	Heinrich Laube,	Novels	Dramas.
1812–1882	Berthold Auerbach,	On the Heights, etc.	
1814–1873	Luise Mühlbach,	Historical Fiction.	
1814–1896	Ernst Curtius,	History of Greece, etc.	
1814–1908	Eduard Zeller,	Philosophy, History.	
1816–1895	Gustav Freytag,	Novels	Poems, Dramas.
1817–1881	Rudolf H. Lotze,	Metaphysik, Logik.	
1817–1903	Theodor Mommsen,	History.	
1817–1895	Karl Vogt,	Science	
1819–1857	Albrecht Schwegler,	History (Rome, etc.).	
1822–1890	Heinrich Schliemann,	Archæology.	
1830–1914	Paul Heyse,	Novels.	Poems.
1837–1898	George M. Ebers,	Orientalism, Novels.	
1842–1906	Eduard von Hartmann,	Philosophy.	
1844–1900	Friedrich W. Nietzsche,	Die fröhliche Wissenschaft, etc.	
1848–1904	Karl E. Franzos,	Novels, Travels.	
1849–	F. von Bernhardi,	Germany and the Next War, etc.	
1857–	Hermann Sudermann,	Dame Care, Novels	Magda, Dramas.
1862–	Gerhart Hauptmann,	Novels	Before Dawn, Dramas, Poems.

At the beginning of the First Century the Germans had ancient poems relating to their gods and the forefathers of their race. It is also believed that the stories, "Reynard, the Fox," and "Isengrin, the Wolf," may be traced back to those remote times, and were brought by the Teutons from Asia.

When these tribes began to accept Christianity, the Church considered the native German traditions as heathenish monstrosities, and tried to suppress them. Charles the Great was the first to check this movement by putting together the beginnings of a German grammar and by issuing orders for the collection and preservation of old German poetry. The only remnants of this poetry left to us are the Anglo-Saxon "Beowulf," with a fragment of the old high German "Hildebrandslied," and the Icelandic "Edda."

During the reign of Charles the Great and his son, Louis the Pious, learning was zealously cultivated by the monks of Germany; schools were established among them, but the chief subject of their study was scholastic philosophy. One of the monks, who died in the year 1022, wrote original philosophical books and translated works from Italy. As the clergy became the chief support of the government and connected with the daily life of the people, a different class of writings arose. Scenes of actual life were pictured, and the fiction, although it came from the cells of monks and the cloister schoolrooms, was thoroughly realistic. An example is a work known as the first novel of Modern European literature, the "Rolandslied," written by an unknown monk about the year 1130. In the form of a story of love and adventure is given a vivid picture of German life of that day.

There are well-written Latin histories belonging to the Eleventh Century, but the best thought of that age was expressed in architecture rather than in writing.

About the year 1200, the order of knights took the place of the clergy, leading in literature. It was in poetry that Germany gained her highest distinction, and her most important poets at this time were of the knightly class. The crusades had much influence and led to the poetical romances of the twelfth and thirteenth centuries. Among the poets the names of Wolfram von Eschenbach and Gottfried of Strassburg stand first, with Walther von der Vogelweide perhaps the most popular of them all.

A few poets of this age of chivalry took up the legends of their own land, and the most important of them was he who collected and put into shape the ancient ballads which make up the Nibelungenlied. Gudrun is another epic which puts into form a collection of legends. Latin was the speech of scholars and poetry the passion of writers, leaving small chance for the growth of prose. But two great collections of local laws had influence in gaining respect of the Germans for their own language; this was the first serious attempt to secure for German prose a place in literature.

About the middle of the thirteenth century preaching became an agency of great power. The new preaching orders of the Franciscans and the Dominicans were given special privilege to speak on any day and in any place; thus they came in touch with the people and grew wider in thought. Most popular among these preachers was Brother Berthold, an orator and writer of high rank. The next early writer of religious prose, Eckhart, became the founder of the mystic school. The most important writers of the fourteenth and fifteenth centuries are the monks of this school, whose works form the link between the great age of the crusades and the greater age of the Reformation. The well-known "Imitation of Christ," by Thomas à Kempis (died 1471), belongs to this class.

With the sixteenth century begins the modern history and modern literature of Germany. Luther (1483-1546) and the Reformers belonged to the people, and in literature, not less than in religion, Luther was the commanding spirit of his age. His greatest work was his translation of the Bible, simple and strong, and in a language that the nation could understand. Germans instantly felt its charm. Up to this date each author had written in a dialect with which he was familiar. Luther's Bible, for the first time, gave to the nation a literary language and a common speech. The hymns of Luther are noted for vigor of style and high devotional feeling. Melanchthon, Ulrich von Hutten, and Zwingle, with other leaders of the movement, were distinguished scholars. Arnd and Jacob Boehme, theologians, Hans Sachs, the leading poet, Paracelsus and Cornelius Agrippa, mystic philosophers, belong to this century, with Albrecht Dürer, scholar and painter, and Gesner, the naturalist.

Soon after the close of the sixteenth century Germany was desolated by the Thirty years' war (1618-1648). This desolation caused a whole generation to grow up in ignorance, and the religious lyric seemed the only class of literature fitted to the conditions. Hymns took the place of the old ballads. Paul Gerhardt (1606-1675) was the greatest hymn writer with many worthy associates both among the Protestants and the Jesuits. Prose writers of the seventeenth century were generally either artificial or coarse. Among numberless romances, one, Simplicissimus, by Grimmelhausen, has qualities bordering on genius. In form of fiction it is a story of the Thirty years' war.

Under the rule of Frederick the Great, beginning in the year 1740, literature shared in general prosperity. Prose writers on theology and philosophy grew more liberal, and the poets, Klopstock and Lessing, changed the tone of German writing. The influence of Kant (1724-1804) brought a host of philosophical writers and critics with new thoughts. Kant's new ideas embodied in his work, "Critique of Pure Reason," and the doctrines he there taught, or explained, have since been known as the Critical Philosophy. Lessing and Herder were philosophers as well as poets, and Lessing's book, "Education of the Human Race," enlarged the field of historic inquiry in Germany. Herder had a fine enthusiasm for human happiness which lights up both his prose and poetry. Fichte (1762-1814) carried the new doctrines to extremes, teaching that the life of the mind was the only real life; while Schelling, writing a few years later, in his "Philosophy of Identity," modifies this by supposing an intuition and making it superior to reason. The most profound philosophical study may be found in Hazel's "Absolute Thought." This habit of studying into the mysteries of being made the noted German philosophy that has affected literature in all countries.

Herder roused and directed the young genius of Goethe (1749-1832), thus helping to give to Germany the writer who holds place equal to Shakespere in England, and Dante in Italy: Goethe belongs to the world rather than to one country. Late in the eighteenth century Goethe, Schiller, Herder, and Wieland settled at Weimar, making it the center of intellectual life. Goethe's drama "Götz von Berlichingen," had given him place as poet, and his sentimental tale, "The Sorrows of Werther," made him known throughout Europe. During his friendship with Schiller they wrote many ballads and lyrics, but his longer poem, "Hermann and Dorothea," was more successful. "Tasso" and "Faust" are best known among his dramas, and "Wilhelm Meister" as his philosophical prose work. Schiller's tragedy, "The Robbers," was received with enthusiasm, but its revolutionary ardor brought criticism. Among his poems, "Maid of Orleans," "William Tell," and the "Song of the Bell" are the best known. His "Wallenstein" is the greatest drama in the German language. Goethe's narratives of travel, his autobiography, and his scientific works are also much read. The principal prose works of Schiller are "History of the Netherlands" and "History of the Thirty Years' War." In this period belong, also, Voss, author of the poem "Louise," and Bürger, who wrote the well-known "Lenore" and "The Wild Huntsman." Uhland, whose first volume of poems was published in 1815, was one of the best writers of lyrics, and his epic of "Ludwig der Baier" ranks high.

Among other poets are Arndt, author of the national song, "German Fatherland," Rückert, an Oriental scholar, and Heinrich Heine, whose collection of lyrics, "Buch Der Lieder," is known throughout the world of letters.

First among the well-known scientists of Germany stands Humboldt, whose "Kosmos" presents in popular form the results of years of scientific work. Liebig in chemistry, Virchow in biology, Helmholtz in study of sight and sound, and Haeckel with his Darwinian investigations have made their subjects intelligible and interesting to the ordinary reader.

In the list of German historians are the names of Ranke, Niebuhr, and Dahlmann; Häusser, who wrote the elaborate "History of Germany"; Schlosser, author of a universal history; Neander, whose "Life of Christ" holds place with his "History of the Church"; and Mommsen, whose works enrich all literature. Historical fiction closely follows history, for the novel holds an important place in Germany. Tieck, as a writer of romance, first attracted attention by "Bluebeard" and "Puss in Boots." In later novels, he dealt with modern life, and, associated with Schlegel, a literary critic, he finished a German translation of Shakespere, which shows mastery of verse, form, and language. E. T. A. Hoffmann, another novelist, wrote grotesque, ghostly tales; the strange genius of Jean Paul Richter shone out in his prose idyll, "The Years of Wild Oats," and "Selections from the Devil's Papers." "Hesperus," "Titan," and "Flower, Fruit, and Thorn Pieces" are his best, and show striking effects with simplest subjects. Fouqué is noted as author of the little master-piece "Undine"; in later days, Freytag, Auerbach, and Paul Heyse claim attention. Modern Germany is rich in all departments of literature.

FRENCH LITERATURE

Time	Author	Representative Works	
		Prose	Poetry and Drama
		. . . . .	Chanson de Roland.
1079–1142	Pierre Abélard, ...	Epistles, Philosophy.	
	Lorris and Meung, . . .	. . . . .	Roman de la Rose.
1160–1213	Villehardouin, ...	Conquest of Constantinople. . .	
1224–1317	Jean Sire de Joinville, .	Chronicles.	
1337–1410	Jean Froissart, ...	Chronicles.	
1431–1484	François Villon, . . .	. . . . .	Ballads.
1445–1509	Philippe de Comines, . .	Memoirs.	
1483–1553	François Rabelais, . . .	Philosophy, Satire.	
1509–1564	John Calvin, ...	Institutes of Religion, etc. . . .	
1524–1585	Pierre de Ronsard, . .	. . . . .	Sonnets, Odes, etc.
1533–1592	Michel E. de Montaigne,	Essays.	
1555–1628	François de Malherbe, .	. . . . .	Poems.
1596–1650	René Descartes, . . .	Philosophy.	
1606–1684	Pierre Corneille, . . .	. . . . .	The Cid, Tragedy, Comedy.
1610–1660	Paul Scarron, ...	. . . . .	Comic Plays, etc.
1613–1680	François de la Rochefoucauld, ...	Maxims, Memoirs.	
1621–1695	Jean de la Fontaine, .	. . . . .	Fables, Contes, etc.
1622–1673	Jean B. Poquelin (Molière), ...	. . . . .	Comedies, Le Misanthrope, etc.
1623–1662	Blaise Pascal, ...	Philosophy, Mathematics. . . .	
1626–1696	Mme. de Sévigné, . . .	Letters.	
1627–1704	Jacques Bossuet, . . .	Sermons, etc.	
1632–1704	Louis Bourdaloue, . .	Sermons (Jesuit).	
1639–1699	Jean Racine, ...	. . . . .	Tragedy.
1651–1715	François de la Fénelon,	Télémaque, etc.	
1657–1757	Bernard Fontenelle, . .	Dialogues of the Dead, etc., . .	Tragedies.
1661–1741	Charles Rollin, ...	Histories.	
1663–1742	Jean Massillon, ...	Orations (religious).	
1668–1747	Alain René le Sage, . .	Gil Blas, etc., ...	Translations.
1694–1778	François M. Arouet (Voltaire), ...	Critical Essays, ...	Poems, Dramas.
1707–1788	Comte de Buffon, . . .	Natural History.	
1712–1778	Jean Jacques Rousseau,	Fiction, Philosophy, Ethics. . .	
1713–1784	Denis Diderot, ...	Fiction, Encyclopédie (Ed.) . .	
1715–1780	Étienne de Condillac, .	Metaphysics.	
1719–1776	Élie Fréron, ...	Biography.	
1723–1799	Jean François Marmontel,	Memoirs, etc.	
1732–1799	A. de Beaumarchais, . .	. . . . .	Comedies.
1737–1814	Henri B. de Saint-Pierre,	Paul and Virginia.	
1746–1830	Mme. de Genlis, . . .	Novels.	
1749–1791	Comte Mirabeau, . . .	Orations, etc.	
1757–1820	Constantin de Volney, .	Ruins, or Meditations, etc., . .	
1760–1836	Claude Rouget de Lisle,	. . . . .	Marseillaise.
1766–1817	Mme. de Staël, ...	Delphine, Corinne, etc.	
1767–1839	Joseph François Michaud,	History of the Crusades, etc. . .	
1768–1848	François Chateaubriand, ...	René, Genius of Christianity, . Atala, etc.	
1769–1832	Baron de Cuvier, . . .	Natural History.	
1772–1837	François Fourier, . . .	Socialism (Fourierism).	
1780–1857	Pierre de Béranger, . .	. . . . .	Lyrics.
1790–1869	Alphonse de Lamartine,	History of the Girondists, etc., .	Poems.
1792–1867	Victor Cousin, ...	Philosophy, Metaphysics. . . .	
1795–1856	Jacques N. Thierry, . . .	History of France, etc.	
1797–1877	Louis Adolphe Thiers, .	French Revolution, History of the Empire, etc.	
1798–1857	Auguste Comte, ...	Positive Philosophy.	

FRENCH LITERATURE—Continued

Time	Author	Representative Works	
		Prose	Poetry and Drama
1798–1865	Joseph Xavier Boniface,	Picciola, etc.	
1798–1874	Jules Michelet,	History of France.	
1799–1850	Honoré de Balzac,	Novels, Comedies of Human Life.	
1799–1863	Alfred Victor Vigny,	Cinq Mars, etc.	
1802–1885	Victor Hugo,	Novels (Les Miserables, etc).	Lyrics.
1802–1870	Alexandre Dumas,	Novels (Three Musketeers, etc.)	
1803–1870	Prosper Mérimée,	Novels.	
1804–1857	Eugène Sue,	Wandering Jew, etc.	
1804–1869	C. A. Sainte-Beuve,	Criticisms, etc.	
1804–1876	George Sand,	Lelia, Consuelo, etc.	
1805–1859	Alexis de Tocqueville,	Political Science.	
1810–1857	Alfred de Musset,	Novels.	Poems, Dramas.
1810–1883	Louis Henri Martin,	History of France.	
1811–1872	Theophile Gautier,	Criticisms, Novels.	Poems.
1811–1883	Jules Sandeau,	Novels.	
1821–1880	Gustave Flaubert,	Novels.	
1821–1890	Octave Feuillet,	Novels.	Dramas.
1822–1899	Emile Erckmann,	Novels (with Chatrian).	
1823–1892	J. Ernest Renan,	Life of Jesus, etc.	
1824–1895	Alexandre Dumas (fils),	Novels, Biography.	
1826–1890	Alexandre Chatrian,	Novels (with Erckmann).	
1827–1912	Père Hyacinth,	Orations (Pulpit).	
1828–1893	H. A. Taine,	History of Literature, etc.	
1828–1885	Edmond F. About,	Novels.	
1828–1905	Jules Verne,	20,000 Leagues Under the Sea.	
1831–1908	Victorien Sardou,		Dramas.
1835–1903	Paul du Chaillu,	Travels, Natural History.	
1840–1897	Alphonse Daudet,	Novels.	
1840–1902	Emile Zola,	Novels.	
1842–1908	François Coppée,		Poems, Dramas.
1844–	Anatole France,	Novels, Essays, Humor.	Poems, Dramas.
1849–1906	Ferdinand Brunetière,	Essays, Criticism.	
1850–	Louis Viaud (Pierre Loti),	Novels, Travels.	
1850–1893	Guy de Maupassant,	Novels, Short Stories.	
1858–	Eugène Brieux,	Essays.	Dramas.
1859–	Henri Bergson,	Creative Evolution.	
1859–	Henri Lavedan,	Novels.	The Prince d'Aurec, Dramas.
1866–	Romain Rolland,	Jean-Christophe, Essays.	Plays.
1868–1918	Edmond Rostand,		Cyrano de Bergerac, Dramas.

The most ancient documents in the French language date from the ninth to the eleventh centuries, but real French literature began much later. There are a hundred of the "Chansons de Gestes," including the famous "Chanson de Roland." Their origin is not known, but they date earlier than the songs of the troubadours. Following these were the epics, "Arthurian Romances," written from the legends of the Round Table, and later the "Romances of Antiquities," also narrative forms, treating of the conquests of Alexander and other classical stories. A fourth form in prose and verse included "Shorter Stories" which cannot be classified. These four divisions make the literature of early France.

In earliest days poetry was used for all literary purposes and French verse is the first in modern European speech. "The Romance of the Rose," a long poem which is really prose, except for the measure of the verse, is an ancient work that gained the attention of the people of France, and no book was ever more popular. This was written by two authors: Guillaume de Lorris, who lived in the first half of the thirteenth century, commenced it; it was continued and finished by Jean de Meung, who died in the year 1320. It is both a love poem and a satire put in the form of allegory. In it are found the characteristics of the later middle age, its mysticism, its chivalry, its science, and its shrewd criticism.

In the tenth or the eleventh century Indian tales were translated into Latin, probably by the monks, and these, with legends from Arabia, brought by the Moors into Spain, became common to all literatures. In France, during the twelfth and thirteenth centuries, tales written in verse, the collection known as "Fabliaux," appeared, and these simple, gay stories are treasures of invention from which other nations have often borrowed. Among these "Reynard the Fox," a poem, or a series of poems, is well known and for two centuries, with its companion, "Isengrin, the Wolf," it formed the basis for an endless variety of songs, poems, and satires, moral applications and generalizings. One of the most interesting of the Fabliaux, "Aucassin and Nicolette," gave the subject for the well-known opera.

It has been claimed that Latin comedy was never lost and was handed on chiefly through the convents; but when the public had forgotten ancient drama an impulse was given to this form of writing in France by the pilgrims returning from the crusades. At the end of the fourteenth century dramas were produced, called the "Fraternity of the Passion" and comprehending the whole history of Christ. In these dramas dialogues of the devils were made to fill in the comic parts. Other dramatic writings followed, based on parables and historical parts of the Bible, or they became pure allegory mingled with farce; there is hardly an abstraction, a virtue, or a vice which did not find place in these compositions. Early in the fifteenth century a comic company brought political and personal satire into their plays and dialogues, made from the fables, and thus began the romantic drama of Europe.

In all literatures of which we have record, prose is later than verse. The document containing copy of the oaths exchanged between Charles the Bold and Louis the German, in the year 842, is probably the oldest French prose. In the Tenth Century some charters were written in French, and in the eleventh the Laws of William the Conqueror. The Twelfth Century shows translation of the Bible and the Romances. History is the first subject in prose writing and is generally recorded in the form of chronicles. Each of these centuries has, in France, one gifted chronicler to describe it. Ville-Hardouin writes of the Twelfth Century, Joinville of the Thirteenth, and Froissart of the Fourteenth. "Froissart's Chronicles," though simple story, forms a history of the different states of Europe from the year 1322 to the end of the century. Phillipe de Comines (1445–1509) has been noted as the last of the quartette of great French mediæval historians. He was an annalist, like Froissart, but he was, also, a political philosopher and an unscrupulous diplomat. He dwells on character rather than on scenes or events in his memoirs.

Standing equal with the early histories in French are the short stories in comic form, and among these is the "Cent Nouvelles Nouvelles," which is the first work of literary prose in the language. The authorship of this collection of tales is not fixed, the themes are the old fables, but this remarkable work, with its simple and straightforward style, had great influence on later writers and was the first of a long series of literary works, romances in miniature, in which French writers excel all others.

The discovery of a new continent, the downfall of Constantinople, and the end of feudalism were the great events of the Fifteenth Century that changed the literary world of France. The invention, or use, of printing made readers in place of listeners. French enthusiasm turned to the study and imitation of the ancient Pagan world and it was this revival of antique learning that took the name "Renaissance." By the beginning of the Fifteenth Century the effect of the Renaissance was nearly lost in Italy, in Germany it had only opened the way to a national literature with little influence in itself, but in France this century was filled with great writers in every line.

Francis Rabelais (1483–1553) holds high rank in the world, as well as in his own country, as a learned philosopher and scholar. The work which brought to him popular fame, however, was the "Lives of Gargantua and Pantagruel," a tale of the adventures of two gigantic heroes, father and son, with a drunken, fighting, swaggering monk and a witty minstrel who played practical jokes. With all this it is a commentary on the thoughts, feelings, and acts of the nation put into attractive literary form, a mirror of the Sixteenth Century. It was the book of the day and went into many editions.

By the side of Rabelais stands John Calvin (1509–1564), and his work. "Institutes of the Christian Religion," has been called the textbook of the Reformation. This book, written first in Latin, then translated by the author, had great influence on future thought and was the beginning of an argumentative prose. Calvin was severe both in logic and doctrine, and turning from this severity, while not believing in the Church policy of that day, many drifted into skepticism. The literature of this skepticism, or doubt, is best represented by the "Essays" of Montaigne (1533–1592). In these essays he undermined all the creeds of the day, but offered nothing in their places. Inquiry and protest had given way to placid contentment in the belief that there was not much to be known on these subjects and that it did not much matter.

The appearance of the "Cid," founded on the Spanish romance, changed the form of dramatic writing and brought fame to the author, Corneille (1606–1684). The dramas of Racine soon followed and Moliere wrote his comedies, in which he assailed the follies of society. The best of these are "Le Misanthrope" and "Tartuffe." To this time belongs the well-known La Fontaine, prince of fable writers, and Perrault, who wrote prose tales. Richelieu, who founded the French Academy in 1635, Colbert and Louis XIV. were patrons of all learning, and the French language, distinguished for its clearness and flexibility, became the language of all literary Europe. In this age Fenelon wrote his famous "Telemaque," which has served as an introduction to the study of French language and literature. Fenelon, with Bourdaloue, Bossuet, and Massillon, were brilliant examples of a pulpit oratory which has never been surpassed in any age or country.

Political and military disasters of the last years of the reign of Louis XIV. checked all literary development, and the beginning of the Eighteenth Century has been named as one of the dead seasons of French literature. Later, a kind of free-thinking optimism arose and showed itself most distinctly in the writings of Voltaire (1694–1778), whose genius gave light to his age. His universal faculty showed itself in both verse and prose, his plays and verse-tales were admirable, and his epistles and satires, the best among their kind, were sufficiently good to bring banishment to their author. After his long exile, spent in England and Germany, he returned to the writing of history and philosophy.

Jean Jacques Rousseau, born early in the Eighteenth Century, had, also, great influence in his literary world. He began with dissertations on music, adding comedies, tragedies, and prose romance. His greatest work, the "Confessions," was finished not many years before his death (1778). In style, or manner of expression, his writings hold absolute fascination; he was a bold and independent thinker, but his sympathy with humanity saved him from the cynicism of Voltaire.

Le Sage, the first great novelist of this century, went to Spain for the subject of his "Gil Blas," and the Spanish inspiration and manner brought popularity. Marmontel, Louvet, and Bernardin de St. Pierre, author of "Paul and Virginia," were also noted novel writers. The brilliant, sparkling letters of Madame de Sevigne gave what has been considered the most complete record of court and social life. Montesquieu belongs to the first half of this century, and his "Spirit of Laws" has taken rank as a

standard work on jurisprudence. Beaumarchais wrote the well-known "Barber of Seville." Among the few lyric poets of the time Lebrun and Chénier stand worthy of mention. Rouget de Lisle, in the "Marseillaise," gave the finest lyric known in the language.

Chateaubriand filled many diplomatic places under the Bourbon rule, but was not free from exile. During his exile he published his first book (in 1797), the "Essay on Revolutions." He found the subject for his "Atala" while among the Indians in America. Madame de Staël spent the years of the French Revolution in England and Switzerland, and while there wrote essays, dramas, and political pamphlets. She is best known by her later romance, "Corinne," and by her "De l'Allemagne." The last brought German literature to the notice of French readers. Béranger is named the first song-writer of France and his songs and ballads are known in all homes. These three writers seem to stand between the days of Voltaire and Rousseau and the beginning of modern French literature.

Volumes of ballads and romance in verse, written by Victor Hugo and Alphonse de Lamartine, belong to later poetry, and with these authors Alfred de Musset claims place. Among dramatists are Gozlan, Delavigne, and Sardou, with others who bear equally distinguished names.

French historical and political writers influence the world, and of these the best known may be Lamartine, Thiers, Michelet, Guizot, and De Tocqueville. Cousin and Comte have offered new views in philosophy; the name Renan is known to all interested in theological questions. Many of these writers hold, also, a place in oratory which has risen to a high position in France.

The influence of later French romance shows in the modern literature of all countries. Balzac (died, 1850) has been considered one of its pioneers. Eugène Sue delights in subjects that call for exciting adventure; his books, "Wandering Jew" and "Mysteries of Paris," have been much read. Alexander Dumas, well known by his "Monte Cristo" and almost numberless semi-historical romances, such as "Three Musketeers," was master in his line; Victor Hugo would stand as a brilliant writer on the merits of his wonderful "Les Miserables" alone. This and various other of his romances have been translated and widely read in different languages. Madame Dudevant, known by her readers as George Sand, was a strikingly original writer of fiction; her "Consuelo," "Indiana," and "André" show a harmony of treatment and simplicity of language that mark them as masterpieces.

ENGLISH LITERATURE

Time	Author	Representative Works	
		Prose	Poetry and Drama
	Unknown,		Traveller's Song. Beowulf.
	Cædmon,		Paraphrase of Scripture.
673– 735	Bede,	Ecclesiastical History,	Poems.
735– 804	Alcuin,	Letters, Biographies.	
750	Cynewulf,		Christ, Elene, Andreas, etc.
849– 901	Alfred the Great,	Translations.	
955–1020	Ælfric,	Homilies, Grammar.	
1095–1143	William of Malmesbury,	History of Kings of England.	
1100–1154	Geoffrey of Monmouth,	Legendary History of English Kings.	
1100–1175	Wace, Robert,		Romance of Rollo, Brut d'Angleterre.
Lived in 12th Century	Layamon, Ormin,		Chronicles of Britain. Ormulum (paraphrase).
1214–1294	Bacon, Roger,	Natural Science, Philosophy.	
1300–1372	Mandeville, Sir John,	Travels.	
1324–1384	Wycliffe, John,	Translation of Bible.	
1325–1408	Gower, John,		Ballads, Lover's Confession.
1330–1400	Langland, William,		Piers, the Plowman.
1340–1400	Chaucer, Geoffrey,		Canterbury Tales, Short Poems.
1422–1491	Caxton, William,	Game and Play of the Chesse, Translation of History of Troy.	
1430	Malory, Sir Thomas,	Morte d'Arthur.	
1465–1530	Dunbar, William,		Thistle and Rose, Golden Targe.
1478–1535	More, Sir Thomas,	Utopia.	
1484–1536	Tyndale, William,	Translation of Bible.	
1503–1542	Wyatt, Sir Thomas,		Sonnets and Lyrics.
1516–1587	Foxe, John,	Book of Martyrs.	
1536–1608	Sackville, Thomas,		Mirror for Magistrates.
1552–1599	Spenser, Edmund,		Faërie Queene, Shepherd's Calendar.
1552–1618	Raleigh, Sir Walter,	History of the World.	
1553–1600	Hooker, Richard,	Ecclesiastical Polity.	
1554–1586	Sidney, Sir Phillip,	Arcadia.	
1559–1634	Chapman, George,		Translation of Homer.
1561–1626	Bacon, Francis,	Essays, Novum Organum (phil.).	
1564–1593	Marlowe, Christopher,		Dramas.
1564–1616	Shakespere, William,		Dramas (37 plays), Sonnets.
1573–1637	Jonson, Ben,		The Alchemist, etc.
1577–1640	Burton, Robert,	Anatomy of Melancholy.	
1579–1625 1584–1616	Fletcher, John, Beaumont, Francis,		Dramas, Philaster, Maid's Tragedy, Woman Hater, etc.
1591–1674	Herrick, Robert,		Poems.
1593–1633	Herbert, George,		The Temple, etc.

ENGLISH LITERATURE—Continued

TIME	AUTHOR	REPRESENTATIVE WORKS	
		PROSE	POETRY AND DRAMA
1593–1683	Walton, Izaak,	The Compleat Angler	
1608–1661	Fuller, Thomas,	Church History of England, etc.	
1608–1674	Milton, John,	Areopagitica,	L'Allegro and Il Penseroso, Comus, Paradise Lost, Paradise Regained, etc.
1612–1680	Butler, Samuel,		Hudibras.
1613–1667	Taylor, Jeremy,	Holy Living, etc.	
1615–1691	Baxter, Richard,	Saint's Everlasting Rest.	
1628–1688	Bunyan, John,	Pilgrim's Progress, Holy War.	
1631–1700	Dryden, John,		Translation of Virgil, St. Cecilia's Day, etc.
1632–1704	Locke, John,	Essay Concerning Human Understanding, Thoughts on Education, etc.	
1633–1703	Pepys, Samuel,	Diary.	
1642–1727	Newton, Sir Isaac,	Principia, etc.	
1661–1731	Defoe, Daniel,	Robinson Crusoe.	
1667–1745	Swift, Jonathan,	Tale of a Tub, Gulliver's Travels.	
1672–1729	Steele, Sir Richard,	Essays, (established The Tatler).	
1672–1719	Addison, Joseph,	Essays in The Tatler, The Spectator.	
1683–1765	Young, Edward,		Night Thoughts.
1685–1753	Berkeley, Bishop,	Philosophy.	
1688–1744	Pope, Alexander,		Essay on man, etc.
1689–1761	Richardson, Samuel,	Clarissa Harlowe, Pamela, Sir Chas. Grandison.	
1692–1752	Butler, Bishop,	Natural and Revealed Religion.	
–1743	Carey, Henry,		Sally in our Alley, etc.
1700–1748	Thomson, James,		The Seasons, etc.
1707–1754	Fielding, Henry,	Tom Jones, Amelia, Jonathan Wild, etc.	
1709–1784	Johnson, Samuel,	Dictionary, Rasselas, Lives of the Poets,	Vanity of Human Wishes.
1711–1776	Hume, David,	History of England.	
1713–1768	Sterne, Laurence,	Tristram Shandy, Sentimental Journey.	
1716–1771	Gray, Thomas,		Elegy Written in a Country Churchyard, etc.
1721–1771	Smollett, T. George,	Humphrey Clinker, Roderick Random, etc.	
1721–1770	Akenside, Mark,		Pleasures of the Imagination.
1723–1790	Smith, Adam,	Wealth of Nations.	
1723–1780	Blackstone, Sir Wm.,	Commentaries on the Laws of England.	
1728–1774	Goldsmith, Oliver,	Vicar of Wakefield, Essays,	She Stoops to Conquer, Deserted Village, etc.
1729–1797	Burke, Edmund,	Essays, Orations.	
1731–1800	Cowper, William,		The Task, John Gilpin, etc.
1737–1794	Gibbon, Edward,	Decline and Fall of the Roman Empire.	
1740–1795	Boswell, James,	Life of Samuel Johnson.	
1743–1805	Paley, William,	Evidences of Christianity, Natural Theology.	
1745–1833	More, Hannah,	Coelebs in Search of a Wife,	Sacred Dramas.
1751–1816	Sheridan, Richard B.,	Speeches,	The Rivals, School for Scandal, Lyrics, etc.
1759–1796	Burns, Robert,		Cotter's Saturday Night, etc.
1767–1849	Edgeworth, Maria,	Popular Tales, etc.	
1770–1850	Wordsworth, William,		The Excursion, Poems.
1770–1835	Hogg, James,	Shepherd's Calendar,	Pastorals.
1771–1854	Montgomery, James,		Hymns, Poems.
1771–1832	Scott, Sir Walter,	Waverley Novels, etc.,	Lady of the Lake, etc
1771–1845	Smith, Sydney,	Sermons, Essays, etc.	
1772–1834	Coleridge, Samuel T.,	Essays, etc.,	Rime of Ancient Mariner, etc.
1774–1843	Southey, Robert,	Biogs. of Nelson, Wesley, etc.,	Poems.
1775–1834	Lamb, Charles,	Essays of Elia, etc.	
1775–1864	Landor, Walter Savage,	Imaginary Conversations, etc.,	Count Julian, Heroic Idyls, etc.
1775–1817	Austen, Jane,	Pride and Prejudice, Emma, etc.	
1776–1850	Porter, Jane,	Scottish Chiefs, Thaddeus of Warsaw,	
1777–1844	Campbell, Thomas,		Pleasures of Hope, Lyrics, etc.
1777–1859	Hallam, Henry,	Europe during Middle Ages, Introduction to Literature of Europe, Constitutional History of England.	
1778–1830	Hazlitt, William,	Table Talk, English Poets, etc.,	
1779–1852	Moore, Thomas,	Biographies,	Lalla Rookh, Irish Melodies, etc.
1784–1859	Hunt, Leigh,	Essays, Sketches, Memoirs,	Poems.
1785–1859	De Quincey, Thomas,	Confessions of an English Opium Eater, etc.	
1785–1854	Wilson, John,	Noctes Ambrosianæ, etc.,	Poems.
1788–1824	Lord Byron,		Poems.

ENGLISH LITERATURE—Continued

Time	Author	Representative Works	
		Prose	Poetry and Drama
1792–1822	Shelley, Percy Bysshe,		Queen Mab, etc.
1792–1848	Marryat, Frederick,	Mr. Midshipman Easy, etc.	
1793–1835	Hemans, Felicia,		Lyrics.
1794–1871	Grote, George,	History of Greece.	
1795–1842	Arnold, Thomas,	Roman History, Essays	
1795–1881	Carlyle, Thomas,	French Revolution, Cromwell.	
1795–1821	Keats, John,		Endymion, Hyperion, etc.
1797–1868	Lover, Samuel,	Handy Andy, Rory O'More	Songs, Ballads.
1798–1827	Pollock, Robert,		Course of Time.
1798–1845	Hood, Thomas,		Poems.
1800–1859	Macaulay, Thomas B.,	Essays, History of England,	Lays of Ancient Rome.
1801–1860	James, G. P. R.,	Novels (historical).	
1802–1856	Miller, Hugh,	Old Red Sandstone, etc.	
1802–1876	Martineau, Harriet,	Political Economy, etc.	
1803–1873	Lytton, Edward Bulwer,	Last Days of Pompeii, etc.	
1804–1881	Disraeli, Benjamin,	Lothair, Vivian Grey, etc.	
1806–1873	Mill, John Stuart,	Political Economy.	
1806–1872	Lever, Charles,	Tom Burke, Charles O'Malley.	
1806–1861	Browning, Eliz. Barrett,		Aurora Leigh, Poems.
1809–1882	Darwin, Charles,	Origin of Species, etc.	
1809–1892	Tennyson, Alfred,		In Memoriam, Idylls of the King.
1809–1890	Kinglake, Alex. Wm.,	Eothen.	
1811–1863	Thackeray, Wm. M.,	Vanity Fair, The Newcomes	
1812–1870	Dickens, Charles,	David Copperfield, Oliver Twist.	
1812–1889	Browning, Robert,		Dramatic Lyrics, Poems.
1814–1884	Reade, Charles,	The Cloister and the Hearth, etc.	Plays.
1815–1902	Rawlinson, George,	Five Great Monarchies.	
1815–1882	Trollope, Anthony,	Barchester Towers, etc.	
1816–1855	Brontë, Charlotte,	Jane Eyre, The Professor, etc.	
1818–1894	Froude, James Anthony,	History of England.	
1819–1875	Kingsley, Charles,	Hypatia, etc.	Poems.
1819–1900	Ruskin, John,	Modern Painters, etc.	
1819–1880	Eliot, George,	Silas Marner, etc.	Spanish Gypsy, Poems.
1820–1903	Spencer, Herbert,	First Principles, etc.	
1820–1893	Tyndall, John,	Scientific Papers.	
1820–1897	Ingelow, Jean,		Poems.
1822–1888	Arnold, Matthew,	Essays and Criticisms	Sohrab and Rustum, etc.
1823–1900	Müller, Max,	Science of Language, etc.	
1823–1892	Freeman, Edward A.,	Histories.	
1823–1896	Hughes, Thomas,	Tom Brown at Oxford, etc.	
1824–1889	Collins, Wilkie,	Woman in White, etc.	
1824–1905	Macdonald, George,	Sir Gibbie, Alec Forbes, etc.	
1825–1895	Huxley, Thomas Henry,	Man's Place in Nature.	
1825–1900	Blackmore, R. D.,	Lorna Doone, etc.	
1826–1887	Mulock, Dinah Maria,	John Halifax, Gentleman, etc.	Poems.
1828–1882	Rossetti, Dante Gabriel,		The Blessed Damozel, etc.
1830–1912	McCarthy, Justin,	History of Our Own Times	
1831–1891	Meredith, Owen,	Biography of Bulwer-Lytton	Lucile.
1832–1904	Arnold, Edwin,		Light of Asia, Poems.
1834–1896	Morris, William,	Essays on Art, etc.,	Poems, Earthly Paradise.
1837–1883	Green, John Richard,	History of the English People.	
1837–1909	Swinburne, A. C.,		Poems.
1838–1922	Bryce, James,	American Commonwealth, etc.	
1838–1901	Besant, Walter,	East London, etc., Novels.	
1838–	Morley, John,	English Men of Letters (Ed.)	
1839–1917	De Morgan, William F.,	Joseph Vance, Novels	
1840–	Hardy, Thomas,	Tess of the D'Urbervilles, etc.	
1841–1898	Black, William,	In Silk Attire, etc.	
1841–1901	Buchanan, Robert W.,	Alone in London	Poems.
1844–	Bridges, Robert,	Essays	Prometheus, Poems, Plays.
1850–1894	Stevenson, Robert Louis,	Essays, Novels	Child's Garden of Verses, etc.
1851–1920	Ward, Mrs. Humphry,	Robert Elsmere, etc.	
1853–	Caine, Hall,	The Christian, etc.	The Eternal City, etc.
1855–	Pinero, Arthur W.,		Iris, Dramas.
1856–	Shaw, George Bernard,	An Unsocial Socialist, etc.	Plays.
1860–	Barrie, James M.,	Auld Licht Idylls, etc.	Plays.
1860–	Tagore, Rabindranath,	Essays, Stories.	Gitanjali, Poems.
1862–	Parker, Gilbert,	The Right of Way, etc.	
1865–	Kipling, Rudyard,	Jungle Book, Tales, etc.	Barrack-Room Ballads.
1866–	Wells, Herbert George,	War of the Worlds, etc.	
1867–	Bennett, Arnold,	Clayhanger, Novels, Essays	Plays.
1867–	Galsworthy, John,	Novels, Stories, Essays	Poems, Dramas.
1868–1915	Phillips, Stephen,		Poems, Dramas.
1875–	Masefield, John,	Novels, Stories	Poems, Plays.
1880–	Noyes, Alfred,	Essays and Criticisms	The Loom of Years, Poems.

When our forefathers went to England in the fifth and sixth centuries, they had no written language but carried with them the love of song. Bards and gleemen accompanied them and they sang the tales of the Northland. The oldest of the old, old songs which have been preserved for us is "The Far-traveler." "Beowulf" is their epic song. When the heathen invaders, after two long centuries of struggle, had become possessed of the land they, in their turn, came under the softening influence of Christianity. Monasteries were built, and in these safe shelters literature had a beginning. The glory of this beginning belongs to Northumbria in the seventh century. For nearly two centuries this was the seat of learning.

The poem "Beowulf" has Teutonic power but it is not native to English soil. Cædmon's "Paraphrase of the Scriptures" is the first great native British poem. With Christianity a new spirit entered into English poetry.

Old English prose also began in the monastery of Northumbria with Bede. His learning was famed over the whole of Europe. It is said that forty-five works written in Latin prove his industry. His last work was a "Translation of the Gospel of St. John."

During the Ninth Century the greater part of England was wasted by the Danes, and literature almost perished. The long battle against these invaders was lost in Northumbria, but was gained for a time by Alfred the Great in Wessex. Learning changed its seat from the north to the south, and as Whitby was the cradle of English poetry in the North, so Winchester became the seat of English prose in the South. Alfred gathered scholars about him and translated the Latin works of Bede, the Chronicles of Orosius, and added an account of the voyages of Othere and Wulfstan. Many other works were added to the English language in Alfred's time. "At Winchester the king took the English tongue and made it the tongue in which history, philosophy, law, and religion spoke to the English people." He also established schools and wrote text-books for these schools, so that every free-born youth might attend to his books till he "could read English writing perfectly."

The next great name in literature after King Alfred is Alfric. He wrote numerous ecclesiastical works and was the first translator of any considerable portion of the Bible. His translation of the Pentateuch, Joshua, Judges, and part of Job, form the best model we possess of the language at the beginning of the Eleventh Century. A long line of Saxon Chronicles continues an unbroken history of the language and literature from Alfred to the death of Stephen in 1154.

The overthrow of Saxon rule in England by William the Conqueror is an event of vast importance in literature as well as in history. For a hundred years after the conquest literature was inert. A foreign king and an aristocracy of a foreign people ruled the land; an alien language and literature had been introduced. A few generations of such domination and then there were signs of returning life. The language could not die while the bulk of the people remained Saxon, but it underwent a great change. England was still to remain the land of the Saxon tongue, but it was to be a language greatly modified by its contact with the Latin of the clergy and the French of the Norman conquerors. For three hundred years after the conquest these languages contended with the Saxon English for supremacy in England. In Edward the Third's reign it had been fully demonstrated that the English were to be the ruling people and parliament enacted important laws making the English the required language in the law courts and in schools.

But the English of King Edward's time was quite unlike the rude Saxon speech of "Beowulf" and "Cædmon," or the later Chronicles. Pure Anglo-Saxon was an energetic language, able to express with vigor the practical common thoughts of every day; but it lacked delicacy and flexibility of expression. The Saxon mind, too, was lacking in quickness of thought and in the creative play of the imagination. It has been well said that in this blending of languages the Saxon furnished the dough and the Norman French the yeast. Out of the combined product we get a strength and flexibility of language that belonged to neither.

The literature of England during the Twelfth Century was almost entirely Latin and French, but we go back to it as a rich source of our story telling. Geoffrey of Monmouth wrote twelve short books in Latin which he called "History of the Kings of Briton." It is a clever putting together of Welsh legends, a source to which we go for some of our King Arthur stories. These stories were afterward translated into French and later brought back into English verse by Laymon in his "Brut d'Engleterre." Later many other stories were added and other cycles of romance were introduced into English literature. There were four of these great romantic cycles: The first, already mentioned, are the King Arthur legends, to which later stories were added, as "Quest of the Graal," "Morte d'Arthur," "Romance of Sir Tristam," etc.; the second, Charlemagne and his twelve peers, containing the stories of "Roland," "Charlemagne," "Otwell," "Siege of Milan," etc.; the third, the "Life of Alexander," romantic wonder stories from the east; fourth, "Siege of Troy," derived from Latin sources. Popular ballads, such as "Robin Hood" and "Robert of Gloucester's Rhyming Chronicles," and lyrics sung among the people, kept the love of poetry alive until the greater burst of song in the Fourteenth Century.

From the Conquest there is very little prose writing in England for the next three centuries, but in the Fourteenth Century there were two prose writers of preëminence, Sir John Mandeville and John Wyclif. Mandeville wrote a most popular book of stories which he styled "The Voiage and Travaile of Sir John Mandeville." This book established the love of story telling. John Wyclif, next to Chaucer, is the greatest literary name of the century. He is the first to give a complete copy of the Scriptures to the English people in their own tongue. The influence of such a translation read by all the people is to raise a dialect to the dignity of a national language. Besides this great work, Wyclif is the author of a large number of sermons and polemical writings. Contemporaneous with these religious tracts which Wyclif distributed so freely was "Piers Plowman" by William Langland. It was a satire in verse upon the evils which had gained a foothold within the Church.

The one name which stands first in the literature of the Fourteenth Century is that of Geoffrey Chaucer. Some critics claim that before him there was no permanent English verse. He is therefore often called the "Father of English poetry." Chaucer's earlier poems are "Romaunt of the Rose," "The Boke of the Duchess," and "Parlement of Briddes." His greatest work is "Canterbury Tales," the plan of which was

suggested by Boccacio's "Decameron." The "Prologue" to the "Canterbury Tales" is one of the finest pieces of description in our language. Before Chaucer's time English was a language of dialects. He wrote in the Midland dialect and made that the language of the nation. Chaucer died in fourteen hundred, just three hundred and thirty-four years after the Norman Conquest. To sum up the most important literary events of these years we note the development of the English language, the translation of the Bible, and the creation in English of one of the world's great masterpieces, the "Canterbury Tales."

There is to be noted a comparative lack of literary progress in the century following Chaucer. There were changing social conditions and intellectual and political unrest. The struggle between the houses of York and Lancaster absorbed men's minds. These are the reasons assigned for the dearth of literature. To them must be added the lack of a literary genius. There was no one great enough to succeed Chaucer.

The greatest prose work of the Fifteenth Century was Malory's "Morte d'Arthur." This is a great prose epic of the deeds of King Arthur and his Knights of the Round Table. Fortunately for the Fifteenth Century it also established the printing press. In 1477, Caxton printed the first book in England. A second complete translation of the Scriptures was made by William Tyndale, early in the Sixteenth Century, and the work of the reformation was furthered. In 1535, Miles Coverdale published the first printed copy of the whole Bible. Certain Italian influences were at work that were changing the form of our poetry. Wyatt and Surrey introduced the Italian sonnet and made use of the Italian blank verse.

The Elizabethan age is marked by features so distinct and so superior that it has been called the "Golden Age in English literature." Two great forces combined to make this the greatest intellectual age, the Renaissance and the Reformation. Men's minds were stimulated and a language completely formed was ready at their hand. There was freedom for thought to express itself and there was variety in life and freshness of experience for the mind to feed upon. The printing press and travel and social intercourse all stimulated intellectual activity. Life was worth enjoying and there was leisure for letters. It was an age of imagination and enthusiasm, and in the midst of it all geniuses were born. What age ever produced two such poets as Shakespere and Spenser, unless it might be the "Golden Age" of Greek splendor?

The non-dramatic poets of the Elizabethan age are Thomas Sackville, Sir Philip Sidney, and Sir Walter Raleigh, who also wrote a most ambitious work in prose, the "History of the World."

Spenser, the only great non-dramatic poet of Elizabeth's reign, has been called the successor of Chaucer. His first great work is the "Shepard's Calendar," divided into twelve eclogues, one for each month. His greatest work, the "Faëry Queen," was also divided into twelve books, but only six books and the fragment of the seventh were ever written. Spenser has been justly called "the poet's poet." He may be wearisome to the general reader who undertakes to study him to-day, but the purity of his imagination, the beauty of his verse, and the music of his rhythm, have furnished models for our later poets.

The dawn of the drama in England is found in "Miracle Plays and Mysteries" which were introduced soon after the Norman Conquest. Following these were the later dramatic recitals, the "Moralities," "Interludes," "Masks," and "Pageants."

As early as the Eleventh Century miracle plays were performed in the monasteries by monks and choristers. Later, companies of professional players traveled about the country and enacted their plays in the yards of inns. In 1575, the Puritans expelled the players from the city and theaters were built outside the limits. Shakespere was born in 1564, and twenty-two or three years later made his way to London where he was attracted by one of these forbidden theaters. Already the English drama had taken form in the great plays of Christopher Marlowe, "Tamburlaine the Great," "Faustus," "The Jew of Malta." The greatest of these plays is "Faustus." Marlowe established the use of blank verse in the English drama, a form of verse which Shakespere adopted.

That Shakespere quickly rose to prominence in his art we may judge from the fact that in 1592, when he had been in London not more than five or six years, he was already writing plays and was the object of a jealous attack by one of his rival playwriters. At the age of forty-nine he was able to leave London with a competence and return to his home at Stratford-on-Avon. This also argues for his success as a dramatist. In 1598, Francis Mere writes of the growing fame of Shakespere and prints the titles of a number of his plays. Ben Jonson, the second dramatist of the age, was his intimate friend. These are facts worth knowing about the personality of the man who is the greatest figure in English literature, perhaps in all literature.

Taking the number from the globe edition of Shakespere's dramas, he wrote thirty-four different plays, counting as one play those which are written in two parts. His dramas may be divided into three classes: comedies, histories, tragedies. The following are a few of the best in each class. Everyone well-read should be familiar with them:

Comedies: "Midsummer Night's Dream," "As You Like It," "Merchant of Venice," "Winter's Tale," "Twelfth Night," "The Tempest."

Histories: "Richard III.," "Henry IV.," "Henry V.," "Henry VIII.," "King John," "Julius Cæsar."

Tragedies: "Hamlet," "Macbeth," "Lear," "Othello," "Romeo and Juliet."

In addition to his dramas, Shakespere also wrote two long narrative poems, and one hundred and fifty-four sonnets. It is said that the measure of Shakespere's greatness is his universality, "not of an age, but for all time." Other

writers have equaled Shakespere in some one quality, but he excels them all in the combination of great qualities.

Ben Jonson wrote three great dramas which will repay reading, "Volpone," "The Alchemist," and "The Silent Woman," and to these three some would add a fourth, "Every Man in His Humor." Jonson failed in his delineation of character. He was a critic of men's follies and he gave a distorted and incomplete picture of life. In his delineation of women, where Shakespere was strongest, Jonson utterly failed.

The decay of the drama began while Shakespere was yet alive. The drama in his hands had been the painting of the whole of human nature, the painting of characters as they were built up by their natural bent, and by the play of circumstance upon them. The drama, in Ben Jonson's hands, was the painting of that particular human nature which he saw in his own age; and his characters are not men and women as they are, but as they may become when they are mastered by a special bias of the mind. In Beaumont and Fletcher, the women are overdrawn and the men are base in thought. Shakespere's men and women are of the types of the noblest characters his age produced.

One of the most remarkable men who adorned the court of Queen Elizabeth was Sir Francis Bacon, the greatest prose writer of the age. As courtier and scholar he adorned both this and the succeeding reign of James I. His political success and his political disgrace are familiar stories in history. His enduring work is in literature. He was both poet and philosopher. His great work in philosophy is magnificent in scope, as may be inferred from the title "Instauratio Magna," or "The Great Institution of True Philosophy." It is a great work designed to be written in six parts, but never finished. The second part, "Novum Organum," the "new instrument," is described as "the science of a better and more perfect use of reason in the investigation of things, and of the true aids of the understanding." It sets forth the methods to be adopted in searching after truth, points out sources of error, and suggests the means of avoiding errors in the future. His entire philosophy is built upon the idea of inductive investigation. Bacon had so little respect for the English language that he wrote his great philosophy in Latin. His "New Atlantis," like Sir Thomas More's "Utopia," pictures in romance an ideal commonwealth, some features of which have been realized in our own republic. The most important among his English works is his volume of essays, clear, concise, practical in observation, of profound wisdom. Sir Walter Raleigh contributed to prose his ambitious "History of the World," and to poetry a few beautiful lyrics.

With the death of Bacon, in 1626, we pass from the glory of the Elizabethan age into the Puritan age. There are some characteristics which sharply separate this age from the preceding. Intense patriotism, peace within the realm, general prosperity, and much worldliness characterized the reign of Elizabeth. The Stuart reign was characterized by controversy in religion and politics, open rupture between king and parliament protracted into the Great Civil War. Puritan standards became triumphant during this period. Literature, which always reflects life, presented the somber tone of the age and was in large part religious. The "King James Version of the Bible" was printed in 1611. It is impossible to overestimate the influence of this translation upon the lives of the people and the language of every day. The study of the Bible became so universal that it colored the imagination and the speech of the common people. Even those who were irreligious in their lives spoke in the language of the Scriptures.

The great literature of the Elizabethan age was in poetry. With one exception, John Milton, the great literature of the Puritan age was in prose. But the prose writers of the Puritan age were not without imagination and delicacy of humor. Bunyan's "Pilgrim's Progress," by some thought to be the crowning work of the imagination, is a product of this age, and during the same period Thomas Fuller brightens his "History of the Worthies of England" by irresistible touches of humor, and Isaak Walton adds delight in nature and rustic pastime in his "Complete Angler"; but for the most part the world was looked upon seriously.

John Milton has been awarded the second place among the great names in English literature. He was born eight years before the death of Shakespere. It may be that Shakespere saw the boy Milton. One likes to think so. Milton's childhood was very happy. His parents trusted him because they realized that he was a boy of high ideals. He had every advantage of a liberal education and of long quiet years of study at his father's home in Horton. This was well for the years of struggle that followed. Milton's literary career may be divided into three periods: that of his youth, his manhood, and his old age. It has been called "a drama in three acts." The first may be stated in years as extending from 1623 to 1640; the second, from 1640 to 1660; and the third, from 1660 to 1674.

The first period, that of his youth, was spent at school and among his family at Horton. During this period he wrote the "Hymn on the Morning of Christ's Nativity," the "Masque of Comus," "Lycidas," "L'Allegro," "Il Penseroso," and a number of his sonnets. Some critics consider "Comus" Milton's finest poem. It is perfect in lyric qualities and as an apotheosis to virtue is lofty in conception. "If virtue feeble were, Heaven itself would stoop to her."

"Lycidas," an elegy on Milton's class-mate, Edward King, ranks as one of the great elegies in our language. "L'Allegro" and "Il Penseroso" are companion poems; one describes the delights of social life, the other the deep enjoyment of the scholar in seclusion. These poems will always remain favorites for their beautiful imagery and their truthful study of the emotions. Milton's sonnets have for their theme such subjects as religion, patriotism, domestic affection; whereas the older poets, Shakespere, Spenser, Sidney, Raleigh, and their imitators, preferred to write sonnets on love. The most remarkable of Milton's minor poems is the "Hymn on the Nativity," written when the

author was only twenty-one, yet nowhere does he excel it in beauty of verse nor in dignity of language.

The second period of Milton's life may be called the time of "storm and stress." Thick darkness was upon him. For twenty years, from 1640 to 1660, his life was filled with religious and political controversy. He was forced to turn from poetry to prose, and lamenting it he says: "I have the use, as I may account it, but of my left hand." His prose works are voluminous. They are upon varied subjects but upon one theme, liberty. He struck heavy blows for liberty in church and state and in all the relations of life. He pled for more freedom of speech and for more liberal ideas in education. His greatest prose work is the "Areopagitica: A Speech for the Liberty of the Press." In 1652, at the age of forty-three, Milton became totally blind; but even in his blindness he served the Commonwealth as Secretary for Foreign Tongues under Oliver Cromwell, the Lord Protector, and continued to write his burning pamphlets against the royalists who were struggling to regain power.

The third period is that which succeeds the Restoration, in 1660. With the return of Charles II., the leaders of the Commonwealth had to flee for their lives. Milton's life was at first endangered and he was concealed by friends. Later, he preferred retirement where he might have leisure to do the great work of his life. Here he wrote "Paradise Lost," "Paradise Regained," and "Samson Agonistes."

The beauty of "Paradise Lost" has been compared to that of a stately temple, the style the loftiest in the whole range of English poetry. Its scenes are laid in Heaven and Earth and Hell, its characters are God and the holy angels, Satan and his legions, and the newly created race of man. It is almost inconceivable how any human mind could have attempted it. "Paradise Regained" and "Samson Agonistes" show a decline of power, though standing alone they would be great. In "Paradise Regained" Christ is tempted in the wilderness and resists Satan. In "Samson Agonistes" we have a choral drama modeled upon the form of the Greek. In the greatness of his work, Milton can be compared only to the great classic writers, Homer and Virgil.

The second great name in the Puritan age is John Bunyan, the prince of prose writers for his time and the prince of story tellers for all times. "Pilgrim's Progress" has been pronounced the greatest of all allegories. Bunyan's preëminence is undoubted. It is not an exaggeration to repeat this estimate of him: "What Shakespere is to English dramatists, what Milton is to English epic poets, that John Bunyan is to writers of English allegory." From extreme poverty and ignorance and years of imprisonment in Bedford jail, he rose to the respected position of pastor over a large church. His biographer says of him, "The fame of his sufferings, his genius as a writer, his power as a speaker, gave him unbounded influence among the Baptists; while the beauty of his character and the catholic liberality of his views secured him universal esteem. His ministrations extended over the whole region between Bedford and London."

Historically, one of the greatest prose works of the century is Samuel Pepys' "Diary." It is a gossipy record of nine years and gives a life-like picture of the gay and profligate portion of society which fell under his observation. The reaction from Puritanism led to an extraordinary state of society among the aristocracy, which we would not like to picture to-day. The great historical work of the age is the "History of the Great Rebellion," by Edward Hyde, the first Earl of Clarendon. A curious coincidence marks the birth and death of Clarendon. Born in 1608 and died in 1674, his life is exactly coextensive with John Milton, his great opponent in the great civil strife. Clarendon has been called the "Cavalier-prince of historic portrait-painters," and Milton the "Puritan-prince of epic poets."

Chaucer, Shakespere, Spenser, Milton, royal names in English literature, are succeeded by a meager school of artificial poets. Dryden and Pope are the representatives of this school. Dryden died in 1700, just three hundred years after the death of Chaucer. The sweetness and gay and kindly humor and tender sympathies which so illumine Chaucer's poetry, is gone from Dryden's didactic verse. His greatest satire is "Absalom and Achitophel," a bitter arraignment of those who opposed the succession of James, the brother of Charles II., to the English throne. "MacFlecknoe," another satire, is directed against a Whig poet. "All for Love," a drama, is in this same cold, critical vein. He wrote long criticisms in argumentative verse which are utterly lacking in the true spirit of poetry. His "Hind and the Panther" and "Religio Laici" are known to-day only as names. The greatness of poetry cannot be expressed by the critical spirit. Dryden's one really admirable poem, "Ode to St. Cecilia's Day or Alexander's Feast," will be remembered for its lyric qualities. His prose writings are numerous, and the English in which he wrote them has become a standard of good style to all later writers.

The English Revolution of 1688 secured peace for the realm and an opportunity for the development of arts and sciences. The investigations of Newton and the development of philosophy under Locke mark this period.

Alexander Pope is the literary successor of John Dryden, and the representative poet of his time. He was a precocious boy whose body was "one long disease." Before he was twelve years of age he had written an "Ode to Solitude," and reading was his passion. To understand Pope one must remember his deformity and the spirit of the time in which he lived. The first half of the Eighteenth Century is marked by a low standard of morals. Political unrest and political double dealing, coarse social life, dull, unimaginative, brutal, these are the common terms by which it is described. Drunkenness was common and morality laughed at. Out of such conditions Pope and Swift and Steele gathered the material for their satires. Addison alone of this distinguished group of writers kept his genial nature and wrote what was gentle

and mirthful with such grace that satire lost its severity.

The literary faults of this age are lack of moral earnestness and enthusiasm. Form was preferred to matter. The age was molded by classical rules. It delighted in studied regularities. Pope is the great exponent of the classic school. So deficient is he in warmth of feeling for man or nature, so fixed and formal are his lines, that it is often questioned whether Pope was entitled to the name of poet. But whether poet or not, Pope has enriched our language by his epigrammatic couplets which are familiar in our common speech. Pope and Dryden have done much for our English in raising the standard of good speech. Poems of satire the world will forget, but a good laugh is worth preserving. "Gulliver's Travels," by Jonathan Swift, are even more enjoyed to-day than when they were written, for the sharpness of their first intent is forgotten.

The first half of the Eighteenth Century is far more remarkable for its prose than for its poetry. A new and excellent field for essayists was found in the "Tatler," planned by Richard Steele. Periodical papers containing news had existed in England from the time of the Civil War, but this was the first periodical designed to have literary merit and to discuss questions of common, every-day interest, containing lively sketches, anecdotes, humorous discussions. It was succeeded by the "Spectator," which appeared every week-day morning in the shape of a single leaf from March 1, 1711, to December, 1712; after a suspension it reappeared three times a week in 1714, and extended to 635 numbers. The "Guardian" was begun in 1713, but ceased after the 176th number. Steele was the principal contributor to the "Tatler" and "Guardian," and Addison to the "Spectator," but papers were also furnished by Swift, Pope, Berkeley, and Hughes. The essays, especially those of Addison, were often models of grace and delicacy, and were highly influential in correcting and refining the tone of society.

Prose fiction is another development of the Eighteenth Century. Daniel Defoe (1661–1731) first gave to English fiction a simple, direct, matter-of-fact, and human interest, and the narrative of "Robinson Crusoe" has never been excelled. The "Tale of a Tub" and "Gulliver's Travels," by Swift, "The History of John Bull," by Arbuthnot, are satires in the form of fictitious narratives. The writings of Swift are admirable for their vigor and humor. Under his successors the novel became more complex and artistic, embraced greater varieties of character and diversities of treatment, and pictured the artificial refinements and distinctions of society. "Joseph Andrews," "Tom Jones," and "Amelia," by Fielding, and "Pamela," "Clarissa Harlowe," and "Sir Charles Grandison," by Richardson, were published near the middle of the century. "Peregrine Pickle," "Humphrey Clinker," and other novels by Smollett are distinguished for coarse, comic incidents and broad humor. "Tristram Shandy" and "Sentimental Journey," by Sterne, contain passages sparkling with wit and humor, also much sentimentality. The "Vicar of Wakefield," by Oliver Goldsmith, is without doubt the most delightful romantic novel of the century. It is not a book without grave faults, but it combines delicate humor with sweet human emotions. Goldsmith was a writer in every field of invention, but he will be longest remembered because of the Vicar and his family. His "Deserted Village" and his "Traveler" contain passages that cannot be forgotten. So also Gray's "Elegy Written in a Country Churchyard" and Collins' "Odes" and Cowper's hymns belong to immortal verse.

The Eighteenth Century, which gave us the modern essay and the novel, also produced writers of carefully elaborated and finished history: "History of England," by David Hume; "History of the Decline and Fall of the Roman Empire," by Gibbon; and Robertson's histories of Scotland, Germany, and America. There was also noted oratory, Burke, Fox, Pitt, and the philosophy of Berkeley, Paley, and Hume, and the great prose works of Adam Smith and William Blackstone.

In striking personality and in power to make others think, Dr. Samuel Johnson was, without doubt, the foremost man of literary London. He was the central figure around whom all the literary men and women gathered, the Nestor of his age. Dr. Johnson founded and carried on as sole editor two periodicals, the "Rambler" and the "Idler," in the style of the "Spectator" which Addison had made so popular. His most famous work was a "Dictionary of the English Language." His critical estimate of poetry cannot be highly valued and his criticisms are often stilted and overstrained in language. His best prose is his romance, "Rasselas, the Prince of Abyssinia." Johnson is better known because of his biographer, Boswell, than for what he wrote.

The close of the century, so remarkable for its development in prose, adds one great name to the poets already mentioned, Robert Burns, the Scottish prince of lyric verse. Love of nature, feeling for humanity, he has written for us as no other poet ever wrote. The poetic ideal of Gray and Collins and Cowper and Blake and Burns reacted against cold formalities in verse. The joys and sorrows of life they would put into poetry, and as it came from the heart they would have it touch the heart. Man and nature are the chosen themes, and man is always in the foreground with Burns. The songs of Burns minister to every common feeling of the human heart. That he has won his audience is proven by the fact that since the day of his death his audiences have continually grown larger. Those who read and those who do not read are familiar with these songs: "Scots wha hae wi' Wallace Bled," "Auld Lang Syne," "Comin' Through the Rye," "Ye Banks and Braes."

Poetry, at the close of the Eighteenth Century, was simpler than in the preceding generations. There were songs of joy and laughter and tender sympathies. Imagination was given free play and it touched with beauty the familiar scenes of every day.

The opening years of the Nineteenth Century ushered in a brilliant company of nature poets: Scott, Wordsworth, Coleridge, Southey, Byron, Shelley, Keats, together with Cowper and Burns, who died in the closing years of the last century,

belong practically to this group. There was to be noted a change of ideals. The reign of the epic and the drama was past. Classic models gave place to freer expression, more individuality, a deeper appreciation of the beauties of nature, and more value set upon the commonplace. Imagination and a larger sympathy found beauty in that which had been counted low and mean. This was illustrated in the poems of Burns and Cowper. Sir Walter Scott showed this tendency in his romances. His romance poems combine the refinements of modern poetry with the spirit and material of the neglected border minstrelsy. Wordsworth aimed to renew nature by bringing back poetry to truth and nature. His verse is often weak, but his best poems, as "Ode on Immortality" and many of his shorter poems, are exquisite in their simplicity of feeling and truthfulness of delineation. Coleridge's finest poems are "Cristabel" and "Ancient Mariner." They are unsurpassed in their strong, wild music and their splendid imagination. Southey contributed both to prose and verse and displayed extensive learning. Byron was remarkable for strength and passion. Keats and Shelley were instinct with love and intellectual sense of ideal beauty. "The Skylark" and "The Cloud," by Shelley, are perfect in their music and their imagery. Thomas Moore, sometimes called the "Irish melodist," besides his shorter poems, wrote "Lalla Rookh," a volume containing four Oriental stories told with rich imagery and diction. Thomas Campbell wrote "Pleasures of Hope." Humor and pathos are combined in the poems of Thomas Hood: "Song of the Shirt," "Bridge of Sighs," "The Last Man."

The prose of this first half of the century also takes high rank. Scott will always be remembered as the creator of the historical novel, Charles Lamb for his delicate humor and rare use of language. His "Essays of Elia" have been called the finest of their kind in literature. Macaulay's essays give us fine examples of English prose. De Quincey's opium dreams and his "English Mail Coach" are also brilliant specimens of English. Mill, Bentham, Malthus, are the chief contributors to philosophical prose.

In 1837, Queen Victoria ascended the throne. From this date until the present time may be called the Victorian age. This age is not remarkable for the development of any new type of literature but for the quantity and general excellence of literature in every department. Representative names of the Victorian age are Browning, Tennyson, Matthew Arnold, the Rossettis, in poetry; Thackeray, Dickens, George Eliot, Bulwer, in prose fiction; Carlyle, Macaulay, Ruskin, Matthew Arnold, Swinburne, Leslie Stephen, in essay writing; Spencer, Newman, Hamilton, Darwin, Tyndall, Huxley, Faraday, Mill, in philosophy and science; Milman, Grote, Froude, Freeman, Buckle, Green, and Leckey, in history.

Problems of life occupy the minds of the Victorian writers. It is an age of scientific thought and of practical reform. There is a struggle of the masses upward, a striving for better government, for higher moral ideals. Prose and poetry alike are imbued with an ethical purpose. Dickens desired to bring out what he called "the romantic aspect of familiar things," and he began with the study of "vicious poverty." Most of Dickens' novels were inspired by a firm purpose to accomplish some reform. His social creed has been formulated in these words: "Banish from earth some few monsters of selfishness, malignity, and hypocrisy, set to rights a few obvious imperfections in the machinery of society, inspire all men with a cheery benevolence, and everything will go well with this excellent world of ours." While Dickens with inimitable humor and rare optimism was presenting the cause of the submerged poor, Thackeray wrote of the follies of the upper classes of society, and George Eliot pictured the English middle class. These great novelists with their deep human sympathies pictured the interdependence of human beings, the relation that every man bears to his surroundings. Thus fiction has kept in close touch with the social ideas of the time, reflecting not only its mood, but also its important changes, showing thereby that it has life and does not exist as a mere literary form.

The vigor and idealism of the age has been splendidly expressed by Browning and Tennyson. Carlyle was the mouthpiece of the strongly-felt need of heroism. He was by far the greatest of the Englishmen of his time who taught the value of sincerity. Another author who had a great influence upon his contemporaries was John Ruskin. Each generation has its message to deliver. Carlyle and Ruskin in their criticisms, one on life, and one on art, caught the message of their time. They would have men be true and live up to the best that is in them. They spoke as the poets Tennyson and Browning spoke of the larger and truer meaning in life. They believed in growth through evolution and in the possibilities of the individual.

It is impossible in so short an article to select and discuss the individual writers of the Victorian age. They must be characterized, if at all, in groups. Such a book as this affords little space for library lists and selected works of the best authors both in English and American literature and the best known works in foreign literatures, so that the student who wishes to continue his studies or the general reader who wishes the delight of well-selected reading should consult a good outline of English literature. Such names as the following, which belong to every appreciative study of English literature, but an extended notice of which has necessarily been omitted here, will be found well worthy of the careful student of his mother tongue: in poetry—Elizabeth Barrett Browning, Edward Fitzgerald, Arthur Hugh Clough, Jean Ingelow, William Morris, Algernon Charles Swinburne, William Watson, Rudyard Kipling; fiction—Charles Lever, Elizabeth Gaskell, Charles Reade, Anthony Trollope, Charlotte Brontë, Charles Kingsley, Wilkie Collins, Richard D. Blackmore, Dinah Maria Craike, George Meredith, Thomas Hardy, William Black, Robert Louis Stevenson, Mrs. Humphrey Ward, Hall Caine, Rudyard Kipling, George Macdonald; essay and criticism—Leslie Stephens, Algernon Charles Swinburne, Walter Pater, John Addington Symonds.

AMERICAN LITERATURE

Time	Author	Representative Works	
		Prose	Poetry
1586–1647	Hooker, Thomas,	Sermons, Survey of Church, etc.	
1588–1649	Winthrop, John,	History of New England (1630–1649).	
1612–1672	Bradstreet, Anne,		Poems.
1663–1728	Mather, Cotton,	Magnalia (history).	
1703–1758	Edwards, Jonathan,	Freedom of the Will, Original Sin, etc.	
1706–1790	Franklin, Benjamin,	Poor Richard's Almanac, Autobiography, Essays, etc.	
1737–1791	Hopkinson, Francis,		Battle of the Kegs.
1743–1826	Jefferson, Thomas,	Notes on Virginia.	
1752–1832	Freneau, Philip,		Poems (humorous).
1754–1812	Barlow, Joel,		The Columbiad, etc.
1757–1804	Hamilton, Alexander,	State Papers.	
1758–1843	Webster, Noah,	Spelling Book, Dictionary.	
1766–1813	Wilson, Alexander,	Ornithology.	
1770–1842	Hopkinson, Joseph,		Hail Columbia.
1771–1810	Brown, Charles Brockden,	Wieland, Clara Howard, etc.	
1773–1811	Paine, Robert Treat,		Adams and Liberty, Poems.
1775–1863	Beecher, Lyman,	Sermons, Political Addresses.	
1779–1843	Allston, Washington,	Lectures on Art,	Poems.
1779–1845	Story, Joseph,	Commentaries on Cons. of U. S.	
1779–1860	Paulding, James Kirke,	Novels,	Poems.
1780–1842	Channing, William E.,	Essays, Addresses.	
1780–1843	Key, Francis Scott,		Star Spangled Banner, Poems.
1780–1851	Audubon, John James,	Birds of America, Quadrupeds of America.	
1782–1852	Webster, Daniel,	Orations, etc.	
1782–1858	Benton, Thomas Hart,	Thirty Years' View (U. S. Senate).	
1783–1859	Irving, Washington,	Knickerbocker's History of New York, Sketch Book, etc.	
1784–1865	Worcester, Joseph E.,	Dictionary of Eng. Language.	
1784–1868	Allen, William,	American Biographical and Historical Dictionary.	
1785–1866	Pierpont, John,	School Readers,	Lyrics.
1787–1879	Dana, Richard H.,	Lectures on Shakespere,	The Buccaneer.
1788–1866	Campbell, Alexander,	Religious Debates.	
1789–1841	Hillhouse, James A.,		Percy's Masque, Hadad.
1789–1867	Sedgwick, Catherine M.,	A New England Tale, etc.	
1789–1851	Cooper, James Fenimore,	The Spy, Leather Stocking Tales, etc.	
1789–1866	Sparks, Jared,	American Biographies.	
1790–1867	Halleck, Fitz-Greene,		Marco Bozzaris, Poems.
1791–1865	Sigourney, Lydia H.,		Poems.
1791–1871	Ticknor, George,	History of Spanish Literature.	
1791–1875	Sprague, Charles,		The Family Meeting, Poems.
1792–1852	Payne, John Howard,		Home, Sweet Home, etc.
1793–1860	Goodrich, Samuel G.,	Peter Parley Books, etc.	
1793–1868	Hall, James,	History of the Indian Tribes.	
1793–1879	Carey, Henry Chas.,	Principles of Political Economy.	
1793–1868	Thompson, Daniel P.,	Green Mountain Boys, Historical Novels.	
1794–1878	Bryant, William Cullen,		Poems (Thanatopsis), etc.
1795–1820	Drake, Joseph Rodman,		The Culprit Fay.
1795–1870	Kennedy, John P.,	Swallow Barn, Rob of the Bowl, Horse-Shoe Robinson, etc., Memoirs.	
1795–1856	Percival, James G.,		Prometheus, etc.
1796–1865	Wayland, Francis,	Moral Science, Political Economy, Intellectual Philosophy.	
1796–1859	Prescott, William H.,	Ferdinand and Isabella, Conquest of Peru, Conquest of Mexico, etc.	
1796–1828	Brainard, John G. C.,		Poems.
1796–1865	Haliburton, Thomas C.,	Sam Slick.	
1796–1881	Palfrey, John G.,	History of New England.	
1797–1882	Parsons, Theophilus,	Relig. and Phil. of Swedenborg.	
1798–1870	Barnes, Albert,	"Barnes's Notes" (Bible).	
1800–1891	Bancroft, George,	History of U. S. to 1789.	
1802–1864	Morris, Geo. P.,		Lyrics.
1802–1880	Child, Lydia M.,	Mother's Book, Biographies.	
1802–1876	Bushnell, Horace,	Nature and the Supernatural, Moral Uses of Dark Things.	
1802–1870	Prentice, George D.,	Louisville Journal (Ed.),	Poems.
1803–1882	Emerson, Ralph Waldo,	Conduct of Life, Essays, Representative Men, etc.	
1803–1879	Abbott, Jacob,	Rollo Books, etc.	
1804–1864	Hawthorne, Nathaniel,	Twice Told Tales, Blithedale Romance, Scarlet Letter, Wonder Book, Marble Faun, etc.	
1805–1877	Abbott, John S. C.,	Histories, Biographies, etc.	
1806–1870	Simms, William Gilmore,	Novels, Biography, etc.,	Poems.
1806–1867	Willis, Nathaniel P.,	Sketches,	Scriptural Poems, etc.

AMERICAN LITERATURE—Continued

Time	Author	Representative Works	
		Prose	Poetry and Drama
1807–1882	Longfellow, H. W.,	Outre Mer, etc.	Hiawatha, Poems.
1807–1865	Hildreth, Richard,	History of U. S. to 1821	
1807–1892	Whittier, John G.,		Maud Muller, Poems.
1808–1895	Smith, Samuel Francis,	Biographies, Sketches	America, Poems.
1809–1894	Holmes, Oliver Wendell,	Autocrat of the Breakfast Table	Poems.
1809–1849	Poe, Edgar Allan,	The Gold Bug	The Raven, etc.
1811–1896	Stowe, Harriet Beecher,	Uncle Tom's Cabin, etc.	
1813–1891	Lossing, Benson J.,	Pictorial Histories, etc.	
1814–1877	Motley, John Lothrop,	Rise of the Dutch Republic	
1815–1882	Dana, Richard Henry, Jr.,	Two Years Before the Mast	
1816–1887	Saxe, John G.,		The Money King, Poems.
1817–1862	Thoreau, Henry David,	Walden, Excursions, etc.	
1817–1881	Fields, James T.,	Yesterdays with Authors	
1817–1911	Bigelow, John,	Life of Benjamin Franklin	
1819–1881	Holland, J. G.,	Timothy Titcomb's Letters	Kathrina.
1819–1910	Howe, Julia Ward,	Essays	Battle Hymn of the Republic.
1819–1891	Lowell, James Russell,	Among My Books, Essays	Vision of Sir Launfal, Poems.
1819–1886	Whipple, Edwin P.,	Essays and Reviews	
1819–1892	Whitman, Walt,		Leaves of Grass.
1821–1885	White, Richard Grant,	Words and their Uses, etc.	
1822–1897	Adams, William Taylor,	Juveniles (Oliver Optic)	
1822–1909	Hale, Edward Everett,	The Man Without a Country	
1822–1891	Parton, James,	Biographies	
1822–1908	Mitchell, Donald G.,	Dream Life, Novels, Essays	
1822–1872	Read, Thomas Buchanan,		The New Pastoral, etc.
1823–1893	Parkman, Francis,	Oregon Trail, Histories	
1823–1890	Boker, George H.,		Poems of the War.
1823–1911	Higginson, Thomas W.,	Outdoor Papers, Essays	
1824–1906	Whitney, Adeline D.,	The Gayworthys, etc.	
1824–1892	Shea, John D. G.,	The Catholic Church in the U. S.	
1824–1892	Curtis, George W.,	Potiphar Papers, Essays	
1825–1909	Lea, Henry Charles,	Ecclesiastical Histories	
1825–1903	Stoddard, Richard H.,	Loves and Heroines of the Poets	Book of the East, Poems.
1825–1878	Taylor, Bayard,	Northern Travel, etc., Hannah Thurston	Poems of the Orient.
1826–1864	Foster, Stephen Collins,		Old Folks at Home, etc.
1827–1905	Wallace, Lew,	The Fair God, Ben Hur	
1829–1900	Warner, Charles Dudley,	My Summer in a Garden, etc.	
1831–1886	Hayne, Paul Hamilton,		Sonnets and Other Poems.
1831–	Terhune, Mary V.,	Alone, Hidden Path, etc.	
1832–1888	Alcott, Louisa May,	Little Women, etc.	
1833–1908	Stedman, Edmund C.,		Alice of Monmouth, etc.
1834–1902	Stockton, Frank R.,	The Lady or the Tiger, etc.	
1835–1900	Tyler, Moses Coit,	History of American Literature	
1835–1910	Clemens, Samuel L.,	Huckleberry Finn, etc.	
1835–	Abbott, Lyman,	Life and Letters of St. Paul	
1836–1907	Aldrich, Thomas Bailey,	Marjorie Daw, Novels	Poems.
1837–1920	Howells, William Dean,	The Rise of Silas Lapham, Their Wedding Journey, etc.	
1837–1902	Eggleston, Edward,	Hoosier Schoolmaster, Roxy, etc.	
1837–1921	Burroughs, John,	Wake Robin, Winter Sunshine, etc.	
1838–1905	Dodge, Mary Mapes,	Hans Brinker	Along the Way.
1838–1888	Roe, Edward Payson,	Barriers Burned Away, etc.	
1838–1905	Tourgée, Albion W.,	A Fool's Errand, etc.	
1838–1896	Dodge, Mary Abigail,	Country Living, Essays	
1839–1902	Harte, Bret,	Luck of Roaring Camp, etc.	Poems.
1839–1886	Ryan, Abram Joseph,		War Poems.
1839–	Schouler, James,	History of the U. S.	
1841–1913	Miller, Joaquin,		Songs of the Sierras, etc.
1841–1887	Sill, Edward Rowland,		Hermione, Poems.
1842–1901	Fiske, John,	Histories, Essays.	
1842–1908	Howard, Bronson,		The Henrietta, Shenandoah.
1842–1881	Lanier, Sidney,	Essays, Criticism	Poems.
1843–1916	James, Henry,	Daisy Miller, Portrait of a Lady	
1844–1909	Gilder, Richard Watson,		Poems.
1844–	Cable, George W.,	Old Creole Days, etc.	
1844–1911	Ward, Eliz. S. Phelps,	Gates Ajar, etc.	
1847–	Hardy, Arthur S.,	Passe Rose, etc.	
1848–1908	Harris, Joel Chandler,	Uncle Remus Tales	The Tar Baby, Rhymes.
1848–	Rhodes, James Ford,	Histories, Essays	
1849–	Allen, James Lane,	The Choir Invisible, etc.	
1849–	Burnett, Frances H.,	Little Lord Fauntleroy, etc.	Plays.
1849–1917	Rives, George Lockhart,	The United States and Mexico	
1850–1895	Field, Eugene,		Poems.
1851–	Brownell, William C.,	Essays on Art, Criticism	
1852–	Grant, Robert,	The Chippendales, Essays	Humorous Verse.
1852–	McMaster, John Bach,	Histories, Biographies	
1852–	Markham, Charles Edwin,		Lincoln, Poems.
1852–	Van Dyke, Henry,	The Blue Flower, etc.	Poems.
1853–1916	Riley, James Whitcomb,		Poems.
1853–	Page, Thomas Nelson,	In Old Virginia, etc.	
1854–1909	Crawford, F. Marion,	Saracinesca, etc.	Ballads.
1854–	Hart, Albert Bushnell,	Histories	
1855–	Woodberry, George E.,	Essays, Criticism	Poems.
1856–	Channing, Edward,	Histories	

AMERICAN LITERATURE—Continued

Time	Author	Representative Works	
		Prose	Poetry and Drama
1856–	Wilson, Woodrow,	History, Political Essays, etc.	
1857–	Atherton, Gertrude,	The Conqueror, Novels	
1857–	Deland, Margaretta W.,	Old Chester Tales, Novels	
1858–1919	Roosevelt, Theodore,	History, Travel, etc.	
1859–	Bates, Katharine Lee,	Essays, Criticism	Poems.
1859–	Thayer, William Roscoe,	History, Biography	Poems.
1859–	Thomas, Augustus,		Alabama, Arizona, Plays.
1860–	Garland, Hamlin,	Main-Traveled Roads	Prairie Songs, Poems.
1860–	Perry, Bliss,	Novels, Stories, Essays	
1860–	Scollard, Clinton,		Pictures in Song, Lyrics.
1860–	Wister, Owen,	The Virginian, Novels	Poems.
1862–	Freeman, Mary E. W.,	Stories, Novels	Poems.
1862–1910	Porter, William Sydney,	Short Stories	
1862–	Wharton, Edith,	Descent of Man, Novels	
1864–	More, Paul Elmer,	Shelburne Essays, etc.	
1868–	Masters, Edgar Lee,	Essays	Spoon River Anthology.
1869–1910	Moody, William Vaughn,		Poems, Dramas.
1869–	Robinson, Edwin A.,		Poems, Dramas.
1870–1902	Norris, Frank,	The Octopus, Novels	
1870–	Johnston, Mary,	To Have and To Hold, etc.	
1872–1906	Dunbar, Paul Laurence,	Novels, Stories	Dialect Poems.
1871–	Churchill, Winston,	Richard Carvel, etc.	
1874–	Peabody, Josephine P.,	Folk Stories	The Piper, Poetic Dramas.
1875–	Frost, Robert,		North of Boston, Poems.
1875–	Mackaye, Percy,	Dramatic Essays	Poetic Dramas.
1876–1916	London, Jack,	The Sea Wolf, Novels	

American history and American literature are not contemporaneous terms. American history began with the European settlement of the American continent, but the literature not until generations later, when the life of the new world had created distinctly different ideals. Our intellectual dependence on England has gradually lessened, and as we have gained independence in national affairs, national ideals have grown clearer. This gradual change in national character has been reflected period by period in our literature, but American literature remains today a branch of the great literature of England which binds together the English speaking people.

Periods of American Literature

I. The Colonial Period, 1607-1765.
II. The Revolutionary Period, 1765-1789.
III. The Period of the Republic, 1789-19—.

Colonial Period. It is important to remember that the group of English colonies scattered along the Atlantic coast represented entirely separate communities. There was no national life. The literature of the colonial period had its beginnings in no one center or group of men.

In Virginia education was despised. All were in eager search for ease of life or for gold. The earliest writings in this colony were news letters and descriptions of the new and strange country, written by the settlers to their friends in England. Very little attempt was made at beauty of style. Captain John Smith had printed when he returned to London "A True Relation of Virginia," published in 1608. "We doubt not," he writes, "but by God's gracious assistance, and the adventurous, willing minds and speedy furtherance to so honorable an action in after times, to see our nation enjoy a country, not only exceedingly pleasant for habitation, but also very profitable for commerce in general, no doubt pleasing to Almighty God, honorable to our gracious sovereign, and commodious generally to the whole kingdom." This and other writings of the early Virginia colonists form very valuable historic documents. Certain few attempts at scholarly work were made, such as the translation of Ovid's "Metamorphoses," by George Sandys, treasurer of the Virginia colony. Among the narratives and descriptions of the country were "Good News from Virginia," by Alexander Whitaker, published in London in 1613; and "Leah and Rachel," by John Hammond, published in 1656.

Great importance was attached to education in the New England colonies. Schools, colleges, and the printing press were soon established. Books and pamphlets were published. The first book printed was the "Bay Psalm Book." Among the earliest writings were diaries, histories, and descriptions. The events of the first year of the Plymouth colony were recorded in the "Journal of William Bradford and Edward Winslow," vivid and full of interesting incidents. The "History of Plymouth," by William Bradford, for thirty years governor of the colony, comes down to 1646.

The literature of New England was, throughout the colonial period, of a religious character. The only questions of general interest were questions of theology. The writers of books and pamphlets were men who had fought for their religious opinions. They had exiled themselves that they might be free to worship God according to the dictates of their own conscience. Naturally, the first publications were in defense of their creed. Their only literary object was to explain divine truth as they perceived it. Religious books and pamphlets, therefore, form the great bulk of the publications of the period. Most prominent among the clergy were Roger Williams, the author of many writings in which he boldly stood for liberty of conscience; John Eliot, the "Apostle to the Indians" and a writer of books; and the Mathers, father, son and grandson, men of great mental power who wrote many volumes of sermons.

The three greatest names during the Colonial period were: Cotton Mather (1663–1728), Jonathan Edwards (1703–1758), Benjamin Franklin (1706–1790). The most celebrated book by Cotton Mather was the "Magnalia Christi Americana," or "great things done by Christ for the American people." Jonathan Edwards' principal work is entitled "Inquiry into the Freedom of the Will." The best known of Franklin's works are his Autobiography," "Father Abraham's Speech," and "Poor Richard's Almanac." The early writings of Benjamin Franklin fall within the Colonial period, but his state papers and his later works belong to the Revolutionary period. The first newspaper published in America was "Public Occurrences," in 1690. "The Boston News Letter" was published in 1704; "The Boston Gazette" in 1719.

Revolutionary Period. By the middle of the Eighteenth Century great changes were manifested in the character of the colonies. They had become closer neighbors and they had discovered that they had much in common. The old isolation was broken down, and with united voice they protested against foreign injustice. The character of the writings of the Colonial period was theological, the character of the writings of the Revolutionary period was political. The writers of the day denounced tyranny and proclaimed for liberty and self-reliance and thus laid the foundations for our national literature. Already, for half a century, the weekly newspapers, as well as a few monthly magazines for a decade or more, had been publishing and discussing political news, so that the people of the colonies had been educated to think and write upon such subjects. The American colleges had contributed their share to the spirit of independence, and educated men were ready to act as leaders. It is not strange, therefore, that the state papers of the Revolutionary period form a body of exceedingly able documents. "When your lordship looks at the papers transmitted to us from America," said Chatham, in 1775, "when you consider their decency, firmness, and wisdom, you cannot but respect their cause."

The greatest orator of Massachusetts was James Otis; the greatest orator of Virginia, Patrick Henry. Jefferson, Madison, Monroe, John Jay, Alexander Hamilton, all were able writers. There were some attempts at general literature, history, essay, biography, fiction, and there were a few poets of an inferior sort. The ballad literature of Revolutionary days is said to have attracted the attention of Lord Chatham. The songs current in America during this era are historically interesting and artistically monotonous. They celebrate in rude verse the achievements of native heroes like "Bold Hawthorne"; or ridicule, like "Jack Brag," the British Lion; or, like the "Fate of Burgoyne," the overthrow of vaulting ambition; or, as in "Wyoming Massacre," bewail the fate of the fallen; or, as in "Free America," celebrate the triumph of the good cause. Among the very rude national anthems of the West, "Yankee Doodle" is remarkable as having been an old Dutch catch adapted into an English satirical chant, and adopted, with conscious or unconscious irony, by the American troops. "Hail Columbia" was a somewhat later production, by Joseph Hopkinson; and the "Star-Spangled Banner," by Francis S. Key, is associated with the traditions of the second British War. As inspired with the spirit of the Eighteenth, though belonging in date to the early years of the Nineteenth Century, we may mention the "Pilgrim Fathers" of J. Pierpont; Woodworth's "Old Oaken Bucket"; "Home, Sweet Home," by J. H. Payne; the humorous burlesque of J. G. Saxe, "Miss MacBride"; and the verses of the great painter and romancer, Washington Allston, with the refrain, "We are One." Francis Hopkinson's "Battle of the Kegs"; Joel Barlow's "Hasty Pudding"; the humorous "Wants of Man," by Quincy Adams; the "Conquest of Canaan," and "Columbia," also by Quincy Adams, are the best verses of their time.

Period of the Republic. The best energies of the American people have been concentrated on the development of vast material resources and the building of a great nation. It is not to be expected that a century of such activity would produce a literature equal to that of the Mother Country with her centuries of assimilation and development. American literature has no name that can rank with the highest. She has never produced a Shakespere or a Milton, but her long roll of honorable names who have written prose and verse give promise of the literature that may be produced in America when time has ripened this nation and when the great genius shall be born.

The center of literary production during the last century shifted from place to place along the Atlantic coast. It was first in New York and began with the writers who formed the Knickerbocker school. From 1830 to 1835 the literary center shifted to Cambridge and Concord, where it remained for more than half a century. Since the deaths of Hawthorne, Longfellow, Emerson, Lowell, Holmes, the leaders of the Concord-Cambridge school, there has been no one center of literary preëminence. New writers have arisen in many parts of the country and a general interest in letters has been diffused.

With the first decade of the Nineteenth Century the stress of war and politics was relaxed and the time was favorable for the beginnings of our national literature.

The principal writers during the pioneer period of American literature were Washington Irving, James Kirk Paulding, James Fenimore Cooper, Joseph Rodman Drake, Fitz-Greene Halleck, William Cullen Bryant, Edgar Allen Poe. It was Washington Irving who, by his "Knickerbocker History" and "Sketch Book," removed from us the taunt, "Who reads an American Book?" Cooper invented a new type of novel in his "Leather Stocking Tales," and Bryant gave us poetry of the new world. Edgar Allen Poe created the music of poetry such as had never been sung.

The literary history of New England divides into three periods, represented by three groups of writers. First, the political group, including the great orators; second, the poets and theo-

logians; third, poets, novelists, essayists, critics. Among the orators and statesmen of the first group are Daniel Webster, Edward Everett, Rufus Choate, Wendell Phillips, Charles Sumner, all orators of the anti-slavery days. Contemporaneous with these were the great orators of the South: Henry Clay, Robert Hayne, John C. Calhoun. To the great orators of the nation must be added the name of Abraham Lincoln, who won an enduring place by his Gettysburg speech.

The second New England group includes minor poets as well as the great theologian, William Ellery Channing; the poet and painter, Washington Allston, and Richard Henry Dana, for many years editor-in-chief of the "North American Review." The third group of New England writers includes Emerson, Hawthorne, Longfellow, Whittier, Lowell, Holmes, and to these may be added Bronson Alcott and Louisa M. Alcott, Henry Thoreau, William Ellery Channing, Theodore Parker, George William Curtis, George Ripley, and Margaret Fuller. Notable among historical writers during this half of the century are Richard Hildreth, George Bancroft, Francis Parkman, John Lothrop Motley, William Hickling Prescott, John Fiske, and John Bach MacMaster.

The period since the close of the Civil War has been one of great productiveness in literary fields, and continues to show an increasing rather than a diminishing tendency. To record even the name of every writer who has been thought worthy of favorable notice by competent critics would be impossible in a short review. The importance of the monthly and other magazines and reviews as vehicles for the first publication of all varieties of writing, has wonderfully developed and the success of those periodicals which employ the art of illustration is especially notable. While the greater part of magazine writing has been of a quality to engage chiefly the attention of desultory and uncritical readers, there is now apparent a decided development in the direction of greater thoroughness, sounder scientific method, and a more acute and delicate art. This is especially the case in historical and biographical studies.

With the dawn of the Twentieth Century we have no promise of literature equal in quality to the best that was produced in the middle of the Nineteenth Century, but the number of those who can write well is exceedingly large. American fiction of to-day is realistic and it has utilized freely the large resources of this country. The number of writers of realistic fiction cannot be computed, for among them must be included the writers of short stories with local coloring. Two acknowledged leaders in this field are William Dean Howells and Henry James, Jr. Mr. Howells is a keen observer of social life in our principal cities and has described it in several novels with depressing accuracy. Mr. James has given us a study of the American abroad in what has been called the "international novel." Contemporaneous with these are Thomas Bailey Aldrich and Edmund Clarence Stedman, both of them writers of poetry as well as prose. With the death of Aldrich in 1907 and Stedman in 1908, the last of the old school of American critics may be said to have passed away. Mr. Aldrich and Mr. Stedman were not great literary geniuses, they did not assume to be, but they had fine literary tastes and as editors and essayists they educated the reading public. Other writers of attractive stories are Edward Everett Hale, Frank R. Stockton, Elizabeth Phelps Ward, Mary E. Wilkins Freeman, Sarah Orne Jewett. Among the essayists are Charles Dudley Warner, John Burroughs, Richard Henry Stoddard, Henry Van Dyke, Donald G. Mitchell, Thomas Wentworth Higginson, Richard Grant White, Moses Coit Tyler. Prominent among literary journalists and critics are Barrett Wendell, Parke Godwin, Richard Watson Gilder.

Western writers have added to our literature an original vein of realism and humor; the poems of Riley and the novels of Edward Eggleston with their Hoosier dialect, Maurice Thompson, Eugene Field, Lew Wallace, Helen Hunt Jackson, Cincinnatus Miller ("Joaquin Miller"), Francis Bret Harte, and greatest of all, Samuel L. Clemens ("Mark Twain"), with his inimitable humor, have not only given us a literature of the West but a fund of laughter which is international.

The South, since the close of the Civil War, has awakened to greater intellectual activity. She has a right to be proud of the writers she has already produced and to be hopeful of her future. In these years, when poetry has been so rare and prose essay and the novel have so multiplied, the South has given us two poets with unusual poetic power, Sidney Lanier and Paul Laurence Dunbar. Sidney Lanier was both poet and musician and had the rare power of interpretation. In his "Marshes of Glynn," as he saw and felt them, he has made us see and feel them too. Paul Laurence Dunbar, the poet of the colored race, had the lyric charm that belongs to true poetry. Some of his exquisite poems will be accounted among the best that America has produced. Nowhere is there a finer dialect poem than Dunbar's "When Malindy Sings," a poem written as a delicate tribute to his own mother who was a negro slave. Fiction has been everywhere the favorite form of writing during the last few decades, and the South may well take satisfaction in the fine literary work of such writers as George W. Cable, James Lane Allen, Thomas Nelson Page, Richard M. Johnston, Mary N. Murfree ("Charles Egbert Craddock"), F. Hopkinson Smith, Joel Chandler Harris ("Uncle Remus"), Winston Churchill.

Three stages in American literature have been considered, the Colonial period, lasting two hundred years and more, when literary efforts were confined to feeble imitation of European models; the second, the period of the Revolution, when there was great unrest and no creative literary genius; the third period, that of the Republic, in the midst of which we are to-day working out our ideals, which will appear in future American literature.

TABLE OF ITALIAN LITERATURE

Time	Author	Prose	Poetry and Drama
13th Century	Ristoro d'Arezzo,	Treatise on Astronomy and Geography.	
13th Century	Fra Paolino,	Latin Chronicle.	
13th Century	Fra Guittone d'Arezzo,	Letters	Poems.
1265–1321	Dante Alighieri,		Divina Commedia.
1270–1336	Cino de Pistoia,		Poems.
1300–1348	Giovanni Villani,	Chronicles.	
1304–1374	Francesco Petrarch,	Letters	Sonnets.
1313–1375	Giovanni Boccaccio,	Decameron.	
1432–1487	Luigi Pulci,		Morgante Maggiore.
1449–1492	Lorenzo de' Medici,		Poems.
1452–1498	Girolamo Savonarola,	Sermons	Poems.
1458–1530	Jacopo Sannazzaro,		Arcadia.
1469–1527	Niccolo Machiavelli,	History, Art of War, The Prince.	
1474–1533	Ludovico Ariosto,		Orlando Furioso.
1480–1562	Matteo Bandello,	Novels.	
1483–1540	Francesco Guicciardini,	History, Politics.	
1490–1536	Francesco Berni,		Satire (comic).
1490–1547	Vittoria Colonna,		Poems.
1496–1556	Jacopo Nardi,	History of Florence.	
1500–1571	Benvenuto Cellini,	Autobiography.	
1512–1574	Giorgio Vasari,	Lives of Celebrated Artists.	
1544–1595	Torquato Tasso,		Rinaldo, Aminta, Jerusalem Delivered, etc.
1548–1600	Giordano Bruno,	Metaphysics.	
1552–1623	Pietro Sarpi,	History of Council of Trent, etc.	
1564–1642	Galileo Galilei,	Science.	
1568–1639	Tommaso Campanella,	Philosophy.	
1598–1647	Bonaventura Cavalieri,	Geometry.	
1670–1744	G. Battista Vico,	"Scienza Nuova."	
1672–1750	Ludovico Antonio Muratori,	Annals of Italy, Italian Antiquities.	
1698–1782	Pietro Metastasio,		Musical Dramas.
1707–1793	Carlo Goldoni,		Comedies.
1731–1794	Girolamo Tiraboschi,	Literary History.	
1745–1827	Alessandro Volta,	Science.	
1749–1803	Vittorio Alfieri,		Poems.
1766–1837	Carlo G. Botta,	History, Story of Italy.	
1773–1842	Jean Charles Sismondi,	History, Politics.	
1778–1827	Ugo Foscolo,	Miscellaneous,	Poems.
1785–1873	Alessandro Manzoni,	Novels	Dramas.
1789–1853	Cesare Balbo,	Hopes of Italy, etc. (political).	
1798–1837	Giacomo Leopardi,		Poems.
1805–1895	Cesare Cantu,	History of Italians, Novels	
1836–1907	Giosue Carducci,	Essays	Poems.
1847–1906	Giuseppe Giacosa,		As the Leaves, Dramas.
1864–	Gabriele d'Annunzio	Il Piacere, etc.	Poems.

The oldest existing libraries have been found in Italy and in that country have been preserved the oldest and most valuable Greek and Latin manuscripts. Among these are the palimpsest, "De Republica," of Cicero, believed to date as far back as the third century, the famous "Codex Vaticanus" of the fourth century, and the equally ancient "Virgil" and "Terence." Italy of the middle ages clung to classical traditions and when at the end of the fifth century the fighting bands from the North conquered the Roman world Latin thought held its power while political Rome was lost. During years that followed the Italians treasured memories of Rome and fought against the encroaching Hohenstaufen empire; from this absorbing interest in political questions they were attracted by positive and practical subjects, especially the study of Roman law. Those who turned toward theology generally went to Paris for study, while in Italy the schools for laymen educated scholars and writers who were masters in grammar and rhetoric, and such poets as Fortunatus. All this kept alive a certain culture in that barbarous age and had great influence on future Italian literature.

When legends, poems, and tales appeared in other countries and among other Latin peoples, Italian writers and students, still interested in history and law, copied these from the French and German, but made the romance of the troubadours into serious history, written in the Latin language. Prosaic lives of the saints, historical chronicles, and translations from Aristotle's philosophy and Marco Polo's travels were gathered into long series of facts. This hindered the literary growth of the new language and there was no real Italian writing before the thirteenth century. Especially in the last half of that century the new literature grew, in the north of Italy chiefly, in the form of religious poems intended to be recited to the people, and in the south in love poems of ideality, feeling, and sentiment. The stirring religious movement of that age, when the two great orders of Saint Francis and Saint Dominic arose, influenced all Italian life and letters. Many poems or hymns have been attributed to Francis of Assisi and others to the poet Jacopone, who was a mystic and a most original writer.

At this time, too, the religious drama began with an old hermit, Fasani, who had come out from his cavern in the year 1258, and suddenly appeared in Perugia. Life was hard in Italy during these years; the never-ceasing quarrels between the Guelphs and the Ghibellines, the frequent interdicts and excommunications from the popes and the tyrannous cruelty of the nobles, added to famines and plagues, kept the people in constant fear. Fasani added to this un-

happy turbulence in Perugia by announcing himself as sent by God to warn the people of terrible visitations shown to him in visions. From these influences many joined together and formed themselves into a society to do penances and their songs, connected with the church liturgy and chanted in dialogue form, grew into the first dramas in the Italian tongue.

The people of Tuscany spoke a dialect closely resembling the Latin and it became the language of literature. Under its democratic government Tuscany was the first province of Italy, politically, and philosophy and science gained a hold in the cities, but prose was scanty during the Thirteenth Century, while poetry in various forms was abundant. The first real prose writing in Italian was a scientific book, a treatise on astronomy and geography by Ristoro. A collection of tales called the "Cento Novelle Antiche" belongs to that time, containing short stories from history, ancient tradition, the Bible, and legends. A number of novels were also written, but they are of little note compared with the rich legendary lore of other countries.

Guittone d'Arezzo is a name that attracts attention in this period; he wrote many poems and some prose, mostly in the form of letters. His love for antiquity, Roman tradition, and the old language was strong; in his researches he went back more than a thousand years and took Seneca for his model, trying to write Italian in the old Latin style. His subjects were moral or religious and his mixed style most extravagant and involved. All this belongs to the age of beginnings.

During this Thirteenth Century the Reformers gained greatly in numbers and about the middle of the century one sect, the Paterini, was nearly destroyed by the Guelphs, led by a Dominican friar. Two columns in the city of Florence still mark the place of the fearful massacre. Not many years later the banished Ghibellines gathered their forces, became conquerors in their turn and would have burned the city but for the determined opposition of Farenato degli Ubertia, whose name Dante afterward made immortal. In the year 1282 the most wealthy guilds of the rich city drew away from all rule and established a government of their own, and this year may be considered the data at which a new period of Italian literature began, the period of development. This period saw, also, the beginning of Italian art in Tuscan lyric poetry.

The poet and philosopher, Cavalcanti, became head of the Ghibellines; and when never-ending brawls wearied the people who sought peace, by banishing the leaders of the rival parties, he was cast out among the rest and died in the year 1300. He wrote in prose on oratory and philosophy, but his poems, especially the love sonnets and short songs, were most noted and were praised by Dante, who was his great friend. Some of these songs were simple and graceful, others were heavy with metaphysical ideas borrowed from the Christian Fathers and ancient philosophers. His "Canzone d'Amore" became popular and was frequently published. In the most noted songs or ballads, probably written during banishment, his melancholy longing for home and his solemn love for the lady of his heart crowded out all subtle philosophy. More than two centuries later his complete poetical works were placed in the libraries of Florence and Venice.

The works of Dante Alighieri (1265–1321), stand as the center of all literature of his time. In his little book of poetry and prose, the "Vita Nuova," are found lyrics, the form and style of which mark all lyrical poetry of that day. In this he idealizes love, making everything heavenly through it as he tells the story of his own love for Beatrice, whom he makes almost divine. The "In Memoriam" of Tennyson has been likened to this work. Dante was the most illustrious of Florentine citizens as well as poets, and was chosen prior of the republic in the year 1300. In his immortal poem, the "Divine Comedy," he has preserved the names and deeds of the great men who made Florence renowned. The parties contending for power took new names at the beginning of the Fourteenth Century, the Bianchi representing the remnant of the old Ghibelline faction while the Guelphs, the nobles or aristocracy, took the name of the Neri. Dante, as one of the Bianchi, was, at last, among the proscribed and his life became a perpetual pilgrimage from one Italian town to another.

The "Convito" or "Banquet" was the work of Dante's manhood as the "Vita Nuova" was the work of his youth. It is made up of three treatises, each forming a commentary, and he planned to compose eleven more, which would have made it a book of universal knowledge. Another work, "De Monarchia," written in Latin in scholastic form, was meant to show that a universal monarchy is necessary to the well-being of the world; this monarchy was to be centered in the Romans. This has been called the creed of Dante's Ghibellinism. Besides his "Divina Commedia" there are numbers of sonnets, ballads, and short songs bearing the poet's name, some of them undoubtedly spurious. The letters of Dante have been counted among the most important material for his biography. He wrote to the government of Florence to complain of his undeserved exile, to Henry VII. urging to some definite plans and to the Italian cardinals pleading for the election of an Italian pope. There are other letters to friends and to people connected with his work.

The contents and scope of the wonderful poem, the "Divine Comedy," are beyond the space of a short notice. From different authorities we may conclude that it was begun about the year 1300, the "Inferno" was finished in 1314, the "Purgatorio" completed in 1318, and the last cantos of the "Paradiso" were probably finished not long before the death of the poet. Dante said of this poem that he called it a comedy because it had a sad beginning and a cheerful ending. He hides an allegorical meaning under the literal one and in this it is connected with mediæval literature, but the merit of the poem lies in the individual art. He took his materials from theology, philosophy, history, and mythology, mingled this with hatred and love, and under his genius the dead became again alive. This

great poem fixed the destiny of Italian literature and began the age of the Renaissance.

Cino da Pistoia (1270–1336), son of a noble family, was also a friend and correspondent of Dante. In literature he continued in some sort the tradition of Dante during the interval between him and his successor, Petrarch. His name is found on all lists of early Italian poets and his love poems are musical and full of sweetness and quoted by critics as being surpassed only by Dante himself. It has been said that in the writings of Cavalcanti, Dante, and Cino da Pistoia "the psychology of love and of sorrow nearly reaches perfection."

In histories of literature Petrarch (1304–1374), is classed as one of the four classical poets of Italy, but he is as well known from his interest in the old Latin writers and his influence in the revival of learning in mediæval Europe. His father was included in the same edict of life-long banishment that sent Dante out of Florence and the boyhood of Petrarch was spent in a little village of Tuscany where he acquired the pure Tuscan idiom that he afterward used with so much skill in odes and sonnets. He lived for many years at Avignon, denouncing the life of the papal court; he traveled much in Europe and in the year 1341 he received the poet's crown in Rome. He wrote works in Latin, the most important being in the form of letters, known as the "Epistolæ," important as a history of his own times as well as an index to his own life and mind. Another work in Latin was a poem, "Africa," in which he recited the wars of Scipio. In the year 1327 he is said to have first met Laura, the object of his life-long devotion and heroine of his poetic writings. That Laura really lived has come to be a belief, but who Laura was cannot be definitely proved; she undoubtedly lived at Avignon. His "Canzoniere" contains poems written during the life-time of Laura, poems written after her death, and a third part which seems to have been planned after the manner of Dante. While these poems show Petrarch to have been a psychologist, he did not, like the poets before him, go into transcendentalism, but kept within human limits. Petrarch had no decided political idea, but he was a most patriotic Italian, and in his mind connected the Italy of his day with the great Rome of the days of Cicero.

Boccaccio (1313–1375) lacked nothing of Petrarch's love for antiquity or his interest in the new Italian literature. Great classical learning shows in his "Genealogia Deorum," where he writes of the Pagan deities, making an encyclopedia of mythological knowledge. He compiled, or perfected, works on geography, he touched upon history and wrote some minor things in Latin, besides his Italian lyrics and longer poems. His famous Italian work was the "Decameron," a collection of a hundred novels related by men and women who had left Florence during a year of plague (1384). In this the rude form used in fable-writing gave place to careful work on classic models and was the beginning of an artistic style in romance. Among authors who wrote collections of tales in imitation of Boccaccio were Fiorentino, Sacchetti, and Sercambi.

A chronicle of events dating between the years 1280 and 1312 was written by Compagni, which is still consulted as important authority for that period of Florentine history. It shows strong feeling and discusses the reasons of the events which evidently came under his own notice. Villani, another chronicler, relates events up to 1347. He traveled in France as well as Italy, and his chronicle includes much valuable knowledge concerning both countries. This was afterwards versified by Antonio Pucci and other versified history was written during this century when every subject was treated under the form of verse. Many minor poets also left political works. In connection with this versification comic poetry was also developed and carried on by Pucci, Orgagna, and their followers. These poems, comical as well as historical, were meant to be recited to the people and in them were the beginnings of the romantic epics of the Sixteenth Century, Ariosto's "Orlando Furioso," Bojardo's "Innamorato," and others.

Lorenzo de' Medici (1449–1492), remembered chiefly as a statesman, was a man of letters, and left poems written in the spirit of Dante and older poets, while he was a man of his own time. As a classical scholar he shows the influence of the Renaissance in Italy. During the Fifteenth Century a kind of literature started in Florence, attached to popular festivals held in honor of St. John, the patron saint of the city. Although this was in the form of popular poetry the names of some of the most important authors are found in connection with it and it became the foundation of the Italian drama. Against this literary and social movement the friar, Savonarola, appeared, arriving in Florence in the year 1489. He took the line of a prophet and preached against much of the reading of the day and against the classical studies. In his struggle with Lorenzo de' Medici he directed his attack against him as a patron of pagan literature rather than against a political tyrant. Savonarola has sometimes been considered as a forerunner of the Reformation, but his preparation of the way for that great German and English religious movement was no part of his plan. He desired a reform of manners, not of doctrine, and had no great merit as a thinker or writer. He left Italian sermons, hymns, and ascetic and political treatises.

Machiavelli (1469–1527) and Guicciardini were leaders in history as a science founded on observation. Machiavelli noted facts, studied other histories and sought out reasons, and his principal works are political rather than historical. His "Principe," the "Prince," called out severe accusations against him, and has since associated his name with unscrupulous politics, but the book seems to have been the result of the civil and moral condition of Italy at that time. His history of Florence is still consulted as standard authority. The "Story of Italy," by Guicciardini, a history of the time from the death of Lorenzo de' Medici to the year 1534, is full of political wisdom, and treats of characters as well as events. Following these were Nardi, Varchi, and Segni, Tuscan historians; Porzio, who wrote histories covering short periods;

Bembo, Paruta, and others, who arranged chronicles or annals of other nations.

The romances of chivalry versified by Pulci and Bojardo became the foundation of the romantic epic formed by the genius of Ariosto (1474–1533). His "Orlando Furioso" made wonders and prodigies appear as truths and facts and his descriptions were marked by grace and beauty. The historical epic was the work of Tasso (1544–1595), who became famous through his poem, "Jerusalem Delivered," the story of the liberation of the Sepulchre by Godfrey of Bouillon in the Eleventh Century. This poem ranks now as the best heroic poem that Italy can show.

Tasso seems to stand between the high development of the Renaissance and the period of decadence in Italian literature that began with the Spanish rule in the middle of the Sixteenth Century. The people of Italy were oppressed, every high aspiration was checked, no freedom of word or thought was allowed, and this continued until the war of the Spanish succession. This one hundred and forty years is known in the history of Italian literature as the Secentismo. During this time, however, some independent thinkers, such as Bruno, Campanella, and Vanini, opened the way for the scientific triumphs of Galileo (1564–1642). He was conspicuous in literature as well as in science, a student of Ariosto, and in his prose is found the poet's ease, clearness, and elegance. The prose of Galileo has been called the best prose ever written in the Italian language.

When freed from Spanish dominion in the Eighteenth Century, civil reforms, resulting from ideas quietly working in many parts of Europe, improved the conditions of life in Italy. The first sign in the literature was in historical and scientific prose. In history Muratori collected the chronicles for the years 500 to 1500, and wrote his Annali d'Italia, and Mazzuchelli turned to literary history preparing for a biography of Italian writers. Everything tended toward improvement and the influence was soon seen in the drama. Metastasio (1698–1782) was one of the most pleasing poets of his day, writing plays, operas and ballets. Goldoni revived comedy and Alfieri (1749–1803) raised tragedy to a high standard. "Saul" is regarded as his masterpiece. Monti and Foscolo were followers, both inspired by patriotism. Silvio Pellico (1789–1854) also wrote tragedies which were good specimens of modern art, but he is most popular as author of "Lie Mie Prigioni," "My Prisons," the story of his ten years' life in the fortress of Spielberg. Manzoni (1785–1873) and Niccolini were also popular writers. Giordani, born in 1774, was the last of the writers known as the classicists.

Scholars in Italy were influenced by the ideas embodied in the movement known as Romanticism, especially strong in Germany at the beginning of the Nineteenth Century. Silvio Pellico, Breme, Berchet, and Manzoni were prominent among them, but the literary reform opposing the classical studies of the past took more the way of realism in Italy. Manzoni was distinguished in this and from his "I Promessi Sposi" the new form is dated. In this the historical novel grew into a work of art, and the genius that created it was first recognized by Gœthe, and placed the author, Manzoni, at the head of Italian literature of the century. Leopardi (1798–1837) shared this honor by putting into his poems most realistic pictures of what he saw and felt. Circumstances had given him a dreary life and his poetry has been quoted as the poetry of despair in which he surpassed even Shelley and Byron. He has also been honored by critics as the first poet since Dante and a most perfect writer of prose. Among his poems are "Passero Solitario," "Sabato del Villaggio," and "Ginestra." "Operette Morali," a volume of discourses and dialogues, was his greatest prose.

Botta (1766–1837) and Colletta (1775–1831) wrote noted histories of their own country and to these Botta added a history of the American Revolution. These were followed by "Vespri Siciliani," a history by Amari, "Storia d'Italia," by Troya, and the "Archivio Storico Italiano," established by Vieusseux, all in the renewed spirit of research. Interest in history was inspired by the noted Italian love of country and patriotism led to literary expression. Among authors connected with the political revolution of 1848 were Guisti with his popular satires, Guerrazzi, writing historical novels, Gioberti in polemics, and Balbo making an epitome of history.

Poetical geniuses of this century were Aleardi, Prati, Carducci, and Zanella. Arnaboldi, also a poet, has been criticised for writing utilitarian verse. Fiction lists carry the names of Barrili Farina, Giovagnoli, and Bersezio, and biography and history have been made richer by the work of Zino, Capponi, Bartoli, Villari, and Berti, with Fiorentino, Trezza, Ferrari, and Cossa in general literature.

Italian fiction has a wide field, description in travels is well done as De Amicis's almost unequaled works show, and through translations Italy holds a place in the reading world.

SPANISH LITERATURE

Time	Author	Prose	Poetry
1176–1250	Juan Lorenzo Segara,		Poem (on Alexander the Great).
1198–1268	Gonzalo de Berceo,		Religious Poems.
	Unknown,		Early ballads.
	Unknown,		Poems of the Cid.
1282–1349	Don Juan Manuel,	Count Lucanor (tales),	Poems.
1300–1360	Juan Ruiz de Hita,		Poems.
1332–1407	Pedro Lopez de Ayala,		Court Rhymes, Poems.
1384–1434	Marquis of Villena,	Labors of Hercules.	
14th Century	Rodrigo Yanez,		Chronicles of Alfonso XI.

SPANISH LITERATURE—Continued

Time	Author	Prose	Poetry and Drama
1398–1458	Lopez de Mendoza,		Sonnets.
1411–1456	Juan de Mena,		Labirinto.
1474–1566	Las Casas,	History.	
1478–1577	Oviedo,	History of Indies.	
1493–1543	Juan Boscan,		Poems.
1503–1536	Garcilaso de la Vega,	History of Florida.	Poems.
1503–1575	Diego de Mendoza,	History, Fiction.	
1512–1581	Zurita,	Annals of Aragon.	
1528–1591	Luis de Leon,		Lyrics (religious).
1533–1595	Ercilla,		Araucana.
1534–1597	Fernando Herrera,		Lyrics.
1536–1623	Juan de Mariana,	History of Spain.	
1547–1616	Cervantes,	Don Quixote, etc.	Galatea.
1562–1635	Lope de Vega,		Dramas, Lyrics, etc.
1569–1631	Guillen de Castro,		Dramas.
1580–1645	Gomez de Quevedo,	Theology, Satires.	Poems.
1596–1669	Manuel de Villegas,		Lyrics.
1600–1681	Calderón de la Barca,		Dramas.
1676–1764	Feyjov y Montenegro,	Scientific Essays, Criticisms.	
1731–1799	Ramon de la Cruz,		Dramas.
1750–1791	Tomas de Yriarte,	Proverbs.	
1760–1828	Leandro F. Moratin,		Dramas, Poems.
1775–1848	Alberto Lista,	Criticism.	
1807–1878	Don Patricio de la Escosura,	Fiction.	Poems.
1832–1916	José Echegaray,		Tragedies, Comedies.
1845–	Benito Pérez Galdós,	Doña Perfecta, Novels.	Dramas.
1867–	Vicente Blasco Ibáñez,	The Four Horsemen of the Apocalypse, The Cathedral, Novels.	

There is no record of the literature of Spain earlier than the Twelfth Century. The oldest manuscript is a fragment of a play written for the Church of Toledo, the earliest important work the "Chronicle of the Cid." Allusions in later literature suggest that heroic poetry may have been quite rich, but no poems are preserved.

With the heroic poetry, taking subjects from history and legends, there grew up in the Thirteenth Century a religious poetry, written mostly by monks. Among these Gonzalo de Berceo wrote poetical lives of the saints, devotional poems, and religious hymns. To this century belongs also a "Life of St. Mary the Egyptian," translated from the French.

King Alfonso X., who reigned until 1284, was author of the poem, "The Philosopher's Stone," besides several prose works. Under his patronage scientific compilations were made and he was the founder of history written in Spanish. The "Cronica General," composed under his direction, tells of universal history from the creation of the world, in one part, and of national history in another. This last was called "Historia De Espana." The source of the first part was Spanish chroniclers, who wrote in Latin, but whose works were soon translated. In the "Historia De Espana" many legends are found, also the story of the Cid.

King Alfonso's example was followed by other writers on his models. About 1390 a "Chronicle of the Conqueridores" was compiled by command of the grand-master of the Order of St. John of Jerusalem. Special chronicles of each king were also written. Among the writers of these comes Pedro Lopez de Ayala, a man who shows literary culture and knowledge of ancient history, and with him the style of writing is much improved. Besides these chronicles are some biographies of important persons and a very curious book of travels, the story of an embassy sent by Henry III. to Tamur, in 1403, evidently written by one who led the mission.

Other writings in prose in the Thirteenth and Fourteenth Centuries are generally filled with maxims and short moral tales, a few of Eastern origin. The best among these Oriental tales is a collection by Juan Manuel, nephew of Alfonso X. Juan Manuel wrote also graver works on education, domestic economy, and politics.

The principal French romances of the Round Table were translated and imitated in Spain in the first half of the Fourteenth Century, and notice of the "Book of Chivalry," in Spanish literature, shows that Spaniards have long known this romance from France, perhaps through Great Britain.

In the reign of John II. of Castile (1407–1454) there appeared a court poetry, now known as the "Arte de Trobat." This poetry was written in short pieces and in complicated verse form. It was made up of love ditties, debates, repartees, burlesques, and satirical songs. To understand or appreciate these poems they must be read in connection with the history of the time. Mendoza, Marquis of Santillana, stands first among these courtiers and poets, and some of his lighter poems are very graceful and full of melody. Juan de Mena belongs, also, to those days, and his principal works, "The Coronation" and "The Labyrinth," show the effect of Italian influence. They show also the progress of the language in Spain.

As the beginning of Spanish drama during these centuries, dramatic representations had been given at church festivals, with the object of explaining the ritual to the ignorant. Gradually changing, dialogue was added, and about the year 1492 a book appeared, "La Celestina," written by Fernando de Rojas, and this most astonishing novel exhibited, for the first time, persons of all classes, particularly the lowest, talking in harmony with their natural surroundings. This could not have been represented on the stage, but it left its mark on the drama of the nation. It was translated into various

languages, and, with its liberty of thought and expression, was a great success.

Two most noted among dramatic writers, Cervantes and Lope de Vega, were contemporaries. Cervantes, born in 1547, began writing comedies and tragedies; the first, "Galatea," was published in 1584. His great work, "Don Quixote," published in 1605, was immediately translated into all the languages of Europe. "Don Quixote" has been defined as the social romance of Sixteenth and Seventeenth Century Spain. Lope de Vega was a prodigy of learning and imagination. He wrote numberless dramas and detached verses, many of which are collected under the name "Obras Sueltas."

The "Golden Age" of Spanish literature dates from the union of Aragon and Castile and the connection of the House of Austria, which gave unity to the literature of Spain, as well as to Spanish politics. During this age Calderon de la Barca (1600–1681) was the head of the Spanish drama. His plays are of four kinds: sacred dramas from Scriptural sources, historical dramas, classic dramas, and pictures of society and manners. The most celebrated are "The Constant Prince," and "El Magico Prodigioso." Calderon was attached to the court for the purpose of furnishing dramas for the royal theater, and in making his story to hold interest throughout, facts were no obstacles.

With the celebrated Juan de Mariana (1536–1623) a new manner of writing history appeared. In place of the tagging on of one fact after another, with no apparent connection, he wrote a general survey of the history of Spain. Various accounts of more or less important episodes in the history of the country were written by different authors with reports of trans-Atlantic conquests. Gracilasso de Vega, a descendant of the Incas, wrote a history of Florida, based upon the adventures of De Soto. To another historian, Solis, belongs "Conquest of Mexico," a flattering picture, and very successful. Gomana, Oviedo, and Las Casas left records of their adventures in the new world, and on these records all history of early Spanish settlements in America is founded. Letter writers are numerous in Spanish literature, and from collections of letters may be gathered history of the times and secrets of Spanish policy. Among these is Antonio Perez (died 1611), whose letters give much information in a gallant and sprightly fashion.

Philosophy was poorly represented in these centuries, the few thinkers writing in Latin, and the very existence of mathematical science was unknown.

Luis de Leon and Herrera led in lyric poetry during the Sixteenth Century and much of their inspiration came from the Hebrew Scriptures. After these writers ballads grew to be a delight among the people, and no poetry of modern times has been more widely known or influenced so thoroughly all national life. Many of these ballads were by authors who wrote little else; but ballads are also found in the works of all writers who wished for fame, or to become of interest among the Spanish people. The religious poems of Quevedo show beauty, but he is best known by his prose satires.

At the end of the reign of Charles II., in 1700, France had great place in Spanish thought; French customs crept into use and French became the language of the society of the court. Translations from the French took the place of native work and little advance was made.

Charles III. (1759–1788) gave new life by abridging the power of the Inquisition and allowing books to stand by defense of author or publisher. In these years the poems of Moratin, the literary fables of Yriarte, and the "Life of Friar Gerund," by Salazar, were added to the literature.

The return of the Bourbons in 1814, however, made this of small account. During fierce political changes and long civil war the political pamphlet was the only book to attract great attention. José de Larra (1809–1837) was a prose writer of talent, who gained reputation by his "letters" on political subjects. He was better known by the pseudonym of "Figaro."

Among later writers Antonio de Trueba is known by his popular songs and short stories, Lista and Duran as literary critics, and Campoamor and Bequer, poets. In the novel we find the best contemporary Spanish literature. Perez Galdos, a writer of fiction, touches modern thought in the conflicting interests of Spanish life. Juan Valera is the author of "Pepita Jimenez," a famous novel, and the stories of Caballero, though not of equal merit, find translators.

RUSSIAN LITERATURE

Going to the foundations of Russian literature we find, as in most literatures, the oral tradition in the form of poetry. This poetry is not rhyme but poetic in figures, and has a sort of cadence appreciated by the scholar of the language. These tales of old time, known as bilini, are full of interest, many in number, and have been carried by wandering minstrels all through the land, as minstrels have chanted the songs and sagas of so many peoples. Thus we find in Russian literature the division of the oral and the written.

The oral literature of song or tale has been marked by scholars into periods, beginning with that of the old heroes. Songs in this period reach to the bounds of mythology, for the oldest heroes are represented as monstrous beings and might be personifications of the powers of nature. In all these there is also the imagery of popular poetry, the terms "brightest sun" used to designate the hero, "damp earth" in connection with a being of evil propensities, and others like. Giants of the mountains and serpents of the caves are made the subjects, or heroes, of the songs, and are shown guarding their surroundings. The animal natures are prominent, as in the well-known legendary characters, Idolistche Poganskoe, the great glutton, and Solovei Razboinik, the nightingale robber, with his nest in six oaks, who is the terror of travelers.

Fabulous tales or legends centering around the cruel tyrant, their celebrated Prince Vladimir and his introduction of Christianity in connection with the Greek Church, seem to mark the second literary period. The chief hero of these is known as Ilya Murometz, a giant in

form and strength and performing gigantic deeds. Vladimir introduced the forms of Christianity after his connection with the Church at Constantinople, during the last half of the Seventh Century, but no note of its spirit is prominent in the recital of his valorous performances as given in these tales.

The great commercial success of Novgorod, and its influence on the country, seems to mark a period in the history of Russia and a third cycle in the literature. In this are found the stories of Sadko, the great merchant, and of Versilii Buslaevich, of daring ventures and grand results.

The period following belongs to Moscow, which became the capital of the future empire in 1300 A. D., and during these years the literature busied itself with the autocracy and its doings. The destruction of Kazan by Ivan the Terrible, the conquest of Siberia, the iron rule of Ivan, himself, with its cruelty and superstition, are the foundations of the popular traditions which, strangely, show no hatred or call for revenge. Mingling with these in the later years are stories of the Cossacks, which almost make a literature in themselves. The Cossack songs laud the glories of the day, while they also record the sufferings of the people during Turkish invasion, the devastation carried by the Mongols, and the final overthrow of the Cossack republic.

The arrival of Peter the Great on the scene is marked as plainly in literature as it is in history. The spirited poem on the death of Ivan the Terrible, the pathetic story of Xenia, the tale of Yermak, the conqueror of Siberia, were followed by songs in abundance celebrating the wonderful Czar. The religious poems of Russia are numerous, and in them may be found many curious legends with beliefs of the Middle Ages. Many of these poems, with a large department of folk-lore, belong to antiquity and offer a fine field for the student of comparative mythology. Belonging to the more modern period some of these songs rehearse the death of Peter the Great and the deeds of Napoleon. The greater amount of all this poetry was not written, but belonged to oral tradition until an Oxford student, sent as chaplain with an embassy, early in the Seventeenth Century, collected a few old songs and tales and put them into writing.

According to authorities, the earliest specimen of the written literature of Russia is a Codex based on the Slavonic gospels. This was written by order of the Governor of Novgorod, and dates 1056 A. D. About twenty years later is a sort of Russian encyclopedia compiled from the Greek. This bears the name of Prince Sviatoslaff, son of Olga, the first Christian sovereign, and the work was done for him by his diak, or deacon. The style is said to be simple and clear. What seems a strange mixture is found in a work considered one of the best written in the language at that time, known as a "Discourse Concerning the Old and New Testaments" and containing a panegyric on Prince Vladimir. That he was the hero of so much of the popular poetry of Russia in that century, may explain the connection. The noted monk, Theodosius, wrote his "Instructions," discussions concerning the faith of the Church and exhortations to better living. Most of the writing of those years seems to have been done by monks and churchmen, and this confirms the statement so often met, that the "beginnings of Russian literature are contemporaneous with the introduction of Christianity." In this connection are mentioned the missionaries, Cyril and Method.

The earliest Russian code of laws, the "Russkai Pravada," is found in the Chronicle of Novgorod, and was first published during the reign of the son of Vladimir, Yaroslaff, who died in the year 1054. Both form and subject-matter of this code show that Russia then stood on a level in civilization with other European countries. Nestor, who is known as the patriarch of Russian literature, wrote his "Chronicle" during this century, and it proved to be the first of a long series of Russian annals recorded of many towns and written by many authors, mostly by the cloistered monks. These would be as dry reading as the Anglo-Saxon chronicles but for the romantic stories and sagas bountifully included in them. Travelers who visited the Holy Land and India left records of their adventures, and the sermons of Cyril and other bishops, written in allegorical style, are also preserved with many lives of the saints and the Fathers. Some of these have been edited in later years.

At the end of the four dreary centuries, the period of the appanages followed by the yoke of the Mongols, the literature of the country began a slow revival. The "Story of Igor," the manuscript of which was carefully preserved until the burning of Moscow in 1812, has been of much note. It is the story of the early part of the Tenth Century, but it has poetic spirit and holds interest for the general reader. To the time of the terrible Ivan (1530–1584) belongs the curious "Domostroi, the Book of Household Management," which became popular. It is said to be the work of a monk, and it faithfully pictures the ignorance and barbarisms of the time. At this date we also find the "Chetii Minei," which is said to have taken twelve years in compiling from the Greek. It was made up of extracts from writings of the Fathers, arranged for every day of the year.

The printing-press was set up in Moscow in the year 1553, and ten years later the first book was printed. This was called the "Apostel," and contained the Acts of the Apostels and the Epistles of the New Testament. Prince Kurbski was a fluent writer of this time who died in exile. Early in the Seventeenth Century appeared the "Chronograph" of Sergius Kubasoff, a history from the creation of the world to the day of Michael Romanoff (1617 A. D.). But the most important writing of that period was the "Account of Russia" by Gregory Kotoshikhin, who fled to Poland about the year 1664. He wrote his work in Sweden, the manuscript was preserved until 1840 and then printed. These books are considered an important record of Russian life before the time of Peter the Great. Works on philology and other educational subjects were written and the authors generally banished. The patriarch Nikon is well-known through his struggles with the Czar

as well as his remodeling of the sacred books which led to the great religious schism of Russia, a matter of history. The whole of the Seventeenth Century shows influence of Poland, and with these men the old Russian literature seems to have ended. Knowledge of the literature of the West made a new or modern literature for Russia.

Simeon Polotzki (1628–1680) was a sort of connecting link between the old and the modern period. He was tutor to Feoder, son of the Czar Alexis, had been educated at Kieff, then a Polish district, but seems to have known something of French literature. He wrote religious works, dramas, and doggerels. During his time Alexis made additions to the "Code of Laws" and burned the "Books of Pedigrees," which held histories of the different branches of past royal families. Peter the Great, beginning his reign in the year 1689, met the Polish element that had been so great in its influence and made native Russian the language of communication in all business. He found help toward introduction of new literary forms in Propocovich, a scientific scholar, who endeavored to put aside the numberless superstitions of the time by teaching material facts of science. Yavorski, who wrote the "Rock of Faith," opposing Lutherans and Calvinists, and Pososhkoff with his valuable treatise on political economy, under the title "Poverty and Riches," were also of note. The indefatigable writer, Michael Lomonosoff, did much to aid education in Russia by his personal influence as well as by his odes, tragedies, essays, and slight histories.

The plan of Peter the Great to civilize Russia on the model of the nations of the West reached its climax under the ten years' rule of Anna (died, 1740). The influence of her German advisers headed by Biren, was strong in all departments, but the annals of the time show little literary progress.

From the beginning of the reign of her successor, Elizabeth, Russians date a notable advance in letters, the work mainly following French models. Through the influence of Ivan Shuvaloff the University of Moscow, the oldest in the country, was founded in the year 1755, and in the following year the first theater at St. Petersburg was opened with Sumarokoff as director. He was noted for his rhymed comedies and tragedies written in French style. Up to this time only religious plays had been allowed in the country.

Catherine II. (reigned 1762–1796) gathered about her a generation of court poets, most of them poor writers but urged to emulate Horace, Virgil, and Homer. Few of them are now remembered even by name. Kherasoff was author of two lengthy epic poems which are no longer read, and Denis von Visin, evidently of German blood, wrote national comedy. The greatest poet was Gabriel Derzhavin (1743–1816), who has been called Catherine's poet laureate. Of his poems the "Ode to God," "The Nobleman," and "The Taking of Warsaw" are best known. Alexander Radistcheff appeared as writer of "A Journey to Moscow," in which he noted the sad condition of the serfs and for which he was sent to Siberia. The censorship of the press became severe, many foreign books were excluded and for readers, as well as authors, times grew troublous.

The form of allegorical writing, so common in countries under absolute rule, was popular in Russia and a long list of fabulists was headed by Ivan Khemnitzer (1744–1784), who began with translating and afterward wrote original tales. A later author, Ivan Kriloff (1768–1844), proved to be the most popular fable-writer of the nation. He resembled the French La Fontaine in character and in work. Among the earliest of real romances or novel writers in Russia were Zagoskin and Lazhechnikoff, whose books are still read, long narratives of life in their own times. Among them is "Yari Miloslaviski," a tale of the days when the Poles were driven from Russia. Nicholas Gogol (1809–1852), a native of Little Russia, was the first novelist of talent and he described the people and the scenery of his own district in his "Old Fashioned Home" and "Taras Bulba," a story of war between Cossacks and Poles. In a curious tale, "The Demon," he pictured Kieff in the old days. Novels grew popular, and we find the names of Hersen, the exile, Goncharoff, Bulgarin, and Dostoievski. Count Tolstoi, noted for many other works, was also a novelist and the English translation of his "Anna Karenina" has been said to be the longest novel in our language. Most eminent was Ivan Turgenieff, in his own time the author best known outside his own country.

Turgenieff first attracted notice by his interest in the Russian peasant and his best poems and tales find subjects among the serfs. These have been translated and made for the author his reputation in Europe. "Dvorianskoe Gnezedo," or "A Nest of Gentle People," has been noted as one of the most pathetic tales found in any literature. "Nov" (Virgin Soil), and "Mumu," with other minor stories, have been often translated and greatly praised.

While Count Tolstoi has written much and on many subjects, including religion and morals, and become known throughout the reading world, critics have named as the best of his work, early sketches relating to Sebastopol and his great prose epic, "War and Peace." The first Russian play made on the model of Shakespere's dramas was "Boris Godunoff," written by Pushkin, but many have appeared since his time. The impulse that came from abroad, especially through acquaintance with the poetry of Gœthe, Schiller, Shakespere, and later, that of Byron, pushed aside the French models that were so often copied. Besides writing after the models found in other languages, Russian poets have translated much, and the literature of their country is rich in these reproductions.

Both in number and genius the novelists of Russia compare well with other countries. Gogol, the first real novelist, has been followed by a series that continues to the present day. Dostœvskii is quoted in connection with Tolstoi and Turganieff; near them are Goncharov, Pisemskii, and Garshin, called a disciple of Tolstoi; and Korolenko, leader of the optimistic school.

Russia has, also, historians worthy to be known as successors of Karamzin, and who have given more accurate record of fact if not in his brilliant

style. It has been said that Russian historians have been generally satisfied to write the story of their own country; this they seem to have thoroughly investigated. They meet strict censorship whenever they deal with history of recent times. Among these, Kostomaroff (1817–1885) wrote much of note, became obnoxious to the government, and was banished for several years and forbidden to publish anything. After his return in the year 1854 he wrote several works and contributed to leading Russian reviews. Ustrailoff published a good and full history of his own country but it was not as popular as his "Reign of Peter the Great," in which he brought out several documents until then unknown and with them facts of interest. He has been called the ablest Russian historian of his time.

Solovieff (1820–1879) left an unfinished history of great length, which has proved a mine of information for writers and scholars. Others have written up particular periods or subjects. An account of the Polish Rebellion of 1863, which first appeared in a Russian magazine and was afterward published in book form, gave some startling disclosures that caused its circulation to be forbidden. Excavations in many parts of the country, within the last century, have also given light to the pre-historic period.

Good histories of Russian literature have been written; these often include philology and go back to older Slavonic literature. A valuable "Explanatory Dictionary of the Great Russian Language" was published many years ago. Works on ethnology and publications on natural history have attracted attention, but moral and mental philosophy found few interested authors. Scientific subjects, law, and medicine have their share of students; works on these subjects have been translated from foreign languages.

We hear of the literature of White Russia and of Little Russia, which are really Russian dialects. Little Russian literature had no separate existence until the annexation of Poland. It developed in a mass of song and legend with some theological writings, educational works, and annals. In the year 1876, the Imperial Government forbade the publishing of anything in Little Russian; both Poland and Russia had long shown hostility toward this dialect. Its popular poetry is exceedingly rich and interesting. The poet, Shevchenko, gathered the old songs of his land as Burns gathered the lays of Scotland and, like Burns, he was one of the great poets. In his youth he rejoiced in the traditions of his native village as he heard them from the priests; in his poetry he faithfully reproduced the life of the old days. The story of those times is lightened by the charming lyrics that he mixed with his recital. He was banished to Siberia for ten years (1847–1857), and died soon after his return. The great cairn that marks his grave has been called the Mecca of South Russia. The folk tales of Little Russia are still recited by wandering peddlers and by peasants.

In the literature of White Russia is found little besides a few songs, parts of Scripture, and some law papers. The country of this literature is the dreariest in the empire.

JAPANESE LITERATURE

In the Fifth Century letters and the Confucian classics were carried into Japan through Corea, and about the year 550 A. D. Buddhist missionaries settled in the islands. In the Eighth Century Japan copied the Chinese form of centralized government in place of the ancient feudalism; Japanese literature, both prose and poetry, dates from this time. Compilations of historical facts are supposed to have existed at least 100 years earlier; two distinct works are quoted, but neither has been preserved.

The earliest known Japanese writing is the "Kojiki" or "Record of Ancient Matters," dating from the year 711 A. D. The most ancient poetry is the "Manyoshiu" or "Collection of a Myriad Leaves," belonging also to the early part of the Eighth Century. In the preface to the "Kojiki" it is said that the emperor who reigned during the last half of the Seventh Century, trying to preserve all traditions, had all the records then existing carefully examined, corrected, and arranged, but this work was never completely written, and the memory of a member of the imperial household, one Are, became the only authority for future references. About twenty years later one of the ministers of the government compiled the work, mostly from the words of Are, and this, completed, became the "Kojiki." In the year 720 another work, entitled the "Nihongi" or "Japanese Record," was put into shape. The earlier record is largely pure Japanese, preserving the form and the spirit of Japanese antiquity; the other shows Chinese ideas. Both are really ancient histories, going back to the "divine age," and are completely mixed with mythological legend. In them the country itself is named "land of the gods," and the pedigree of the sovereign is traced back to a Sun goddess. These works formed the basis for many later writings and numerous commentaries. A noted edition of the "Kojiki," with an elaborate commentary, was published between the years 1789 and 1822. Many old manuscripts have been published in modern style.

Among later Japanese histories is the "Dai Nihonshi" or "History of Great Japan" in 240 books. This was composed by the second lord of Mito (1622–1700), a noted patron of literature, who collected a large library of old books from temples and shrines, and from among the people. It is said that the lord of Mito had aid from Chinese scholars who had fled to Japan to escape their Manchu conquerors. A doubt of the origin of the imperial dynasty might endanger the very foundations of the throne, and for this reason the national annals of Japan have been most carefully guarded. The purpose of the "Dai Nihonshi" was to call attention to historical facts and thus give new strength to his rightful authority, which was being usurped by the Shogun. The writing of this history had much to do with the revolution that came more than a century later. Following this, an author, Rai Sanyo (1780–1832), wrote the "Guaishi," or "External History of Japan," which was widely read by Japanese scholars. There are many other historical works adapted for popular reading and for scholars.

Works on local geography make a large showing in this literature. As early as the Eighth Century the government ordered careful descriptions of every province and village to be compiled. These are much like the county histories of England and the books growing from them are numberless. They include facts of topography, natural history, origin of names, local legends and traditions, records of industries and commerce, and descriptions of temples, shrines, and monuments; all these, written with minute detail, make works of great length and of much historic interest. Every province in Japan has places noted in history; namely, monuments, castle-towns, temples, and other memorials of past ages. The guide books included in this geographical section of the literature give the traveler a perfect knowledge of his route. Probably no other country is so minutely known by its inhabitants.

Japanese classical poetry has always been a favorite study; there are many volumes written or collected by the old nobles. The "Hiakunin-is-shiu" or "Collection of One Hundred Poems" contains verse written by the emperors themselves. It had long been a custom for scholarly people to gather for the purpose of passing away time in the making of verse. These verses or poems were kept in the original manuscripts, or printed and made up into numberless books of minor poems. Loyalty to country and love of its beauty make many subjects in this verse; most of the short poems are simple, almost explanatory in form, and very difficult of translation into what we would call poetry. Some of the lyrics, however, show quaint ways of thought and happy modes of expression. The editors of "Sunrise Stories" have very cleverly succeeded in translating the peculiar flavor of Japanese verse and in keeping something of Japanese form. There are no great epics or didactic poems in the Japanese language, and the drama does not hold large place. Popular plays, however, are common; they are often stilted in style, often without plot.

Religion and philosophy make a large section in the literature of most countries, but no Japanese book yet read or translated by a foreigner takes the place held by the religious books in European languages. Nothing has thus far undone the work of the early ages, for loyalty, family pride, patriotism, and religion are all one in Japan. The national, or Shinto, faith accounts for its lack of a moral code by teaching that loyal subjects of the emperor need no other moral guidance. The journey to the land of perpetual youth is one of the expressions in their literature on the philosophy of death. The great body of imported literature, the Confucian learning, and Buddhist Books have long been held in high honor by native students.

The "Story of My Hat," probably written seven hundred years ago, is a Japanese classic, which has its great charm from its simplicity of language and its picture of a most simple life. It is full of allusions to nature, telling of the bright moon, the floating cloud, the fireflies, the notes of the wild-bird, etc.; it gives minute descriptions of natural surroundings. Another book, "Tosa Nikki," describing in simplest language the ordinary life of a traveler in the Tenth Century, is also classical. It gives no adventure or romance and no wise maxims. It is simple narration, and is said to have been written by a woman. In the Tenth Century the learned men of Japan wrote only for the well-read and educated class and were deep in the study of Chinese. The women of the court kept up their own language; a large part of the best writings in their literature was the work of women.

Romances and novels are by no means unknown in Japan; their heroes and heroines have thrilling adventures, which are graphically presented. Much of this fiction is mixed with history and the tales date back to one of the numerous wars. Fairy tales abound and are very artistically told, and short-story books are common. These and the books for children often take for their subject some hero of ancient times.

The mental equipment of this nation has been forming for centuries; when the Empire shut its ports and drew away from the rest of the world, it had, within itself, resources of food for its intellectual life. By the opening of these ports Japan was introduced into the affairs of the modern world, taking a stand among the nations. Through the researches of scholars the literature of the West is being enriched by the imagination of the East, and to this literature Japan is giving a generous share, though only a fraction of the books of this modern Oriental nation are yet reached by Western readers. The "Wakan Sansai Dzuye," known to the world as the "Great Japanese Enclyclopedia," is noted as a necessary help to all who seek knowledge of Japanese letters. The fact that such a large work has been compiled and that it is considered an essential part of a student's equipment shows something of the value of Japanese literature.

THE FAMILY LIBRARY

Selecting books for a family library is remarkably like selecting food for a family table,—a very nice art, indeed. The cook must know food values, their preparation and their economic selection, so as to balance one kind of food against another and furnish complete nourishment. Within a narrow range of choice, allowance must be made for individual tastes, and enough provided to satisfy every rational appetite. So it is in the selection of books. What is a good book for one may not be a good book for another. A family library, like a family table, should cater somewhat to individual tastes; but there are common tastes as well, and the well-selected library of even a few books may furnish joy for the whole family.

No one list of books can ever be the best list. It can only be suggestive of the kind of books that belong to every good list. A short list of books for a family library is appended here.

A SMALL HOME LIBRARY

Title	Publisher or Author
A Standard Dictionary.	
A Good Encyclopedia.	
Imperial Atlas of the World,	Rand-McNally.

Title	Publisher or Author
History of the United States,	John B. McMaster.
The United States in Our Own Times,	E. B. Andrews.
History of Our Own Times (English),	Justin McCarthy.
English Lands, Letters, and Kings (4 vols.),	Donald G. Mitchell.
American Lands and Letters (2 vols.),	Donald G. Mitchell.
Outlines of Universal History (2 vols.),	Geo. P. Fisher.
Romance of Discovery,	W. E. Griffis.
Romance of Conquest,	W. E. Griffis.
Critical Period of American History,	John Fiske.
History of the English People,	Green.
Struggle for a Continent,	Francis Parkman.
A Talk About Books,	J. N. Larned.
Natural Resources of the United States,	Jacob H. Patton.
Holland and Its People,	Edmondo de Amicis.
Spain and the Spaniards,	Edmondo de Amicis.
The Alhambra,	Washington Irving.
Wayfarers in Italy,	Catharine Hooker.
French By-ways,	Clifton Johnson.
Fresh Fields (English),	John Burroughs.
A Corner of Cathay,	A. M. Fielde.
Across Asia on a Bicycle,	Allen and Sachtleben.
At the Rainbow's End (The Klondike),	Alice Henderson.
The Desert (American),	John Van Dyke.
Hawaiian America,	Caspar Whitney.
Thirty Years in Australia,	Ada Cambridge.
Java, the Pearl of the East,	Mrs. S. J. Higginson.
Japan, Its History and Folklore,	W. E. Griffis.
Japanese Girls and Women,	Alice M. Bacon.
Great World's Farm,	Selina Gaye.
Romance of Industry and Invention,	Robt. Cochrane.
Men Who Made the Nation,	E. E. Sparks.
Literary Friends and Acquaintances,	W. D. Howells.
Yesterdays with Authors,	Jas. T. Fields,
My Summer in a Garden,	Chas. Dudley Warner.
Indoor Studies,	John Burroughs.
Outlines of English Literature,	Henry S. Pancoast.
Outlines of American Literature,	Henry S. Pancoast.
Life of Abraham Lincoln,	John G. Nicolay.
Lincoln, Master of Men,	Alonzo Rothschild.
Life of William Penn,	Augustus Buell.
The Mother of Washington and Her Times,	Mrs. Roger Pryor.
The Making of an American,	Jacob A. Riis.
Practical Garden Book,	L. H. Bailey.
A Woman's Hardy Garden,	Helen R. Ely.
Earth's Bounty,	Kate V. St. Maur.
Sesame and Lilies,	John Ruskin.
The Development of the Child,	Nathan Oppenheim.
Mental Growth and Control,	Nathan Oppenheim.
Two Children of the Foot Hills,	Elizabeth Harrison.
Fisherman's Luck,	Henry Van Dyke
Bits of Talk on Home Matters,	Helen Hunt Jackson.
Village Sermons,	Charles Kingsley.
Children's Rights,	Kate Douglas Wiggin.
Heredity and Christian Problems,	Amory Bradford.
Prue and I,	George W. Curtis.
The Brook Book,	Mary Rogers Miller.
Three Acres and Liberty,	Bolton Hall.
The Life of the Spirit,	Hamilton Mabie.
The Blue Flower,	Henry Van Dyke.
Marsh Island,	S. O. Jewett.
Adventures of Tom Sawyer,	Mark Twain.
Fishin' Jimmy,	Annie Trumbull Slosson.
Story-tell Lib,	Annie Trumbull Slosson.
How to Tell Stories to Children,	Sarah Bryant.
Point of Contact,	Patterson Du Bois.
Solomon Crow's Christmas Pockets,	Ruth McEnery Stuart.
Uncle William,	Jennette Lee.
Captain of the Gray-horse Troop,	Hamlin Garland.
Ramona,	Helen Hunt Jackson.
The Crisis,	Winston Churchill.
Aliens,	Mary Tappan Wright.
Wonders of the Colorado Desert (2 vols.)	G. W. James.
In and Out of the Old Missions of California,	G. W. James.
Certain Delightful English Towns,	W. D. Howells.
Prophet of the Great Smoky Mountains,	Chas. Egbert Craddock.
The Scarlet Letter,	Nathaniel Hawthorne.
Marble Faun,	Nathaniel Hawthorne.
Vesty of the Basins,	Sarah P. M. Greene.
John Halifax,	Dinah Mulock Craik.
Rudder Grange,	Frank Stockton.
The Widow O'Callaghan's Boys,	Gulielma Zollinger.
The Sky Pilot,	Ralph Connor.
The Blazed Trail,	Stewart Edward White
Old-town Folks,	Harriet Beecher Stowe
Alice of Old Vincennes,	Maurice Thompson.
The Virginian,	Owen Wister.
Princess of Thule,	William Black.
Adam Bede,	George Eliot.
Old Curiosity Shop,	Charles Dickens.
Annals of a Quiet Neighborhood,	George Macdonald.
Margaret Ogilvy,	James Barrie.
Beside the Bonnie Brier-Bush,	Ian Maclaren.
Put Yourself in His Place,	Charles Reade.
Ben Hur,	Lew Wallace.
Cambridge Book of Poetry and Song,	Charlotte Fiske Bates.
Songs of Nature,	John Burroughs.
Shakespere's Plays: Hamlet, Merchant of Venice, Macbeth, As You Like It, Julius Cæsar, King Lear, and others, as preferred.	
Selected volumes of Household Poetry.	

BOOKS FOR THE CHILDREN'S LIBRARY

"A wise mother and good books enabled me to succeed in life."— *Henry Clay.*

NOTE.— These books have been carefully selected from children's lists, issued by public libraries, and from lists prepared by school departments. They are all of them good books and children like them, but they are only a few of the many equally good ones which can be found from the same sources.

PICTURE BOOKS AND RHYME BOOKS FOR THE VERY LITTLE ONES

(Children under six years of age.)

Title	Publisher or Author
Babyhood Days,	Dutton.
Little Sunshine,	De Wolf.
Cherry-tree Farm,	Stokes.
Children's Pets,	Dutton.
Little Black Sambo,	Doubleday.
Five Minute Stories,	Richards.
Book of Nursery Rhymes,	Welsh.
Baby Days,	Dodge.
Child Stories and Rhymes,	Poulsson.
Mother Goose: Old Nursery Rhymes,	Warne.
Rhymes and Jingles,	Norton.
Caldicott Picture Books,	Warne.
Songs for Little Children,	Smith.
Sunbonnet Babies,	Rand-McNally.
Lullaby Land,	Eugene Field.

FOR CHILDREN OF THE FIRST AND SECOND PRIMARY GRADES

(From six to eight years of age.)

Title	Publisher or Author
Five Mice in a Mouse Trap,	Richards.
Six Nursery Classics,	Welsh.
Happy Heart Family,	Gerson.
Asgard Stories,	Foster and Cummings.
Stories of the Red Children,	Brooks.
Book of Fables,	Scudder.
St. Nicholas Christmas Book,	Century.
Docas, the Indian Boy,	Snedden.
Grimm's Fairy Tales (2 vols.),	Wiltse.
Stories of Great Americans for Little Americans,	Eggleston.
Book of Fables and Folk Stories,	Scudder.
Fairy Stories and Fables,	Baldwin.
Andersen's Fairy Tales,	Baldwin.
Little Folks of Many Lands,	Chance.
Mother Goose,	Greenaway.
First Jungle Book,	Kipling.
Brownies, their Book,	Cox.
Treasury of Stories, Jingles, and Rhymes,	Humphrey.
Child's Garden of Verses,	Stevenson.
In Sunshine Land,	Thomas.
Rhymes of Childhood,	Riley.

FOR CHILDREN OF THE THIRD AND FOURTH GRADES

(From eight to ten years of age.)

Title	Publisher or Author
Joyous Story of Toto,	Richards.
Toto's Merry Winter,	Richards.
Jackanapes,	Ewing.
Children's Book,	Scudder.
Seven Little Sisters,	Andrews.
Our Little Brown Cousin,	Wade.
Our Little Indian Cousin,	Wade.
Our Little Japanese Cousin,	Wade.
Our Little Russian Cousin,	Wade.
Old Greek Stories,	Baldwin.
Adventures of a Brownie,	Mulock.
Little Jarvis,	Seawell.
Stories of American Life and Adventure,	Eggleston.
Four Great Americans,	Baldwin.
Mischief's Thanksgiving,	Coolidge.
World and Its People (our own country),	Dunton.
Just So Stories,	Kipling.
Golden Windows,	Richards.
Uncle Remus and His Friends,	Harris.
Boys of Other Countries,	Taylor.
Book of Knight and Barbara,	Jordan.
Children's Life of Lincoln,	Putnam.
Court of King Arthur,	Green.
Water Babies,	Kingsley.
Little Folks' Lyrics,	Sherman.
Songs Every Child Should Know,	Bacon
Poems Every Child Should Know,	Burt.

FOR CHILDREN OF THE FIFTH AND SIXTH GRADES

(From ten to twelve years of age.)

Title	Publisher or Author
Century Book of Famous Americans,	Brooks.
True Story of Christopher Columbus,	Brooks.
True Story of George Washington,	Brooks.
True Story of Benjamin Franklin,	Brooks.
True Story of Ulysses S. Grant,	Brooks.
Pioneer Stories (3 vols.),	McMurry.
Travels Through North America with the Children,	Carpenter.
Boys of '76 and Boys of '61,	Coffin.
Story of the Greeks,	Guerber.
Story of the Romans,	Guerber.
Paul Jones,	Seawell.
Robinson Crusoe,	Defoe.
Hans Brinker,	Dodge.
Land of Pluck,	Dodge.
The Land We Live In (3 vols.),	King.
Nelly's Silver Mine,	Jackson.
Tales of King Arthur,	Farrington.
Zig-Zag Journeys (series),	Butterworth.
Little Cousin Series (Italy, Germany, Holland, etc.),	Pub. by Page & Co.
Fifty Famous Stories Retold,	Baldwin.
Story of a Bad Boy,	Aldrich.
Myths Every Child Should Know,	Mabie.
Legends Every Child Should Know,	Mabie.
Wonder-Book and Tangle-wood Tales,	Hawthorne.
Lobo, Rag and Vixen,	Thompson-Seton.
Squirrels and Other Fur-bearers,	Burroughs.
Little Smoke,	Stoddard.
Juan and Juanita,	Baylor.
Heidi (Home life in Switzerland),	Spyri.
Little Women,	Alcott.
Little Men,	Alcott.
Spinning Wheel Stories,	Alcott.
Jack Hall,	Grant.
Betty Leicester,	Jewett.
Some Merry Adventures of Robin Hood,	Pyle.
King of the Golden River,	Ruskin.
Swiss Family Robinson,	Wyss.
Arctic Alaska and Siberia,	Aldrich.
Poems of American Patriotism,	Matthews.
Golden Numbers (Poems),	Wiggin and Smith.

FOR SEVENTH AND EIGHTH GRADES

(From twelve to fourteen.)

Title	Publisher or Author
Boys' Handy Book and Girls' Handy Book,	Beard.
Cyclopedia of Common Things,	Champlin.
Colonial Days and Ways,	Smith.
Twelve Americans,	Carroll.
The Story of Washington,	Seelye.
Ulysses S. Grant,	Wister.
Abraham Lincoln,	Noah Brooks.
Osceola, Chief of the Seminoles,	Gordon.
Tecumseh, Chief of the Shawanees,	Gordon.
Paul Jones,	Seawell.
One Hundred Famous Americans,	Smith.
Heroes of the Golden Age,	Baldwin.
Cruise of the Cachalot,	Bullen.
Captains Courageous,	Kipling.
Personally Conducted,	Stockton.
Tour of the World in Eighty Days,	Verne.
We Girls,	Whitney.
Land of the Long Night,	Du Chaillu.
World of the Great Forest,	Du Chaillu.
Historical Tales from Shakespere,	Couch.
Stories from Shakespere,	Chas. and Mary Lamb.
Oakleigh,	Deland.
From Cattleranch to College,	Doubleday.
Story of Sonny Sahib,	Cotes.
Micah Clarke,	Doyle.
Treasure Island,	Stevenson.
Two Young Homesteaders,	Jenness.
Four Macnicols,	Black.
Flamingo Feather,	Munroe.
Polly Oliver's Problem,	Wiggin.
For the Honor of the School,	Barbour.
Sharp Eyes and Other Papers,	Burroughs.
Birds Through an Opera Glass,	Merriam.
Prince and Pauper,	Mark Twain.
Christmas Stories,	Dickens.
Story of King Arthur,	Pyle.
The Spy and the Leather Stocking Tales (5 vols.),	Cooper.
Twenty Thousand Leagues Under the Sea,	Verne.
Poems of American Patriotism,	Matthews.
Treasure Book of Verse,	Brackett and Eliot.

FOR THE OLDER BOYS AND GIRLS

Title	Publisher or Author
Reader's Handbook of Famous Names,	Brewer.
Dictionary of Phrase and Fable,	Brewer.
Young Folks' Cyclopedia of Literature and Art,	Champlin.
Young Folks' Cyclopedia of Persons and Places,	Champlin.
Age of Fable,	Bulfinch.
Helps for Ambitious Boys,	Drysdale.
Boys' Book of Inventions,	Baker.
Electricity for Everybody,	Atkinson.
Discovery of America,	Fiske.
War of Independence,	Fiske.
Advance Guard of Western Civilization,	Gilmore.
Tramp Across the Continent,	Lummis.
Story of Our Continent,	Shaler.
Successful Men of To-day,	Craft.
Abraham Lincoln,	Nicolay.
Story of Music and Musicians,	Lillie.
Story of the English,	Guerber.
Life of Robert Fulton,	Knox.
La Salle and the Discovery of the Great West,	Parkman.
Fighting Phil (Sheridan),	Headley.
Rough Riders,	Roosevelt.
The Raiders,	Crockett.
Christmas in Four Quarters of the Globe,	Barber.
Twelve Christmas Sermons,	Spurgeon.
Pepacton,	Burroughs.
A Social Departure,	Duncan.
Explorers and Travelers,	Greeley.
How the Other Half Lives,	Riis.
Nineteenth Century,	Mackenzie.
Roman Life in the Days of Cicero,	Church.
John Brent,	Winthrop.
Our Old Home,	Hawthorne.
The Roman and the Teuton,	Kingsley.
Nicholas Nickleby,	Dickens.
Being a Boy,	Warner.
Cuore,	D'Amicis.

Title	Publisher or Author
John Halifax,	Mulock.
Shakespere, the Boy,	Rolfe.
Ranch Life and the Hunting Trail,	Roosevelt.
A Roundabout Journey,	Warner.
Along the Florida Reef,	Holder.
Astronomy with an Opera Glass,	Serviss.
How I Found Livingstone,	Stanley.
Story of My Life,	Helen Keller.
Standish of Standish,	Jane G. Austin.
Dr. Le Baron and His Daughters,	Jane G. Austin.
Judith Shakespere,	Black.
A Summer in Leslie Goldthwaite's Life,	Whitney.
Ivanhoe, Rob Roy, Kenilworth, Waverley,	Scott.
Heart of the Ancient Wood,	Roberts.
The Land of Evangeline,	Roberts.
Kidnapped,	Stevenson.
David Balfour,	Stevenson.
Huckleberry Finn,	Mark Twain.
David Copperfield, Little Dorrit,	Dickens.
A Noble Life,	Mulock.
Silas Marner,	Eliot.
The House of the Seven Gables,	Hawthorne.
Window in Thrums,	Barrie.
Idylls of the King,	Tennyson.
Book of Golden Deeds,	Yonge.
Selected Volumes of Household Poetry, Whittier, Scott, and other favorites.	Longfellow,

PEN NAMES OF NOTED WRITERS

Pen Name	Real Name
Abbott, Madeline Vaughan,	Mrs. Charles E. Bushnell.
Ackworth, John,	Rev. F. R. Smith.
Adam, Madame (Edmond),	Juliette Lamber.
Adams, Moses,	Geo. Wm. Bagby.
Adams, Stephen,	Michael Maybrick.
Adeler, Max,	Charles Heber Clark.
Agate,	Whitelaw Reid.
A. K. H. B.,	Rev. A. K. H. Boyd.
Akers, Elizabeth,	Mrs. E. M. Allen.
A. L. O. E. (A Lady of England),	Charlotte M. Tucker.
Alexander, Mrs.,	Mrs. Annie French Hector.
Allen, F. M.,	Edmund Downey.
Americus,	Francis Lieber.
Amyand, Arthur,	Capt. E. A. Haggard.
Andrews, Annulet,	Mrs. J. Kingsley Ohl.
Angell, Norman,	Ralph Norman Angell Lane.
Anstey, F.,	F. Anstey Guthrie.
Archibald, Mrs. G.,	Mrs. George A. Palmer.
Armstrong, Regina,	Mrs. C. H. Niehaus.
Arnold, Birch,	Mrs. J. M. D. Bartlett.
Arp, Bill,	Charles H. Smith.
"Ashmont,"	J. Frank Perry.
Atlas,	Edmund Yates.
"Aunt Elmina,"	Mrs. Isaac Slenker.
Ayres, Alfred,	Thomas E. Osmun.
Bab,	W. S. Gilbert.
Ballin, Ada S.,	Mrs. Oscar G. D. Berry.
Baba, Ali,	Alberigh Mackay.
Barnaval, Louis,	Charles De Kay.
Barnes, Catharine Weed,	Mrs. Henry Snowden Ward.
Bates, Charlotte Fiske,	Mme. Adolphe Rogé.
Baylor, Frances Courtenay,	Mrs. Geo. S. Barnum.
Beard, Frank,	Thos. Francis Beard.
Beaumont, Averil,	Mrs. Hunt.
Bede, Cuthbert,	Rev. Edward Bradley.
Bell, Acton,	Anne Brontë.
Bell, Currer,	Charlotte Brontë.
Bell, Ellis,	Emily Brontë.
Bell, Lilian,	Mrs. Arthur Hoyt Bogue.
Bell, Lura,	Julia May Williamson.
Bell, Nancy,	Mrs. A. Geo. Bell.
Belloc, Marie Adelaide,	Mrs. Frederick S. Lowndes.
Bentzon, Thérèse,	Marie Thérèse Blanc.
Berkeley, Thusnelda,	Mrs. Mary L. Metcalfe.
Bevans, Neile,	Nellie B. Van Slingerland.
Bibliophile,	S. A. Allibone.
Bickerdyke, John,	Charles H. Cook.
Bickerstaff, Isaac,	Swift and Steele.
Biglow, Hosea,	J. R. Lowell.
Billings, Josh,	Henry W. Shaw.
Birmingham, George A.	James Owen Hannay.
Bisland, Elizabeth,	Mrs. Elizabeth Wetmore.
Blanchan, Neltje,	Mrs. F. N. Doubleday.
Boldrewood, Rolf,	Thos. Alex. Browne.
Bonehill, Capt. Ralph,	Edw. Stratemeyer.
Boz,	Charles Dickens.
Braddon, Miss M. E.,	Mrs. John Maxwell.
Brannigan, Calvin,	Jas. Jeffrey Roche.
Breitmann, Hans,	Charles Godfrey Leland.
Briscoe, Margaret Sutton,	Mrs. A. J. Hopkins.
Brooke, Magdalen,	M. H. M. Capes.
Brooks, Esta,	Mrs. E. P. Evans.
"Brooksby,"	Capt. Pennell Elmhirst.
Brydges, Harold,	James Howard Bridge.
"Brunswick,"	Jeannette Leonard Gilder.
"Bunny,"	Carl E. Schultze.
Butt, Beatrice May,	Mrs. W. H. Alhusen.
"C,"	Mrs. J. Farley Cox.
Calderwood, M.,	William F. Robertson, M. D.
Cambridge, Ada,	Mrs. Geo. F. Cross.
Carroll, Lewis,	Rev. C. L. Dodgson.
Carter, Nick,	J. Russell Coryell.
Carton, R. C.,	R. C. Critchett.
Cartwright, Julia,	Mrs. Henry Ady.
Caryll, Ivan,	John Carl.
Caskoden, Edwin,	Charles Major.
Castlemon, Harry,	Charles A. Fosdick.
"Champ,"	Jas. W. Champney.
Chester, Eliza,	Harriet Eliza Paine.
Chester, Morley,	Emily Underwood.
"Chicot,"	Epes Winthrop Sargent.
Clark, Henry Scott,	Millard F. Cox.
Cleeve, Lucas,	Mrs. Howard Kingscote.
Clement, Clara Erskine,	Mrs. James Forbes Waters.
Coe, Captain,	E. Card Mitchell.
Collingwood, Harry,	W. J. C. Lancaster.
Collins, Mabel,	Mrs. Keningale Cook.
Collins, Percy,	Price Collier.
Colmore, G.,	Mrs. Gertrude C. Dunn.
Connor, Marie,	Marie Connor Leighton.
Connor, Ralph,	Rev. C. W. Gordon.
Conway, Hugh,	F. J. Fargus.
"Coo-ee,"	W. S. Walker.
Coolidge, Susan,	Sarah C. Woolsey.
Corelli, Marie,	Eva Mary Mackay.
Cornwall, Barry,	Bryan W. Proctor.
Craddock, Charles Egbert,	Mary N. Murfree.
Craik, Georgiana M.,	Mrs. May.
Crayon, Geoffrey,	Washington Irving.
Crinkle, Nym,	Andrew C. Wheeler.
Cromarty, Deas,	Mrs. Watson.
Crowfield, Christopher,	Harriet Beecher Stowe.
Cusack, George,	Grace Carter-Smith.
Cushing, Paul,	Roland A. Wood-Sey.
D'Ache, Caran,	Emmanuel Poire.
Dacre, J. Colne,	Mrs. A. S. Boyd.
"Dagonet,"	George R. Sims.
Dale, Alan,	Alfred J. Cohen.
Dale, Darley,	Francesca Maria Steele.
Daly, Frederic,	Lewis Frederic Austin.
Danbury Newsman,	J. M. Bailey.
Danby, Frank,	Mrs. Julia Frankau.
D'Anvers, N.,	Mrs. A. Geo. Bell.
Dean, Mrs. Andrew,	Mrs. Cecily Sidgwick.
De Burgh, A.,	E. M. Alborough.
Devoore, Ann,	Mrs. R. P. Walden.
Dix, Dorothy,	Elizabeth M. Gilmer.
Dobson, Austin,	Henry A. Dobson.
Donovan, Dick,	Joyce Emerson Muddock.
Dooley, Martin,	Finley Peter Dunne.
Dora d' Istria,	Helena Ghika.
Douglas, George,	George D. Brown.
Douglas, Marian,	Annie D. G. Robinson.
Doyle, Conan,	Sir Arthur C. Doyle.
Drinkwater, Jennie Maria,	Jennie Conklin, M. D.
"Droch,"	Robert Bridges.
Duncan, Sara Jeannette,	Mrs. Everard Cotes.
Dunning, Charlotte,	Charlotte D. Morse.
"Duchess, The,"	Mrs. Hungerford.
Egerton, George,	Mrs. R. Golding Bright.
Eichberg, Annie,	Mrs. John Lane.
Elia,	Charles Lamb.
Eliot, George,	Marian Evans.
Eliot, Max,	Mrs. Granville Alden Ellis
Emery, Clay,	Clayton Mayo.
Ettrick Shepherd,	James Hogg.
Falconer, Lanoe,	Mary Elizabeth Hawkes.
Fane, Violet,	Lady Currie.
Farnam, Ella,	Ella F. Pratt.
Farquharson, Martha,	Martha F. Finley.
Fern, Fanny,	Sara P. Parton.
Field, Michael,	Miss Bradley and Miss Cooper.
Fielding, Howard,	Charles W. Hooke.
Finn, Mickey,	Ernest Jarrold.
"Fitznoodle,"	B. B. Vallentine.
Fleming, George,	Julia Constance Fletcher.
Flynt, Josiah,	Josiah Flynt Willard.
Fontenoy, Marquise de,	Frederick Cunliffe-Owen.

Pen Name	Real Name
Forbes, Athol,	Forbes Alexander Phillips.
Forrester, Francis	Daniel Wise.
Forrester, Frank,	Henry Wm. Herbert.
Forrester, Isola,	Mrs. Reuben Merrifield.
"Fra Elbertus,"	Elbert Hubbard.
France, Anatole,	Jacques Anatole Thibault.
Francis, M. E.,	Mrs. Frank Blundell.
Frank, Dr.,	J. Frank Perry, M. D.
Gardiner, Helen Hamilton,	Mrs. S. A. Day.
"G. G.,"	Henry George Harper.
Garrett, Edward,	Mrs. John R. Mayo.
Gates, Eleanor,	Mrs. Richard Walton Tully.
"Gath,"	George Alfred Townsend.
George, G. M.,	Mrs. Spurrell.
Gerard, Dorothea,	Mme. Longard de Longarde.
Gerard, Emily,	Mme. de Laszowski.
Gerard, Morice,	Rev. J. Jessop Teague.
Gibbons, Lucy,	Lucy G. Morse.
Gift, Theo,	Mrs. G. S. Boulger.
Gilman, Winona,	Mrs. F. Schœffel.
Glyndon, Howard,	Mrs. Laura C. R. Searing.
Godfrey, Hal,	Charlotte O'Conor-Eccles.
Gooch, Fanny C.,	Fanny C. G. Iglehard.
Goodman, Maude,	Mrs. A. E. Scanes.
Gordon, A. M. R.,	Alexander Macgregor Roe.
Gordon, Julien,	Mrs. Van Rensselaer Cruger.
Gorki, Maxim,	Alexel Maximovitch Peshkov
Graduate of Oxford,	John Ruskin.
Graham, John,	David Graham Phillips.
Grand, Sarah,	Mrs. McFall.
Gray, Maxwell,	Miss M. G. Tuttiett.
Green, Anna Katharine,	Mrs. Charles Rohlfs.
Greenwood, Grace,	Sara Jane Lippincott.
Greville, Henri,	Mme. Durand.
Grey, Barton,	George Herbert Sass.
Grier, Sydney C.,	Miss Gregg.
Grile, Dod,	Ambrose Bierce.
Gubbins, Nathaniel,	Edward Spencer Mott.
"Gyp,"	Countess de Martel.
"H. H.,"	Helen Hunt Jackson.
Haliburton, Hugh,	James Logie Robertson.
Hall, Owen,	James Davis.
Hamilton, Gail,	Mary Abigail Dodge.
"Hard Pan,"	Geraldine Bonner.
Hardinge, E. M.,	(Ellen) Maud Going.
Harland, Marion,	Mrs. Mary V. Terhune.
Harrod, Frances,	Frances Forbes-Robertson.
Hawthorne, Alice,	Septimus Winner.
Hayes, Henry,	Ellen Olney Kirk.
Hegan, Alice Caldwell,	Mrs. Cale Young Rice.
Henry, John,	Hugh McHugh.
Henry, O.,	William Sydney Porter.
Herbert, Morgan,	Margaret M. H. Mather.
Heron, E. and H.,	Mrs. Kenneth and Mr. Hesketh Prichard.
Hickson, Mrs. Murray,	Mrs. S. A. P. Kitcat.
Hill, Headon,	F. Grainger.
"Historicus,"	Sir W. Vernon Harcourt.
Hobbes, John Oliver,	Mrs. Pearl Craigie.
Hoffman, Prof.,	Angelo Lewis.
Hogan, Ernest,	Reuben Crowdus.
Holdsworth, Annie E.,	Mrs. Lee-Hamilton.
"Holland,"	E. J. Edwards.
Holloway, Laura,	Laura C. H. Langford.
Hope, Anthony,	Anthony Hope Hawkins.
Hope, Ascot R.,	R. Hope Moncreiff.
Hope, Graham,	Jessie Hope.
Hopper, Nora,	Mrs. Wilfred H. Chesson.
Huntington, Faye,	Theodosia T. Foster.
Hutchinson, Ellen M.,	Ellen M. H. Cortissoz.
"Innominato,"	Mgr. Eugene Boeglin.
"Iota,"	Mrs. Mannington Caffyn.
"Ironquill,"	Eugene F. Ware.
Irons, Ralph,	Mrs. S. C. Cronwright.
"Ivory Black,"	Thomas A. Janvier.
"J. S. of Dale,"	Frederick J. Stimson.
Jay, W. L. M.,	Julia L. M. Woodruff.
Jean Paul,	J. P. F. Richter.
Johnson, Benjamin F.,	James Whitcomb Riley.
Johnson, Effie,	Mrs. Orson Richmond.
"Josiah Allen's Wife,"	Marietta Holley.
"June, Jenny,"	Mrs. David G. Croly.
Keith, Leslie,	Grace L. K. Johnston.
Kendall, B.,	Baroness Kurt von Kendall.
Kerr, Orpheus C.,	Robert C. Newell.
King, Katherine Douglas,	Mrs. Burr.
Kirk, Eleanor,	Eleanor K. Ames.
Kirke, Edmund,	James R. Gilmore.
Klingle, George,	Mrs. Holmes.
Knickerbocker, Cholly,	John W. Kellar.
Knickerbocker, Diedrich,	Washington Irving.
"Kron, Karl,"	Lyman Hotchkiss Bagg.

Pen Name	Real Name
Kvelve,	Rasmus B. Anderson.
Laurie, Annie,	Mrs. Chas. A. Bonfils.
Le Baron, Grace,	Mrs. Henry Macy Upham.
Lee, Home,	Harriet Parr.
Lee, Vernon,	Violet Paget.
L. E. L.,	Letitia E. Landon.
Leslie, Amy,	Lillie West Brown.
Leslie, Mrs. Frank,	Mrs. Miriam F. F. Wilde.
Logan, Celia,	Mrs. J. B. Connelly.
Logan, Olive,	Mrs. W. Wirt Sikes.
Lope de Vega,	Lope Felix de Vega Carpio.
Lothrop, Amy,	Anna Bartlett Warner.
Loti, Pierre,	L. M. Julien Viaud.
Ludlow, Johnny,	Mrs. Henry Wood.
Luska, Sidney,	Henry Harland.
Lyall, Edna,	Ada Ellen Bayly.
Lys, Christian,	Percy Jas. Brebner.
"M. E. W. S.,"	Mrs. Jno. Sherwood.
Maartens, Maarten,	J. N. W. van der Poorten Schwartz.
Maitland, Thomas,	R. Buchanan.
McManus, Blanche,	Mrs. M. F. Mansfield.
MacDermott, B.,	Robert M. Sillard.
Mackenzie, Fergus,	James Anderson.
Mackie, Pauline B.,	Mrs. Herbert M. Hopkins.
Maclaren, Ian,	Rev. John Watson.
Maclean, Mona,	Miss Todd.
Macleod, Fiona,	William Sharp.
MacNab, Frances,	Agnes Fraser.
Malet, Lucas,	Mrs. William Harrison.
"Maori,"	James Inglis.
Marchant, Bessie,	Mrs. J. A. Comfort.
Marlitt, E.,	Henriette Eugenie John.
Marlowe, Charles,	Harriet Jay.
"Marshes, A Son of the,"	Mrs. Owen Visger.
Martin, Ellis,	Marah Ellis Ryan.
Martin, George Madden,	Mrs. Atwood R. Martin.
Marvel, Ik.,	Donald G. Mitchell.
Marvel, Matthew,	E. P. Ackerman.
Mathers, Helen,	Mrs. Henry Reeves.
Maxwell, Ellen Blackmer,	Ellen B. Barker.
May, Sophie,	Rebecca Sophia Clarke.
Meade, L. T.,	Mrs. F. Toulmin Smith.
Meredith, Owen,	Earl of Lytton.
Merriam, Florence A.,	Mrs. Florence M. Bailey.
Merriman, Henry Seton,	Hugh Stowell Scott.
Mignon, August,	John A. Darling.
Miller, Joaquin,	Cincinnatus Heine Miller.
Miller, Olive Thorne,	Harriet Mann Miller.
Millman, Helen,	Mrs. Caldwell Crofton.
Miln, Louise Jordan,	Mrs. George Crichton Miln.
"Miss Teerius,"	Mrs. Fred Horner.
Montbard, Georges,	Charles Auguste Loyes.
Moore, Mollie E.,	Mary Evelyn Moore Davis.
Mortimer, Geoffrey,	Walter M. Gallichan.
Morton, Hugh,	Charles M. S. McLellan.
Mowbray, J. P.,	Andrew C. Wheeler.
Mulholland, Rosa,	Lady Gilbert.
Mulock, Miss,	Mrs. G. L. Craik.
Nasby, Petroleum V.,	David Locke.
Nesbit, E.,	Mrs. Hubert Bland.
Newton, Aubrey,	Ambrose Winterton.
Nox, Owen,	Charles B. Cory.
Nordau, Max,	Simon Sudfeld.
North, Christopher,	John Wilson.
North, Barclay,	William C. Hudson.
Nye, Bill,	Edgar Wilson Nye.
O'Dowd, Cornelius,	Charles Lever.
"O. K,"	Mme. Ulga Kireef Novikoff.
Ogden, Ruth,	Frances Otis Ide.
Ogilvy, Gavin,	J. M. Barrie.
Oldcastle, John,	Wilfred Meynell.
"Old Sleuth,"	Harlan P. Halsey.
O'Neill, Rose Cecil,	Mrs. Harry Leon Wilson.
Optic, Oliver,	Wm. T. Adams.
O'Reilly, Miles,	Charles G. Halpin.
O'Rell, Max,	Paul Blouet.
Otis, James,	James Otis Kaler.
"Ouida,"	Louise de la Ramée.
Owen, Jean A.,	Mrs. Owen Visger.
Oxenham, John,	Mr. Dunkerley.
Palmer, Lynde,	Mrs. A. A. Peebles.
"Pansy,"	Isabella Macdonald Alden.
Parley, Peter,	Samuel G. Goodrich.
Partington, Mrs.,	Benj. P. Shillaber.
Paston, George,	Miss E. M. Symonds.
Patton, J. B.,	Edmund White.
Paul, John,	Chas. Henry Webb.
Perkins, Eli	Melville D. Landon.
Phiz,	H. K. Browne.
Phœnix, John,	George H. Derby.
Pindar, Peter,	John Wolcott.

Pen Name	Real Name
Plymley, Peter,	Sydney Smith.
Poor Richard,	Benjamin Franklin.
"Porte Crayon,"	David H. Strother.
Powell, Richard Stillman,	Ralph Henry Barbour.
Prescott, Dorothy,	Agnes Blake Poor.
Prescott, E. Livingston,	Edith K. Spicer-Jay.
Prevost, Francis,	Harry F. P. Battersby.
Prout, Father,	Francis S. Mahony.
"Q.,"	Arthur T. Quiller-Couch.
Quad, M.,	C. B. Lewis.
Quinn, Dan,	Alfred Henry Lewis.
Quirinus,	Dr. Döllinger.
Raimond, C. E.,	Elizabeth Robins.
Raine, Allen,	Mrs. Beynon Puddicombe.
Raleigh, Cecil,	Mr. Rowlands.
Ranger, Robin,	James M. Freeman.
Redden, Laura Catherine,	Laura C. Searing.
Reid, Christian,	Frances F. Tiernan.
Rheinhardt, Rudolph H.,	George Hempl.
Riddell, Mrs. J. H.,	Mrs. C. E. L. Riddell.
"Rita,"	Mrs. E. M. J. von Booth.
Rives, Amélie,	Princess Troubetskoi.
Roy, Rob,	John Macgregor.
Robertson, Muirhead,	Henry Johnson.
Robinson, A. Mary F.,	Mme. Emile Duclaux.
Rosny, J. H.,	The Brothers Boex.
Ross, Adrian,	Arthur Reed Ropes.
Ross, Albert,	Linn Boyd Porter.
Ross, Martin,	Violet Martin.
"Rover,"	Alfred Gibson.
Rowe, Bolton,	Benj. C. Stephenson.
Rowe, Saville,	Clement Scott.
"Rusticus,"	J. K. Fowler.
Rutherford, Mark,	Wm. Hale White.
St. Aubyn, Alan,	Frances Marshall.
St. Clair, Victor,	G. Waldo Browne.
St. Laurence,	Alfred Laurence Felkin.
Saint Remy,	The Duc de Morny.
"Saladin,"	William Stewart Ross.
Sand, George,	Mme. Dudevant.
Sanghamita, Sister,	Countess M. A. de S. Canavarro.
Saunders, Marshall,	Margaret M. Saunders.
Schreiner, Olive,	Mrs. S. C. Cronwright.
Scriblerus, Martinus,	Pope, Swift, and Arbuthnot.
Seeley, Charles Sumner,	John William Munday.
Setoun, Gabriel,	Thomas Nicoll Hepburn.
"Sevenoaks,"	Alfred S. Edwards.
Sharp, Luke,	Robert Barr.
Shaw, Flora,	Lady Flora Lugard.
Sidney, Margaret,	Harriett Mulford Lothrop.
Siegerson, Dora,	Mrs. Clement Shorter.
Siegvolk, Paul,	Albert Mathews.
Sinjohn, John,	John Galsworthy.
Slick, Sam,	T. C. Haliburton.
Smith, T. Carlyle,	John Kendrick Bangs.
Spinner, Alice,	Mrs. Augusta Zelia Fraser.
"Spy,"	Leslie Ward.
Stanlaw, Penrhyn,	Penrhyn Stanley Adamson.
Stepniak,	S. Kartcheffsky.
Sterne, Stuart,	Gertrude Bloede.
Stewart, Philip,	Philip Robinson.
"Stonehenge,"	J. H. Walsh.
Stretton, Hesba,	Hannah Smith.
Stuart, Cosmo,	Cosmo Chas.Gordon-Lennox.
Stuart, Esme,	Miss Leroy.
Stuart, Leslie,	T. A. Barrett.
Sturgis, Dinah,	Mrs. Belle A. Whitney.
"Surfaceman,"	Alex. Anderson.
Swan, Annie S.,	Mrs. Burnett Smith.
Swift, Benjamin,	William Romaine Paterson.
Sylva, Carmen,	Elizabeth, Queen of Rumania.
Symington, Maggie,	Mrs. Sarah M. Blathwayt.
Syntax, Dr.,	Wm. Coombe.
Tay Pay,	Thomas Power O'Connor.
Temple, Hope,	Mme. André Messager.
Thanet, Octave,	Alice French.
Theuriet, André,	Claude Adhemar.
"The Widow,"	Teresa Dean.
Thomas, Annie,	Mrs. Pender Cudlip.
Thompson, Wolf,	Ernest Thompson Seton.
Thorn, Margaret,	Ethel S. Cann.
Thorpe, Kampa,	Elizabeth Whitfield Bellamy.
Titcomb, Timothy,	J. G. Holland.
Titmarsh,	W. M. Thackeray.
"Tivoli,"	Horace W. Bleackley.
"Toby, M. P.,"	Henry W. Lucy.
Tottenham, Blanche L.,	Mrs. Arthur Ram.
Tower, Martello,	Commander F. M. Norman.
Trask, Katrina,	Mrs. Spencer Trask.
Travers, Graham,	Dr. Margaret Todd.
"Trois-Etoiles,"	E. C. Grenville-Murray.
Turner, Ethel,	Mrs. H. R. Curlewis.
Twain, Mark,	Samuel L. Clemens.
Tyler, G. Vere,	Mrs. Lachlan Tyler.
Tynan, Katherine,	Mrs. H. A. Hinkson.
Tytler, Sarah,	Henrietta Keddie.
"Uncle Charlie,"	Charles Welsh.
"Uncle Remus,"	Joel Chandler Harris.
Vandegrift, Margaret,	Margaret T. Janvier.
Varley, John Philip,	Langdon E. Mitchell.
Verne, Jules,	M. Olchewitz.
Voltaire,	François Marie Arouet.
Ward, Artemus,	Charles F. Browne.
Warden, Florence,	Mrs. G. James.
Wetherell, Elizabeth,	Susan Warner.
Winter, John Strange,	Mrs. H. E. V. Stannard.
Zadkiel,	Capt. R. J. Morrison, R. N.
Zmaj,	Jovan Jovanovic.

MYTHOLOGY

The term mythology is now used appropriately for that branch of knowledge which considers the notions and stories, particularly among the Greeks and Romans, respecting gods and demigods, their pretended origin, their actions, names, attributes, worship, images, and symbolical representations.

Gods of the Greeks and Romans. The principal deities of each were common to both, and we can include them all in one system of classification.

"The ancient Greeks believed their gods to be of the same shape and form as themselves, but of far greater beauty, strength, and dignity. They also regarded them as being of much larger size than men; for in those times great size was esteemed a perfection, supposed to be an attribute of divinities, to whom they ascribed all perfections. A fluid named Ichor supplied the place of blood in the veins of the gods. They were immortal, but they might be wounded or otherwise injured. They could make themselves visible or invisible to men, and assume the forms of men or of animals. Like men, they stood in daily need of food and sleep. The meat of the gods was called Ambrosia, their drink Nectar. The gods, when they came among men, often partook of their food and hospitality.

"Like mankind, the gods were divided into two sexes; namely, gods and goddesses. They married and had children. Often a god became enamored of a mortal woman, or a goddess was smitten with the charms of a handsome youth; these love-tales form a large portion of Grecian mythology.

"To make the resemblance between gods and men more complete, the Greeks ascribed to their deities all human passions, both good and evil. They were capable of love, friendship, gratitude, and all affections; on the other hand, they were frequently envious, jealous, and revengeful. They were particularly careful to exact all due respect and attention from mankind, whom they required to honor them with temples, prayers, costly sacrifices, splendid processions, and rich gifts; and they severely punished insult or neglect."

(1) Superior Gods.—Jupiter, Neptune, Apollo, Mars, Mercury, Vulcan, Janus, Saturn, Pluto, Bacchus, Juno, Minerva, Diana, Venus, Vesta, Ceres, Rhea. (2) Inferior Gods.—Cœlus, Sol, Æolus, Plutus, Æsculapius, Pan, Luna, Aurora, Nox, Iris, Latona, Themis, Nemesis, Fortuna, Fama. Several gods peculiar to the Greeks: Enyo, Ergane, Cotytto, etc. Several gods peculiar to the Romans: Priapus, Terminus, Vertumnus, Pomona, Flora, Feronia, Pales, etc. (3) Mythical Beings.—Titans, Giants, Pygmies, Tritons, Sirens, Nymphs, Muses, Graces, Hours, Seasons, Fates, Furies, Harpies, Winds, Genii, Somnus, Mors, Manes, Lares, Penates, Satyrs, Fauns, Gorgons, Amazons, Centaurs, Minotaur, Chimæra, Geryon, Hydra, Pegasus, Scylla, Charybdis, Sphinx, Typhon.

Most of the heroes were at last viewed as sons of gods, and often of Jupiter himself. The veneration for the heroes was, however, less sacred and less universal than the worship of the gods. The heroes received only an annual commemoration at their tombs, or in the vicinity, when offerings and libations were presented to them. Sometimes the respect paid them exceeded these limits, and they were exalted to the rank and honors of the gods. The introduction of solemnities in memory of heroes is ascribed to Cadmus.

(4) Deified Heroes.—Inachus, Phoroneus, Ogyges, Cecrops, Deucalion, Amphictyon, Cadmus, Danaus, Pelops, Minos, Perseus, Hercules, Theseus, Jason, Castor, Pollux, and heroes of the Theban and the Trojan Wars, etc.

Ach'eron. Acheron, Styx, Cocytus, and Phlegethon, are known as rivers of hell. These regions below the earth were considered as the residence of departed souls, where after death they received rewards or punishments according to their conduct upon earth.

Achil'les. The son of Peleus and Thetis. In the Trojan War he was the most distinguished for his strength and bravery. When Achilles was born, Thetis plunged him in the river Styx, which made him invulnerable in every part except the heel, by which she held him. And in this heel he received a fatal wound.

A'cis. The nymph, Galatea, loved Acis, the handsome shepherd, and the monstrous Cyclop, Polyphemus, sued in vain for her favor.

Acris'ius. Son of Abas, King of Argos, grandson of Lynceus, and great-grandson of Danaus. An oracle had declared that Danaë, the daughter of Acrisius, would give birth to a son who would kill his grandfather. For this reason he kept Danaë shut up in a subterranean apartment, or in a brazen tower. But here she became the mother of Perseus, by Zeus, who visited her in a shower of gold.

Actæ'on. Actæon was the son of Aristæus and Autonoë, daughter of Cadmos. He was reared by Chiron, and becoming passionately fond of the chase, passed his days chiefly in pursuit of wild beasts that haunted Mount Cithæron.

Adis'sechen. In Indian mythology the serpent of a thousand heads which hold the universe in place.

Adme'tus. A king of Thessaly, and husband of Alcestis, famous for his misfortunes and his piety. Apollo tended the flocks of Admetus for nine years, when he was obliged to serve a mortal for having slain the Cyclops.

Ado'nis. A beautiful youth, loved by Venus, and slain by a wild boar which he was hunting. Venus was inconsolable at his loss, and at last obtained from Proserpine that Adonis should spend six months on earth with her and six months among the shades. Adonis is also the name given to a Syrian god, who was supposed to be slain by a wild boar in Lebanon, and to revive every year. He is identified with the Greek Adonis, beloved by Venus.

Adram'melech. God of the people of Sepharva'im, to whom infants were burned in sacrifice (Kings xvii, 31). Probably the sun.

Adras'tus. A king of Argos, and the institutor of the Nemean games.

Æa'cus. Son of Jupiter and grandson of the river-god Asopus. Æacus was renowned in all Greece for his justice and piety, and after his death became one of the judges in hades.

Ægе'on. One of three brothers, huge monsters, with fifty heads and a hundred arms. According to the most ancient tradition, Ægeon and his brothers conquered the Titans when they made war upon the gods, and secured the victory to Zeus, who thrust the Titans into Tartarus, and placed Ægeon and his brothers to guard them.

Ægе'us. King of Athens, and father of Theseus.

Ægir'. God of the ocean, whose wife is Rana. They had nine daughters, who wore white robes and veils. These daughters are the billows, etc.

Æ'gis. The shield of Jupiter made by Vulcan was so called, and symbolized "Divine protection." The shield of Minerva was called an ægis also.

Æ'gle. The mother of the graces. Also the name of one of the sisters of Phaeton.

Ælu'rus. The cat. An Egyptian deity held in the greatest veneration. Herodotus tells us that Diana, to avoid being molested by the giants, changed herself into a cat. The deity used to be represented with a cat's head on a human body.

Æne'as. A Trojan prince, son of Anchises and the goddess Venus. When Troy fell, he quitted the city with his followers, accompanied by his father and son, visited various countries, settled in Latium, and married Lavinia, the daughter of Latinus. To him tradition ascribes the commencement of the Roman Empire.

Æ'olus. Under the name of Æolus both Greeks and Romans worshiped a god and ruler of winds and storms. He was called the son of Jupiter, sometimes of Neptune, and by others, of Hippotes, an ancient lord of the Lipari Isles. From Jupiter he received his authority over the winds, which had previously been formed into mythical persons, and were known by the names Zephyrus, Boreas, Notus, and Eurus, and were afterwards considered the servants of Æolus. He held them imprisoned in a cave of an island in the Mediterranean Sea, and let them loose only to further his own designs or those of others, in awakening storms, hurricanes, and floods. He is usually described by the poets as virtuous, upright, and friendly to strangers. He is represented as a vigorous man supporting himself in the air by wings, and blowing into a shell trumpet like a Triton, while his short mantle is waving in the wind.

Æs'acus. A son of Priam, who was enamored of the nymph Hesperia, and, on her death, threw himself into the sea, and was changed by Thetis into a cormorant.

Æs'cula'pius. The son of Apollo and Coronis, the daughter of a Thessalian King. By his father he was committed to the care of the wise Centaur, Chiron, who taught him botany, together with the secret efficacy of plants. By means of this information, Æsculapius became the benefactor of mankind. In tradition he is noted as having awakened the dead.

Æsir, plural of As or Asa, the celestial gods of Scandinavia, who lived in Asgard (god's ward), situate on the heavenly hills between earth and the rainbow. The chief was Odin.

Æson. The father of Jason and brother of Pelias who seized the kingdom rightfully belonging to Æson.

Æs'tas. The god of summer; he is crowned with corn and generally holds a sickle in his hand. By poets and artists the seasons are all personified. They are frequently seen together on relievi, medals, and gems. The artists have also followed the poets in representing the four ages of life by depicting Ver (spring), as infantile and tender; Æstas (summer), as young and sprightly; Autumnus (autumn), mature and manly; and Hyems (winter), as old and decrepit.

Æta. A king of Colchis, was father of Medea.

Agamem'non. King of Argos, in Greece, and commander-in-chief of the allied Greeks who went to the siege of Troy. Agamemnon married Clytemnestra, the daughter of Tyndareus, by whom he became the father of Iphianassa (Iphigenia). When Helen, the wife of Menelaus, was carried off by Paris, and the Greek chiefs resolved to recover her by force of arms, Agamemnon was chosen their commander-in-chief.

Ag'anip'pe. A fountain at the foot of Mount Helicon, in Bœotia, consecrated to Apollo and the Muses, and believed to have the power of inspiring those who drank of it.

Ah'ri'man. A deity of the ancient Persians, being a personification of the principle of evil. To his agency were ascribed all the evils existing in the world. Ormuzd the principle of good, is eternal, but Ahriman is created, and will one day perish.

A'jax. The son of Telamon, and one of the Greek heroes in Homer's "Iliad." He was of great stature, strength, and courage, but dull in mind. He killed himself out of vexation because the armor of Hector was awarded to Ulysses.

Ak'uman. The most malevolent of all the Persian gods.

Alas'tor. A surname of Jupiter. Among the lesser gods the name Alastor is given to the unforgetting, revengeful spirit, who, in consequence of some crime perpetrated, persecutes a family from generation to generation.

Alces'tis, or **Alces'te.** A daughter of Pelias, and the wife of Admetus. To save her husband's life, she died in his stead. By request of Apollo, the gods had granted eternal life to Admetus but on the condition, that when the appointed time came for the good king's death, some one should be found willing to die in his stead. This decree was reported to Alcestis, Admetus' beautiful young wife, who offered herself as substitute, and cheerfully gave her life for her husband. But immortality was too dearly bought at such a price; and Admetus mourned until Hercules, pitying his grief, descended into hades, and brought her back.

Alec'to. One of the Furies. She is represented with her head covered with serpents, and breathing vengeance, war, and pestilence.

Alec'tryon. A servant of Mars, who was changed by him into a cock because he did not warn his master of the rising of the sun.

Al'fadur. In Scandinavian Mythology the Supreme Being — Father of all.

Alphe'os and Arethu'sa. The Greek fable says that Alphe'os, the river-god, fell in love with the nymph Arethu'sa, who fled from him in affright. Diana came to her rescue.

Al Si-rat'. A narrow bridge extending from this world, to the next over the abyss of hell, which must be passed by every one who would enter paradise.

Althæ'a. Sister to Atalanta, and mother of Meleager. She caused the death of her son and killed herself in remorse.

Am'azons. A nation of women-soldiers who lived in Scythia. Hercules defeated them, and gave Hippolyte, their queen, to Theseus for a wife.

Ambro'sia. The food of the gods; so called because it made them not mortal, i. e., it made them immortal.

Amaci'tia. The goddess of friendship. In Greek

mythology she was represented with her head bare, her dress open near the heart, holding in her left hand an elm, around which a vine clung, filled with clusters of grapes.

Am'mon. One of the names bestowed on Jupiter. As Jupiter Ammon, he was represented as having the horns of a ram.

Amphi'on. Son of Jupiter and Antiope, and brother of Zethus. They were born on Mount Cithæron, and grew up among the shepherds. When they had learned their origin they marched against Thebes, where Lycus reigned, the husband of their mother Antiope, who had married Dirce in her stead. They took the city, and killed Lycus and Dirce, because they had treated Antiope with great cruelty. After they had obtained possession of Thebes, they fortified it by a wall. Amphion had received a lyre from Mercury, on which he played with such magic skill that the stones moved of their own accord and formed the wall.

Ancæ'us. A son of Neptune who, having left a cup of wine untasted to pursue a wild boar, was killed by it, which gave rise to the proverb, "There's many a slip between the cup and the lip."

Anchi'ses. King of Dardanus and father of Æneas. On the capture of Troy by the Greeks, Æneas carried his father on his shoulders from the burning city.

Androm'ache. Daughter of one of the kings of Thebes, and wife of Hector.

Androm'eda. Andromeda, to atone for a crime of which she was guiltless, was to have become the victim of divine anger. The whole country was laid waste with plagues, which, according to the oracle of Jupiter Ammon, were not to cease until Andromeda, swallowed up by a sea-monster, should, by her death, expiate the crime of her mother. Perseus beheld the maiden fastened with chains to a rock, and a monster rising out of the sea ready to devour her; while her parents stood on the shore in despair. Perseus rushed down upon the monster, struck the deadly blow, delivered the fair maiden and obtained her as his wife. After her death she was placed among the stars.

Angurva'del. Frithiof's sword, inscribed with Runic letters, which blazed in time of war, but gleamed with a dim light in time of peace.

Antæ'us. One of the giant sons of Neptune whose home was in Libya. His strength was invincible so long as he remained in contact with his mother earth. Once lifted from the earth and allowed again to touch it his strength increased. One of the exploits ascribed to Hercules was the exhibition of his strength in overcoming Antæus.

Antig'one. In the story of Oedipus, Antigone appears as a noble maiden, with a truly heroic attachment to her father and brothers. When Oedipus had put out his eyes, and was obliged to quit Thebes, he was accompanied by Antigone, who remained with him till he died at Colonus, and then returned to Thebes. After her two brothers had killed each other in battle, and Creon, the King of Thebes, would not allow Polynices to be buried, Antigone buried him by night, against the orders of Creon, for which offense he ordered her to be buried alive. She, however, killed herself on hearing of the sentence. The death of Antigone is the subject of a tragedy written by Sophocles. (See Eteocles.)

Aph'rodite. One of the names under which Venus was worshiped. She was said to be the daughter of Zeus, but later poets frequently relate that she was sprung from the foam of the sea, whence they derive her name.

A'pis. One of the Egyptian gods worshiped under the form of an ox.

Apol'lo. According to both Greeks and Romans, Apollo was the son of Jupiter and Latona, born on the island Delos. He was regarded as the god of the sciences and the arts, especially poetry, music, and medicine. They ascribed to him the greatest skill in the use of the bow and arrow, which he proved in killing the serpent Pytho, the sons of Niobe, and the Cyclops. The last achievement incensed Jupiter, and he was banished from Olympus. During his exile Apollo abode as a shepherd with Admetus, King of Thessaly. All sudden deaths were believed to be the effect of his arrows; and with them he sent the plague into the camp of the Greeks before Troy. As he had the power of punishing men, so he was also able to deliver men, if duly propitiated. From his being the god who afforded help, he is the father of Æsculapius, the god of the healing. As a god of inspiration and prophecy he gave oracles and communicated this gift to other gods and to men. The stories of Apollo in Greek mythology are much the same as the stories concerning Crishna in Hindoo mythology.

Arach'ne. A Mæonian maid, named Arachne, proud of her skill in weaving and embroidery, in which arts the goddess of wisdom had instructed her, ventured to deny her obligation, and challenged her patroness to a trial of skill. Minerva accepted the challenge and they met to try their skill. Arachne produced a piece of cloth in which the amours of the gods were woven, and as the goddess could find no fault with it, she tore the work to pieces. Arachne, in despair, hung herself. Athena loosened the rope and saved her life, but the rope was changed into a cobweb, and Arachne herself into a spider.

Ares. The Greek god of war, known as Mars by the Romans.

Arethu'sa. A wood nymph of Elis, in Greece, who, pursued by the River Alpheus, was changed into a fountain and ran under the sea. The waters of the fountain, mingled with the river, rose again in the fountain of Arethusa in the island of Ortygia, near Syracuse. According to another version of the same legend, it was Diana herself, and not the nymph Arethusa, whom the river-god of the Alpheus pursued; and when this pursuit ended in the island of Ortygia, then arose the fountain Arethusa.

Ar'gonauts. One of the most celebrated enterprises of the heroic ages, one which forms a memorable epoch in Grecian history, a sort of separation-point between the fabulous and the authentic, was the Argonautic expedition. This was a voyage from Greece to Colchis in order to obtain the golden fleece, conducted by Jason, the son of Æson, King of Thessaly. The undertaking was imposed upon him by his uncle Pelias. He invited the most illustrious heros of Greece to unite in the expedition, and among those who joined him were Hercules, Castor and Pollux, Peleus, Pirithous, and Theseus. The vessel built for the purpose was named Argos, which after various adverse events arrived at Æa, the capital of Colchis.

Ar'go. A fifty-oared ship in which Jason and his companions made their voyage to Colchis in search of the golden fleece. This ship was built of pines cut from Mount Pelion, which, although larger than any other previously constructed, moved lightly and easily, and was therefore called the Argo (swift-sailing). From her name, those who embarked in her were called Argonauts. The mast of the Argo was taken from the forest of Dodona, where the oaks were endowed with the power of making predictions; therefore, the ship was regarded as an animated being, in accord with Fate, to which a man might commit himself with confidence.

Ar'gus. A fabulous being of enormous strength, who had a hundred eyes, of which only two were asleep at once, whence he was named Panoptes, or the All-seeing.

Ari'adne. Daughter of Minos, second king of Crete, and Pasiphæ, fell in love with Theseus, who was shut up in the labyrinth to be devoured by the Minotaur. She gave Theseus a clew of thread by which he extricated himself from the windings of the labyrinth.

Ar'ion. A Greek bard, who having thrown himself into the sea to escape from pirates, was taken up by dolphins, and carried on their backs safe to land.

Ar'temis. Artemis, the daughter of Zeus and Leto, or Latona, and twin sister of Apollo, was the goddess of chastity, of the chase and the woods.

As'gard. In Scandinavian mythology Asgard represents the city of the gods, situated at the center of the universe, and accessible only by the bridge Bifrost, i. e., the rainbow.

A'sir. In Northern mythology the most powerful, though not the oldest, of the deities; usually reckoned as twelve gods and twelve goddesses. The gods are — Odin, Thor, Baldur, Niörd, Frey, Tyr, Bragi, Heimdall, Vidar, Vali, Ullur, and Forseti; the best-known of the goddesses — Frigga, Freyja, Iduna, and Saga.

Astar'te. Noticed in the Old Testament under the name Ashteroth, an ancient Syrian deity, who was adored as the goddess of the moon; hence Jeremiah calls her "the queen of heaven." Solomon built her a temple on the Mount of Olives.

Atalan'ta. A maid of Arcadia who was forsaken by her parents and reared in the hills. Found by some hunters she afterward joined in the Calydonian hunt, and at the funeral games of Pelias, she won the prize in wrestling.

Atlan'tis. A mythical island in the west, mentioned by Plato, Pliny and other ancient writers, and said to have sunk beneath the ocean.

At'las. One of the Titans, son of Iapetus and Clymene. Being conquered by Jupiter, he was condemned to the labor of bearing on his head and hands the heaven he had attempted to destroy.

At'ropos. One of the three Parcæ, or Fates; the one that cut the thread of life. As wife of Pluto, and queen of hell, Proserpine presided over the death of mankind; and according to the opinion of the ancients, no one could die if the goddess herself, or Atropos, the minister, did not cut off one of the hairs from the head.

Auge'an Stables. The stables of Augeas, King of Elis, in Greece. In these stables he had kept 3,000 oxen, and the stalls had not been cleansed for thirty years, When Hercules was appointed to cleanse these stables, he caused two rivers to run through them.

Augurs. Men whose principal business was to observe the flight and cry of birds from which they predicted future events. They also explained other omens and signs

Au'ræ. Sylphs, Nymphs of the air, a species of sportive, happy beings, and well-wishers to mankind. they were winged and represented as flying.

Auro'ra. The goddess of the morning, or of the dawn. She is sometimes described as the goddess of day. She is represented as standing in a magnificent chariot, which is sometimes drawn by winged steeds. A brilliant star sparkles upon her forehead; while with one hand she grasps the reins, she holds in the other a lighted torch.

Av'atar. The incarnation or descent of the deity Vishnu, of which nine are believed to be past. The tenth is yet to come when Vishnu will descend from heaven on a white-winged horse, and will introduce on earth a golden age of virtue and peace.

Aver'nus. Properly, a small, deep lake in Campania, occupying the crater of an extinct volcano, and almost completely shut in by steep and wooded heights. The entrance to the infernal regions, called Avernus, is described as having around it a host of dreadful forms: Disease, Old Age, Terror, Hunger, Death, War, Discord, and the Furies, the avengers of guilt.

Aza'zel. According to Ewald, a demon belonging to the pre-Mosaic religion. Another opinion identifies him with Satan, or the devil. Milton makes him Satan's standard bearer.

Az'rael. In the Jewish and the Mohammedan mythology, the name of an angel who watches over the dying, and separates the soul from the body. It means in Hebrew "help of God."

Ba'al. In Hindu mythology, god of the sun. He was worshiped by the Phenicians

Bac'chus. The god of wine.

Baim'wawa. In American Indian folk-lore, the sound of thunder.

Bal'der. The god of peace, son of Odin and Frigga. He was killed by the blind war-god, but was restored to life at the general request of the gods.

Ba'lios. A famous horse given by Neptune to Peleus as a wedding present, and afterwards given to Achilles.

Bal'mung. In Norse mythology, the sword of Siegfried forged by Vulcan.

Ban'shee. The domestic spirit of certain Irish or Scottish families. It was supposed to wail at the death of one of the family. The Banshee is allowed only to families of pure stock.

Bar'guest. A frightful goblin among fairies. It was armed with teeth and claws, and was an object of terror in the north of England.

Bay-tree. The tree of Apollo, hence a shield against lightning. A wreath of bay-leaves was worn as protection during thunder-storms. The withering of a bay-tree was dreaded as an omen of death.

Beel'zebub. A heathen god of evil at the head of nine ranks of demons and second only to Satan. He was also the god of flies.

Befa'na. The fairy of Italian children, who is supposed to fill their stockings with toys on Twelfth Night.

Beller'ophon. A prince who rode the winged horse, Pegasus, controlling him with a golden bridle, the gift of Minerva. By aid of Pegasus, he killed the lion-headed monster, the Chimæra.

Bello'na. Goddess of war. She prepared the chariot of Mars when he was going to war, and appeared in battles armed with a whip and holding a torch.

Bel'phegor. A god of evil, worshiped by the Moabites. He was an archfiend who had been an archangel.

Be'lus. The Chaldean name of the sun.

Bereni'ce. Princess who vowed to sacrifice her hair to the gods, if her husband returned in safety. She suspended her hair in the temple of the war-god, but the winds wafted it to heaven, where it still forms the seven stars near the constellation Leo.

Berg Folk. Pagan spirits doomed to live on the Scandinavian hills till the day of redemption.

Ber'tha. The white lady who guards good German children, but is the terror of the bad, who fear her iron nose and big feet. She corresponds to the Italian Befana.

Bheem. One of the five brotherhoods of Indian demi-gods, famous for his strength

Bi'frost. In Norse mythology, a bridge between earth and heaven, over which none but the gods could travel. It leads to the palace of the Fates.

Bil'skirnir. A wonderful palace built by Thor for the use of peasants after death.

Bladud. A mythical king of England, who built the city of Bath, and dedicated the medicinal springs to Minerva.

Bo'reas. The name of the north wind blowing from the Hyperborean mountains. He was son of Astræus and Aurora.

Bra'gi. The son of Odin and Frigga and the god of poetry and eloquence. He is represented as an old man with flowing white beard.

Brah'ma. The supreme god of the Hindus, represented with four heads and four arms. He is regarded as the creator of the universe, and forms, with Vishnu, the preserver, and Siva, the destroyer, the divine triad.

Briareus. A giant with fifty heads and a hundred hands. He hurled a hundred rocks at Jupiter in a single throw and Jupiter bound him under Mount Ætna with a hundred chains.

Bubas'tis. Name applied to the cat as worshiped among Egyptian gods.

Bukada'win. The god of famine among American Indians.

Caa'ba. Shrine of Mecca, said by the Arabs to have been built by Ishmael, assisted by his father Abraham.

Caco'dæ'mon. An evil spirit consulted by the Greeks.

Ca'cus. A famous robber, son of Vulcan and Medusa. He is represented as a three-headed monster.

Cad'mus. The hero who, having slain the dragon which guarded the fountain of Dirce, in Bœotia, sowed the teeth of the monster. Then a number of armed men sprang up and surrounded Cadmus with intent to kill him. By the counsel of Minerva, he threw a precious stone among the armed men, who, striving for it, killed one another. According to tradition, Cadmus introduced the use of letters into Greece — the alphabet, as introduced by him, consisting of sixteen letters.

Cadu'ceus. A white wand carried by Roman officers when they went to treat for peace. It had two winged serpents entwined round the top.

Cal'chas. The son of Thestor. He was the wisest of the soothsayers among the Greeks at Troy. He died from grief on meeting with a soothsayer who proved wiser than he.

Calli'ope. The Muse who presided over epic poetry and rhetoric. She is generally depicted using a stylus and wax tablets, the ancient writing materials.

Callis'to. A nymph of Arcadia, the mother of Arcas, who was changed into a bear and placed in the heavens as a constellation.

Cal'pe. One of the two pillars of Hercules. The other was named Abyla. These two were originally only one mountain, which Hercules tore asunder; he then poured the sea between them.

Calyp'so. One of the daughters of Atlas. When Ulysses was shipwrecked on her coasts she received him with hospitality, and offered him immortality if he would remain with her, which he refused to do. After seven years' delay he was permitted to depart from the island.

Cama. The god of love and marriage in Indian mythology.

Cam'deo. The Hindu god of love.

Came'næ. Nymphs who prophesied. Roman poets sometimes gave the name to the Muses.

Camil'la. Virgin queen of the Volscians. She was so swift that she could run over a field of corn without bending a blade, or make her way over the sea without wetting her feet.

Cano'pus. The Egyptian god of water. The Chaldeans worshiped fire, and sent all the other gods a challenge, which was accepted by a priest of Cano'pus. The Chaldeans lighted a vast fire. Then the Egyptian deity spouted out torrents of water and quenched it.

Cassan'dra. Daughter of Priam and Hecuba. She was passionately loved by Apollo.

Cassiope'ia. The chief stars of this constellation form the outline of a chair. Cassiopeia boasted that the beauty of her daughter Andromeda surpassed that of the sea-nymphs. The sea-nymphs complained to the sea-god of this affront, and Andromeda was chained to a rock to be devoured by sea-monsters. Perseus delivered her and made her his wife. The mother was taken to heaven and placed among the stars.

Cas'taly. A fountain on Mount Parnassus. Whoever drank of its waters was endowed with the gift of poetry.

Castor and Pollux. Brothers, sons of Leda. Mercury carried them to Pallena, where they were educated. As soon as they arrived at manhood they embarked with Jason in quest of the Golden Fleece. Pollux was the son of Jupiter, and Castor of Tyndarus. Hence

Pollux was immortal, while Castor was subject to old age and death, like other men.

Cau'ther. In Mohammedan mythology, the lake of paradise, whose waters are as sweet as honey, as cold as snow, and as clear as crystal; and any believer who tastes thereof is said to thirst no more.

Ce'crops. In mythology is represented with upper part of his body human, the lower part that of a dragon. Cecrops is said to have founded Athens, and to have divided Attica into twelve communities, and to have introduced the first elements of civilized life; he instituted marriage, abolished bloody sacrifices, and taught his subjects how to worship the gods.

Cen'taurs. Monsters, half horse, half human. They are especially celebrated for their contest with the giants in the mountains of Thessaly.

Cer'berus. The three-headed dog that keeps the entrance of the infernal regions. He prevents the living from entering and the shades from escaping. Orpheus lulled Cerberus to sleep with his lyre; and the Sibyl who conducted Æneas through the Inferno, also threw the dog into a sleep with cake seasoned with poppies.

Ce'res. The daughter of Saturn, sister of Jupiter and Neptune. She was the goddess of corn, flowers, and harvest. She is represented as riding in a chariot drawn by dragons and crowned with poppies. She was the mother of Proserpine, who was seized by Pluto while she was gathering flowers. Ceres was the Roman name for mother-earth.

Cha'os. The vacant space which existed before the creation of the world, and out of which the gods, men, and all things arose. Chaos was called the mother of Erebus and Night.

Cha'ron. A god of the infernal regions, son of Nox and Erebus, who conducted the souls of the dead in a boat over the rivers Styx and Acheron.

Charyb'dis. A woman who robbed travelers and was turned by Jupiter into a dangerous gulf on the coast of Sicily, opposite Scylla. Scylla and Charybdis are generally mentioned together to represent alternative dangers.

Che'mos. The god of war among the Moabites.

Chibia'bos. A musician, ruler in the land of spirits, and friend of Hiawatha. Personification of harmony in nature.

Chimæ'ra. A celebrated monster goat, lion, and dragon, which continually vomited flames. It was destroyed by Bellerophon.

Chi'ron. A centaur, son of Philyra and Saturn. He was famous for his knowledge of medicine, and taught mankind the use of plants and herbs. He was placed among the stars and is known as Saggitarius.

Chlo'ris. The goddess of flowers, known as Flora in Greek mythology.

Chou. An Egyptian god corresponding to the Roman Hercules.

Cimme'rians. People living in a land of perpetual darkness.

Cir'ce. A sorceress. Daughter of Sol and Perseis, celebrated for her knowledge of magic and venomous herbs. Ulysses, on his return from the Trojan war, visited her coasts, and his companions were changed by her potions into swine.

Clio. The muse who presided over history.

Clo'tho. The youngest of the three daughters of Jupiter and Themis, was supposed to preside over the moment of birth. She held the distaff and spun the thread of life.

Clu'ricaune. An Irish elf, who guards a hidden treasure. He has an evil disposition and appears as a wrinkled old man.

Clyt'emnestra. A daughter of King of Sparta; married Agamemnon.

Clyt'ie. A water-nymph who loved the sun-god, Apollo, and was changed into a sunflower. In this form, she turns always toward the sun.

Cocy'tus. A river of the infernal regions. The unburied dead wander on its banks for 100 years, and it is known as the river of lamentation.

Col'chis or **Colchos.** A country of Asia famous for the expedition of the Argonauts, and the birthplace of Medea.

Colli'na. The goddess of the hills.

Co'mus. The god of revelry, presiding over feasts.

Concor'dia. The goddess of peace and concord, one of the oldest at Rome. She is represented holding a sceptre budding with fruit, and a horn of plenty. Camillus raised a temple to this goddess, in the capitol.

Consen'tes Dii. The twelve Etruscan gods who formed the council of Jupiter, consisting of six male and six female divinities. Juno, Minerva, Vulcan, Saturn, and Mars were among them.

Con'sus. The god of counsel, a name given to Neptune.

Co'ra. The goddess of vegetation.

Coro'nis. A king's daughter who was transformed into a crow by Minerva when asking for protection from Neptune. Another Coronis was the consort of Apollo.

Cor'ybantes. Priests who served at the worship of the mother of the gods. The name came from their habit of striking themselves in their religious dances.

Cress'ida. Daughter of Calchas, the Greek, beloved by Troïlus, son of Priam. They vowed eternal fidelity, and as pledges Troïlus gave the maiden a sleeve, and Cressida gave the Trojan prince a glove.

Creu'sa. Daughter of Priam and wife of Æneas. She was lost in the city of Troy when her husband escaped from its flames.

Cro'nos. The youngest of the Titans. Cronos also known as the father of Jupiter.

Cu'pid. God of love, son of Jupiter and Venus, is represented as a winged boy, naked, armed with a bow and arrows, and often with a bandage covering his eyes. He shot his arrows into the hearts of both gods and men. Like all the gods, he put on different forms to suit his plans. He became the husband of Psyche.

Cyb'ele. A goddess, daughter of Cœlus and Terra, and wife of Saturn. She is supposed to be the same as Ceres, Vesta, etc. On her birth she was exposed on a mountain, where she was tended and fed by wild beasts, receiving the name of Cybele from the mountain. She is represented on a throne with lions at her side.

Cy'clops. One-eyed giants who forged the thunderbolts of Jove. Homer describes them as wild, insolent, lawless shepherds, who devoured human beings. A later tradition represents them as Vulcan's assistants.

Cyp'aris'sus. A beautiful youth, beloved by Apollo, whose favorite stag he inadvertently killed, and who was metamorphosed into a cypress because of his grief.

Cyre'ne. A water-nymph, the mother of Aristæus. Her residence and the visit of her son are described in the fourth book of Virgil's "Georgics."

Dæd'alus. A great architect and sculptor. He invented the wedge, the axe, the level, and the gimlet, and was the first to use sails. He made himself wings with feathers and wax, and fitted them to his body and to his son Icarus. They sailed in the air, but the heat of the sun melted the wax on the wings of Icarus, and he fell into the ocean, which after him has been called the Icarian Sea.

Dag. In mythology of the North this name is given to the "radiant son of night." The name is also applied to the last of a treacherous race, the Hundings.

Da'gon. A Syrian divinity, who, according to the Bible, had richly adorned temples in several of the Philistine cities. He was a national god of the Philistines, formed in human shape upwards from the waist, and resembling a fish downwards, with a finny tail.

Da'gun. In Indian mythology a god who reconstructed the world when it had been destroyed after creation.

Da'hak. In mythology of Persia the ages of the world are divided into periods of 1,000 years. When the cycle is complete, the reign of Ormuzd will begin, and men will be good and happy; but this event will be preceded by the loosing of Dahak, who will break his chain and fall upon the world, and bring on man the most dreadful calamities.

Dai'koku. A mythical god invoked by Japanese workers. He is represented as holding a full sack which he beats to bring from it all useful articles, and the sack never becomes empty.

Dai'tyas. Among Hindu gods these are powerful to work evil.

Dan'æ. The daughter of Ancrisuis, King of Argos, who became the mother of Perseus. An Italian legend related that Danaë came to Italy, built the town of Ardea, and married Pilumnus, by whom she became the mother of Daunus, the ancestor of Turnus.

Dana'ides. The fifty daughters of Danaus, King of Argos, who married the fifty sons of their uncle, Ægyptus.

Daph'ne. The goddess of the earth. Apollo courted her, but she fled from him, and was, at her own request, turned into a laurel tree.

Daph'nis. A Sicilian shepherd, son of Hermes (Mercury), by a nymph, was taught by Pan to play on the flute, and was regarded as the inventor of bucolic poetry. A Naiad to whom he proved faithless punished him with blindness, whereupon his father, Hermes, translated him to heaven.

Delph'obus. A son of Priam and Hecuba. After the death of Paris, he married Helen, but was betrayed

by her to the Greeks. Next to Hector, he was the bravest among the Trojans. On the capture of Troy by the Greeks he was slain and fearfully mangled by Menelaus.

De'lius. A name of Apollo, from the island in which he was born. The name Delia has been traced to this origin.

Del'phi. A town on Mount Parnassus, famous for its oracle, and for a temple of Apollo.

Del'phos. The place where the temple was built from which the oracle of Apollo was given.

Deme'ter. The mother of Persephone, who was evidently a goddess of the earth, whom some ancient system married to Zeus, the god of the heavens.

De'mogor'gon. The tyrant genius of the soil or earth, the life and support of plants. He was depicted as an old man covered with moss, and was said to live underground.

Deo. A name sometimes applied to Ceres.

Derce'tis. A Syrian goddess who corresponds to Dagon of the Philistines.

Dian'a. An ancient Italian divinity, whom the Romans identified with the Greek Artemis. Her worship is said to have been introduced at Rome by Servius Tullius, who dedicated a temple to her on the Aventine. At Rome Diana was the goddess of light. She was a daughter of Jupiter, and was born of Latona, or Leto, on the island Delos, at the same time with Apollo. As in Apollo the sun was deified and adored; so was the moon in Diana.

Dictyn'na. A Greek name of Diana. The name is connected with a Greek word meaning hunting-net, and refers to Diana as huntress.

Di'do. She was daughter of the Tyrian King Belus, and sister of Pygmalion, who succeeded to the crown after the death of his father. Dido was married to her wealthy uncle Acerbas, who was murdered by Pygmalion. Dido had vowed eternal fidelity to her late husband, and under pretense of soothing the manes of Acerbas by sacrifices, she erected a funeral pile, on which she stabbed herself in presence of her people. After her death she was worshiped by the Carthaginians as a divinity.

Dike. One of the three guardians of life appointed by Themis, whose names are Eunomia (order), Dike (punishment), Irene (peace). Their office was to promote unanimity by the exercise of equity and justice. They likewise stand around the throne of Zeus, and their regular occupation is to open and shut the gates of heaven, and yoke the steeds to the chariot of the Sun.

Dind'ymus. A mountain in Phrygia, on the frontiers of Galatia, near the town Pessinus, sacred to Cybele, the mother of the gods, who is hence called Dindymēnē.

Di'omed. A Greek hero of the Trojan War, was a son of Tydeus, and became King of Argos. He was a favorite of Minerva, who, according to Homer, encouraged him to attack and wound both Mars and Venus, who were engaged on the side of the Trojans.

Diome'des. The cruel tyrant of Thrace, who fed his mares on the flesh of his guests, was overcome by Hercules, and was given to the same horses as food.

Dio'ne. The youngest of the Titan sisters and reputed mother of Venus. The name has also been poetically applied to Venus, herself.

Diony'sus. Son of Jupiter and Semele, the daughter of Cadmus. He was the god of wine, and is generally represented crowned with vine leaves.

Di'ræ. The avenging goddesses of Furies.

Dis. Contracted from Dives, a name sometimes given to Pluto, and hence also to the lower world.

Discor'dia. A malevolent deity corresponding with the Greek "Eris," the goddess of contention. She was driven from Heaven by Jupiter because she sowed dissensions among the gods. At the nuptials of Peleus and Thetis she threw an apple among the gods, which was the primary cause of the ruin of Troy, and of infinite misfortunes to the Greeks.

Dives. Demons of Persian mythology. According to the Koran, they are ferocious and gigantic spirits under the sovereignty of Eblis.

Dodo'na. The most ancient oracle was that of Jupiter at Dodona, a city of the Molossi, said to have been built by Deucalion.

Do'nar. A name given, sometimes, to Thor, the thunder-god, in Norse mythology.

Door'ga. A goddess worshiped among the Hindoos.

Do'ris. Daughter of Oceanus and Thetis, wife of her brother Nereus, and mother of the Nereides.

Dra'co. One of the hounds of Acteon.

Draup'nir. The marvelous ring belonging to Odin, with which he worked magic. It was burned on the funeral pyre of his son Balder.

Dro'ma. The chain forged for the purpose of binding the Fenris wolf, but which he broke. Hence the proverb, "to dash out of Droma."

Dry'ads. Wood nymphs, believed to be sent from heaven. The Dryads were distinguished from the Hamadryads in this, that the latter were supposed to be attached to some particular tree, with which they came into being, lived and died; while the former had the care of the woods and trees in general.

Duer'gar. Dwarfs who dwell in rocks and hills; noted for their strength, subtilty, magical powers, and skill in metallurgy. They are the personification of the subterranean powers of nature.

Dur'ga. In Hindu mythology, the wife of Siva, represented as having ten arms.

E'acus. Son of Jupiter and Egina, one of the judges of the infernal regions, who was appointed to judge the Europeans.

Eb'lis. Among Mohammedans, name given to the prince of fallen angels who refused to worship the man, Adam.

Echno'bas. One of Actæon's hounds, whose bark rose above all other sounds.

Ech'o. A nymph who engaged the attention of Juno by her never-ceasing talk, allowing Jupiter his freedom, meanwhile. Juno found out her trick and accordingly punished her. Echo loved Narcissus; as her love was not returned, she pined away until nothing remained but her beautiful voice. In Northern mythology, Echo is the sound of the dwarf's talk.

Eck'hardt. In German legends, Eckhardt appears on the evening of Maundy Thursday to warn all persons to go home, that they may not be injured by the headless bodies and two-legged horses which traverse the streets on that night.

Ee'tion. Wife of Hector and mother of Andromeche.

Egeon. A giant sea-god, who assisted the Titans against Jupiter.

Ege'ria. A nymph from whom King Numa Pompilius was fabled to have received his instructions respecting the forms of public worship which he established in Rome.

E'gia. One of the nine beautiful giantesses seen by Odin along the sea shore, known as wave-maidens. Her son became guardian of Bi-frost, the rainbow bridge.

E'gil. The Vulcan of Northern mythology, one of the three brothers who married the swan-maidens. He was a great archer and killed his brother, Völund, by command of the king, and himself later became a peasant.

Egip'ans. Rural deities who inhabited the forests and mountains, the upper half of the body being like that of a man, and the lower half like that of a goat.

E'gis. Part of the armor of Jupiter used by Minerva as a shield.

El'ra. An attendant of the goddess, Frigga, and a skillful nurse. She gathered herbs and plants for the cure of both sickness and wounds and taught the science to women.

El'atus. A prominent warrior among the mythical people of Thessaly and the father of Caneus, whom Neptune changed into the form of a man.

El'begast. One of the dwarfs of Scandinavian mythology who dwelt in a magnificent palace under ground, and drew their servants from the bosom of the earth.

El'ber-ich. In the German hero legends a dwarf who aided the Lombard Emperor Otnit to win the daughter of the Soldan of Syria. He is identical with the Oberon of French and English fairy mythology.

Elec'tra. The bright or brilliant one. A daughter of Agamemnon and Clytemnestra, and the sister of Iphigenia. She became the accomplice of Orestes in the murder of their mother.

Elf. The water sprite, known also as Elb, from which the name of the River Elbe is said to be derived. Elves are more properly known as mountain fairies or those airy creatures that dance on the grass or sit in the leaves of trees and delight in the full moon.

Eliva'gar. In Norse mythology, the name of a great stream in Chaos, flowing from a fountain in the land of mist. This stream was much frequented by the elves at their creation.

Ely'sium. The Paradise of the Greeks, known also as the Happyland. Departed mortals were adjudged to Elysium or to Tartarus by the sentence of Minos and his fellow judges in the "Field of Truth." Elysium is described as adorned with beautiful gardens, meadows, and groves; where birds ever warble; where the River Eridanus winds between banks fringed with laurel, and "divine Lethe" glides in a quiet valley; where the air is always pure, and the day serene; where the blessed have their delightful abode.

Em'bla. An elm tree found in human form, by the gods, according to Northern mythology.

Empyre'an. A term used by the ancients to express the highest heaven, where the blessed enjoy the

beatific vision. Its name is derived from its having been supposed to be the region of fire.

Encel'adus. A Titan, son of Terra, and the most powerful of all the giants who conspired against Jupiter, and attempted to scale heaven. He was struck by Jupiter's thunderbolts, and chained beneath Mount Ætna.

Endym'ion, in Greek mythology, is the setting sun with which the moon is in love. One of the many renderings of his story is that Endymion was a beautiful youth who fed his flock on Mount Latmos. One clear night, Diana, the moon, looked down and saw him sleeping. The cold heart of the goddess was warmed by his beauty, and she came down to him, kissed him, and watched over him while he slept. Another story was that Jupiter bestowed on him the gift of perpetual youth united with perpetual sleep. One version of this myth made sleep a reward for piety, while another version made it a punishment for presuming to fall in love with Hera.

Eni'peus. A fabled river in Thessaly. Poseidon assumed the form of the god of this river in order to obtain possession of Tyro, who was in love with Enipeus. She became the mother of Pelias and Neleus.

En'yo. One of the gray-maidens who became the goddess of war, who delights in bloodshed and the destruction of towns, and accompanies Ares in battles.

Eolus. Known in Roman mythology as the god of the winds.

Eos. The Roman name for Aurora.

Ep'aphus. The son of Zeus and Io, born on the river Nile, after the long wanderings of his mother. He became king of Egypt, and built Memphis.

Ep'eus. Noted as builder of the Trojan horse.

Er'ebus. A name applied to the dark and gloomy space under the earth through which the souls of the dead were obliged to pass on their way to Hades. The name also means Tartarus, the prison house into which Jupiter cast the Titans, the adherents of his father, Saturn.

Erga'tis. A name given to Minerva. It means the work-woman, and was given to the goddess because she was credited with having invented spinning and weaving.

E'ris. The goddess of discord; a sister of Mars, and a daughter of Night; the same as the Roman "Discordia."

Erl-king. Name given to the king of the elves, or a spirit of the air. According to tradition, its home is in the Black Forest of Germany and it appears as a goblin, working harm and ruin, especially among children.

E'ros. The Greek name of the deity called "Cupido," or Cupid, by the Romans. He is said to have come forth from the egg of Night, floated on Chaos, and to have inherited arrows with which he pierced all things, thereby giving new life and a torch with which he lighted the world. (See Cupid.)

Erythe'ia. One of the daughters of Night appointed to guard the golden apples in the gardens of the Hesperides.

Erythre'os. The Grecian name of one of the horses of Sol's chariot.

E'thon. One of the horses which drew the chariot of Sol, the sun. The word is Greek and signifies hot.

Eumae'us. The faithful swine-herd of Ulysses, whom Telemachus consulted upon his return to Minerva.

Eumen'ides. A euphemistic name given by the Greeks to the Furies, whose true name of Erinnyes they were afraid to utter. They are represented as the daughters of Earth or of Night, and as fearful winged maidens, with serpents twined in their hair, and with blood dripping from their eyes. They dwelt in the depths of Tartarus, dreaded by gods and men.

Euphor'bus. The son of Panthous, one of the bravest of the Trojans, slain by Menelaus, who dedicated his shield in the temple of Hera (Juno), near Mycenae. Pythagoras asserted that he had once been Euphorbus, and in proof of his assertion took down at first sight the shield from the temple of Hera.

Euphros'yne. One of the three Graces. She specially represented joy, as her sisters stood for splendor and pleasure.

Euro'pa. Daughter of the Phenician King Agenor, or, according to the Iliad, daughter of Phœnix.

Euryd'ice. The wife of Orpheus, who died from the bite of a serpent. Orpheus, disconsolate at her loss, determined to descend to the lower world, and obtain permission for his beloved Eurydice to return to the regions of light. Armed only with his lyre, he entered the realms of Hades, and gained an easy admittance to the palace of Pluto. Orpheus was promised she should return on condition that he looked not back till she had reached the upper world. When the poet got to the confines of his journey, he turned his head to see if Eurydice were following, and she was instantly caught back again into Hades.

Euryl'ochus. One of the companions of Ulysses in his wanderings, and the only one of them who was not changed by Circe into a hog.

Eurys'theus. The King of Argos who appointed the twelve labors of Hercules.

Eury'tos. The god made tutor to Hercules, by Mercury, who taught him the use of the bow and arrows.

Evad'ne. Wife of Capaneus, and mother of Sthenelus. Her husband having been killed at the siege of Thebes, she threw herself upon the funeral pile, and was consumed with him.

Excal'ibar. (Written also Excalibur, Excaliber.) The name of King Arthur's sword. When about to die, he sent an attendant to throw the weapon into a lake near by. Twice eluding the request, the knight at last complied. A hand rose from the water, clutched the sword, and after waving it three times both sank.

Fada. A fée or kobold of the south of France, sometimes called "Hada." These house-spirits, of which, strictly speaking, there are but three, bring good luck in their right hand and ill luck in their left.

Faf'nir. In Northern mythology the eldest son of the dwarf king, Hreidmar. The slaying of Fafnir is the destruction of the demon of cold or darkness who had stolen the golden light of the sun.

Fah'fah. Name given to one of the rivers of Paradise in mythology of the East.

Fa'ids. Name sometimes applied to Druids.

Fane'sii. A mythical Scandinavian tribe far north, whose ears were so long that they would cover their whole body.

Fates. In Greek and Roman mythology the Fates are identical with the Parcæ. They were three sisters, daughters of Night, whom Jupiter permitted to decide the fortune and especially the duration of mortal life. One of them "Clotho," attached the thread; the second, "Lachesis," spun it; and the third, "Atropos," cut it off, when the end of life arrived. They were viewed as inexorable, and ranked among the inferior divinities of the lower world. Their worship was not very general. The Parcæ were generally represented as three old women, with chaplets made of wool and interwoven with the flowers of the Narcissus, wearing long robes, and employed in their works: Clotho with a distaff; Lachesis having near her sometimes several spindles; and Atropos holding a pair of scissors.

Fauni. Rural deities represented as having the legs, feet, and ears of goats, and the rest of the body human. Name of Italian origin.

Fauns. Among the Romans, a class of rural deities corresponding with the Greek "Pan." They were the demi-gods of woods and forests, and hence called "sylvan deities," and are represented with horned heads, sharp-pointed ears, and with their bodies below the waist resembling those of goats. Their festival was celebrated at Rome on the 5th of December.

Fay. A diminutive name applied to a fairy or an elf.

Felic'itas. A symbolical, moral deity of the Greeks and Romans. She was the goddess of happiness and prosperity, and is frequently seen on Roman medals, in the form of a matron, with the staff of Mercury and a cornucopia.

Feng. The name taken by Odin in the capacity of wave-stiller. Under this name he teaches mortals to distinguish between good and bad omens and to know the moods of the winds.

Fenrir or Fenris. In Scandinavian mythology, the wolf of sin, meaning the goading of a guilty conscience. The "wolf" was the brother of Hel. When he gapes, one jaw touches earth and the other heaven.

Fero'hers. The guardian angels of Persian mythology. They are countless in number, and their chief tasks are for the well-being of man.

Fero'nia. A goddess of fruits, nurseries, and groves among the Romans. She had a very rich temple and grove specially sacred to her. She was honored as the patroness of enfranchised slaves, who ordinarily received their liberty in her temple.

Fi'des. The personification of faithfulness, worshiped as a goddess at Rome.

Flora. The Romans had a particular goddess of blossoms and flowers, whom they worshiped under the name of "Flora." She is said to have been the same as the Grecian nymph "Chloris."

Fortitu'do. A deification of courage and bravery, was one of the moral deities of the Romans.

Fortu'na. Known also as Fortune and sometimes as the goddess of Chance, to whom was ascribed the distribution and the superintendence of prosperity and adversity in general.

Fortuna'tæ. Known also as "the Islands of the Blessed." The early Greeks, as we learn from Homer, placed the Elysian fields, into which favored heroes passed without dying, at the extremity of the earth, near the River Oceanus. In poems later than Homer, an island is spoken of as their abode; hence when certain islands were discovered in the ocean, off the western coast of Africa, the name of Fortunatæ Insulæ was applied to them. They are now called the Canary and Madeira Islands.

Freki and Geri. The two wolves of Odin. When Odin, seated on his throne, overlooks heaven and earth, his two wolves lie at his feet.

Frey. (Scandinavian mythology.) The god of the sun and of rain, and hence of fertility and peace. He was one of the most popular of the Northern divinities. No weapons were ever allowed in Frey's temple, although oxen and horses were sacrificed to him. His name was connected with the taking of any solemn oath, a heavy gold ring was dipped in the blood of the sacrifice and the oath sworn upon the ring. One of the most celebrated of the temples built to Frey was at Therva in Iceland.

Frey'ja. She was the sister of Frey, and the wife of Odur, who abandoned her on her loss of youth and beauty, and was changed into a statue by Odin, as a punishment. She is known as the Northern goddess of beauty and love; plants were called Freya's hair, and the butterfly, Freya's hen.

Frig'ga. In Scandinavian mythology the wife of Odin, the queen of the gods, and the mother of Baldur, Thor, etc. She sometimes typifies the earth, as Odin does the heavens. The Anglo-Saxons worshiped her as "Frea." The name survives in "Friday."

Fro'di. The son of Frey, a god of peace. Under his direction two giantesses turned a pair of magic mill-stones which ground out gold according to his wish and filled his coffers. Excited by greed he forced them to labor, allowing rest only long enough for the singing of one verse. When Frodi, himself, slept, the giantesses changed their song and proceeded to grind out an army of troops to invade the land. These troops represent the Vikings.

Furies. Among the divinities of the lower world were three daughters of Acheron and Night, or of Pluto and Proserpine, whose office it was to torment the guilty in Tartarus, and often to inflict vengeance upon the living. The Greeks called them "Furies." They are also known as Erinnyes and Eumenides.

Fylgie. Guardian spirits treated of in Norse mythology. Besides the Norns or Dises, who were regarded as protective deities, the Norsemen ascribed to each human being a guardian spirit named Fylgie, which attended him through life.

Gaéa. Same as Tellus and Terra, a personification of earth. Sometimes written Ge.

Galar. One of the dwarfs who, with his fellow dwarf, Fialar, slew the giant, Kvasir, and drained every drop of his blood.

Ganga. One of the three Indian River goddesses.

Gang'ler. The gate-keeper in Odin's palace who gave the explanation of the Northern mythology that it might be recorded.

Gany'mede. A son of Troas, King of Troy, according to Homer, was the most beautiful of all mortals, and was carried off by the gods that he might fill the cup of Zeus (Jupiter), and live among the immortal gods. Later writers state that Zeus himself carried him off, in the form of an eagle, or by means of his eagle, from Mount Ida.

Garm. A fierce dog that kept guard at the entrance of Hel's kingdom, the realm of the dead. He could be appeased by the offering of a Hel-cake which always appeared in the hand of one who, on earth, had given bread to the needy.

Gauta'ma. The chief deity of Burmah.

Gem'ini. One of the names given to the twins, Castor and Pollux, under which they were transported to dwell among the stars.

Ge'nii. Protecting spirits or gods.

Gerda. Wife of Frey, and daughter of the frost giant, Gymer. She is so beautiful that the brightness of her naked arms illuminates both air and sea.

Ger'yon was a monster, said to be the offspring of Chrysaor and Callirhoe, and to have three bodies and three heads. His residence was in the island of Gades, where his numerous flocks were kept by the herdsman, Eurythion, and guarded by a two-headed dog, called Orthos. The destruction of this monster formed one of the twelve labors of Hercules.

Giall. The infernal river of Scandinavian mythology.

Giallar Bridge. The bridge of death, over which all must pass.

Giallar Horn, The. Heimdall's horn, which went out into all worlds whenever he chose to blow it. According to Northern mythology, he blew a long-expected blast as a rallying call to the battle which ended the reign of the gods, Odin, Frey, and Tyr.

Gian ben Gian. King of the Ginns or Genii, and founder of the Pyramids. He was overthrown by Aza'zil or Lucifer. (Arab superstitions.)

Giants. Earth united with Heaven produced Oceanos and the giants with fifty heads and a hundred hands — by which is meant, the personification of the great powers of nature — as their names signify: Cottos (eruption), Briareos (hurricane), and Gyes (earthquake). In fables the giants are beings of monstrous size, with dragons' tails and fearful countenances. They attempted to storm heaven, being armed with huge rocks and the trunks of trees, but were killed by the gods with the assistance of Hercules, and were buried under Mount Ætna and other volcanoes. In Scandinavian mythology they are described as evil genii of various forms and races, enemies of the gods. They dwelt in a territory of their own, called Giant-land. They had the power of assuming divers shapes, and of increasing or diminishing their stature at will.

Ginun'ga-gap. In Norse mythology, the vast chaotic gulf of perpetual twilight, which existed before the present world and separated the region of fog from the region of heat. Giants were the first beings who came to life among the icebergs and filled this vast abyss.

Glads'-heim. A great hall in the palace of Odin, in which were the twelve seats occupied by the gods when holding council.

Gla'sir. A marvelous grove in the land of Asgard, in which the leaves were all of shimmering red gold.

Glendoveer'. In Hindu mythology, is a kind of sylph, the most lovely of the good spirits.

Gnome. One of a class of spirits or imaginary beings which were supposed to tenant the interior parts of the earth, and in whose charge mines, quarries, etc., were left. Rübezahl, of the German legends, is often cited as a representative of the class.

Golden Apples, The. A great treasure which was thought to be altogether unattainable, was the golden apples in the gardens of the Hesperides. These gardens were watched by a monstrous dragon, and to bring the golden fruit to Eurystheus, was one of the tasks which Hercules was to accomplish.

Golden Fleece. Ino persuaded her husband, Athamas, that his son Phryxos was the cause of a famine which desolated the land, and he ordered him to be sacrificed to the angry gods. Phryxos made his escape over sea on a "ram which had a golden fleece." When he arrived at Colchis, he sacrificed the ram to Zeus, and gave the fleece to King Æe'tes, who hung it on a sacred oak. It was afterwards stolen by Jason in his celebrated Argonautic expedition.

Gor'gons. The three Gorgons were hideous monsters whose faces were so fearful that whoever looked on them became "congealed stone." One of these creatures, Medusa, was slain by Perseus, and her head was presented to Minerva, who placed it in her shield, where the face continued to retain its petrifying power.

Graces. To the retinue of Venus belonged the Graces, servants and companions of the goddess. They were said to be daughters of Jupiter and Eurynome, or according to others, of Bacchus and Venus herself, and were three in number: Splendor, Pleasure, and Joy. They were honored, especially in Greece, and had temples in the principal cities. Altars were often erected to them in the temples of other gods, especially Mercury, Venus, and the Muses.

Grid. Wife of Odin and mother of Vidar. She lent Thor her girdle, staff, and glove, warning him to beware of treachery.

Gripir. A horse-trainer, servant of Odin, who could foretell events of the future. He could teach a young hero all that he might need to know. He is compared to Chiron the Centaur.

Groves. The Romans were accustomed, like other ancient nations, to consecrate groves and woods to the gods. As many as 230 sacred groves are enumerated, chiefly within the city of Rome. In Greece, the particular tract of land, situated between Athens and Megara, was consecrated to Ceres and Proserpine, and trees were also set apart and with ceremony consecrated to some god.

Gyes. One of the hundred-handed giants. (Also written Gyges.)

Ha'des. The Greek god of the nether world, the son of Saturn and Rhea, and the brother of Jupiter and Neptune. He is the same as Pluto. In ordinary life he was usually called Pluto (the giver of wealth), because people did not like to pronounce the dreaded name of Hades. His wife was Persephone (Proserpine), the

daughter of Demeter, whom he carried from the upper world. In the division of the world among the three brothers, Hades obtained the abode of the shades, over which he ruled. Of all the gods he was most hated by mortals. The ensign of his power was a staff, with which, like Hermes, he drove the shades into the lower world. He possessed a helmet which rendered the wearer invisible, and which he sometimes lent to both gods and men. The Furies are called his daughters; the nymph Mintho, whom he loved, was metamorphosed by Persephone into the plant called mint; and the nymph Leuce, whom he likewise loved, was changed by him after death into a white poplar. Being the king of the lower world, Pluto is the giver of all the blessings that come from the earth; hence he gives the metals contained in the earth.

Ham'adryads. Nymphs of the woods who were born and died with particular trees. They possessed the power to reward and punish those who prolonged or abridged the existence of their special tree.

Harmo'nia. A daughter of Mars and Venus, and wife of Cadmus. Harmonia received a present of a necklace, which afterwards became fatal to all who possessed it.

Haroe'ris. The Egyptian god, whose eyes are the sun and moon.

Harpies. Robbers or Spoilers, described by Homer as carrying off persons, who had utterly disappeared. Hesiod represents them as fair-locked and winged maidens; but subsequent writers describe them as disgusting monsters, some with the heads of maidens, with long claws and faces pale with hunger.

He'be. The goddess of youth, was daughter of Zeus and Hera. She was employed by her mother to prepare her chariot, and harness her peacocks, and was cupbearer to all the gods.

Hec'ate. A mysterious divinity known as the goddess that troubles the reason of men; the goddess that presides over nocturnal ceremonies, and consequently over magic; hence her identity with Diana in Grecian mythology, and with Isis in Egyptian.

Hector. The prominent hero of the Trojans in their war with the Greeks, was the eldest son of Priam and Hecuba, and the husband of Andromache. He fought with the bravest of the Greeks, and slew Patroclus, the friend of Achilles. This death of his friend roused Achilles to the fight. The other Trojans fled before him into the city. Hector alone remained without the walls; but when he saw Achilles, his heart failed him, and he took to flight. Thrice he ran round the city, pursued by Achilles, and fell pierced by Achilles' spear. Achilles tied Hector's body to his chariot, and thus dragged him into the camp of the Greeks. At the command of Zeus, Achilles surrendered the body to the prayers of Priam, who buried it at Troy with great pomp. Hector is one of the noblest conceptions of the poet of the "Iliad."

Hec'uba. The second wife of Priam, King of Troy, and the mother of Paris and Hector. After the fall of Troy, she fell into the hands of the Greeks as a slave, and, according to one account, threw herself in despair into the sea.

Heim'dal. In Northern tales a god, who lived in the celestial fort Himinsbiorg, under the farther extremity of the bridge Bifrost, and kept the keys of heaven. He is the watchman or sentinel of Asgard, sees even in sleep, can hear the grass grow, and even the wool on a lamb's back. Heim'dal, at the end of the world, will wake the gods with his trumpet.

Helen. A daughter of Jupiter and Leda, and the wife of Menelaus, King of Sparta. She was the most beautiful woman of her age, and chose Menelaus among many suitors. She afterward eloped with Paris, her husband's Trojan guest, and thus brought on the war between the Greeks and Trojans. After the fall of Troy she was restored to Menelaus.

Hel'enus. Son of Priam and Hecuba, celebrated for his prophetic powers.

Hel'loe. A maid beloved of Jupiter, and by jealousy of Hera changed into a she-bear.

Hel'icon. A mountain in Boeotia sacred to the Muses from which place the fountain Hippocrene flowed. It is also known as the Muses' Mount. It is part of the Parnassus, a mountain range in Greece.

He'lios. The Greek sun-god, who rode to his palace in Colchis every night in a golden boat furnished with wings. This god gives light both to gods and men. He sees and hears everything, and discovers all that is kept secret.

Hel'le. Daughter of Athamas and Nephele, and sister of Phrixus. When Phrixus was to be sacrificed, Nephele rescued her two children, who rode away through the air upon the ram with the golden fleece, the gift of Hermes: but Helle fell into the sea. The episode gave the name of the Hellespont to the part of the sea where Helle was drowned. It is now called the Dardanelles.

Hel'len. The son of Deucalion and Pyrrha, and father of Æolus, Dorus, and Xuthus. He was King of Phthia in Thessaly, and was succeeded by his son Æolus. He was the mythical ancestor of all the Hellenes.

Hell Shoon. In Icelandic mythology indispensable for the journey to Valhalla as the obolus for crossing the Styx.

Helmet of Hades. A helmet worn by Perseus, rendering him invisible and which, with the winged sandals and magic wallet, he took from certain nymphs, who held them in possession. After he had slain Medusa he restored them again, and presented the Gorgon's head to Minerva, who placed it in the middle of her shield.

He'ra. Greek name for the wife of Jupiter, known among Romans as Juno. Hera was worshiped in many parts of Greece, but more especially at Argos, in the neighborhood of which she had a splendid temple, on the road to Mycenæ. She had also a temple in Samos. Hera was usually represented as a majestic woman of mature age.

Heracli'dæ. Name given to the descendants of Hercules, who, in conjunction with the Dorians, conquered the Peloponnesus eighty years after the destruction of Troy, or B. C. 1104, according to mythical chronology. This legend represents the conquest of the Achæan population by Dorian invaders, who henceforward appear as the ruling race in the Peloponnesus.

Her'cules. Of all the Grecian heroes, no other obtained such celebrity as Hercules, son of Jupiter and Alcmene. Wonderful strength was ascribed to him even in his infantile years. Eurystheus imposed upon him many difficult enterprises, which he carried through with success; particularly those which are called the "twelve labors" of Hercules. These were: to kill the Nemæan lion; to destroy the Lernæan hydra; to catch alive the stag with golden horns; to catch the Erymanthean boar; to cleanse the stables of Augeas; to exterminate the birds of Lake Stymphalus; to bring alive the wild bull of Crete; to seize the horses of Diomedes; to obtain the girdle of Hippolyta, Queen of the Amazons; to destroy the monster Geryon; to plunder the garden of Hesperides, guarded by a sleepless dragon; and to bring from the infernal world the three-headed dog, Cerberus. Many other exploits were ascribed to him, by which he gave proof of his extraordinary strength and exhibited himself as an avenger and deliverer of the oppressed. Such were: his slaying the robber, Cacus; the deliverance of Prometheus, bound to a rock; the killing of Busiris, and the rescue of Alceste from the infernal world. His last achievement was the destruction of the centaur, Nessus. Nessus, dying, gave his poisoned tunic to Deianira: Hercules afterwards receiving it from her, and putting it on, became so diseased that he cast himself in despair upon a funeral pile on Mount Æta. The worship of Hercules became universal, and temples were erected to his honor.

Herculean Knot. A snaky complication on the rod or caduceus of Mercury, adopted by the Grecian brides as the fastening of their woolen girdles, which only the bridegroom was allowed to untie.

Her'la. A mythical king, the supposed leader of The Wild Hunt of Scandinavian mythology. This was known as the Raging Host in Germany and as Herlathing in England, from the name, Herla.

Her'mes. A Greek name of the god Mercury.

Hermi'one. The beautiful daughter of Menelaus and Helen. She had been promised in marriage to Orestes before the Trojan War, but Menelaus, after his return home, married her to Neoptolemus (Pyrrhus).

Hesper'ides. The Hesperides are called daughters of Night, because their origin and existence are veiled in darkness. Their names were Ægle, Erytheia, and Arethusa;—and they were appointed to guard the golden apples, which were the gift of Earth to Juno on her wedding day. The celebrated gardens of the Hesperides abounded with fruits and were carefully guarded by a dragon, which never slept.

Hes'perus. A supposed son or brother of Atlas enrolled among the deities after death, and made identical with the Evening Star.

Hes'tia. The Greek name for Vesta. She was the goddess of the domestic hearth.

Hippocre'ne. The Muses were entertaining themselves in the mountain with song and lyre, in so gay a manner that all could hear them. Poseidon sent up Pegasus, charging him to limit the mirth and noisy merriment. On arriving at the top of the mount,

Pegasus had only to paw the ground to bring all quiet; and from beneath his foot arose that well-known fountain which, from its origin, is called Hippocrene.

Hippol'yta. Queen of the Amazons, and daughter of Mars. In classic fable, her sister Antiope married Theseus. Hippolyta was famous for a girdle given her by her father, and it was one of the twelve labors of Hercules to possess himself of this prize.

Hippoly'tus. Son of Theseus and Hippolyte; he was killed by a fall from a chariot, but was raised to life again by Diana, or by Æsculapius.

Hippom'enes. Son of Megareus, and great-grandson of Poseidon (Neptune), conquered Atalanta in a foot-race. He had three golden apples, which he dropped one by one, and which she stopped to pick up. By this delay she lost the race.

Hofvarp'nir. The fleet steed of Ina, in Scandinavian legend, which traveled through fire and air and enabled this messenger of the gods to see all that was happening on the earth.

Hobomok'o. An evil spirit known among American Indians.

Ho'de-ken. A famous German kobold, or domestic fairy servant; so called from wearing a little felt hat pulled down over his face.

Ho'dur. In Norse mythology, a blind god who destroyed his brother, Baldur, at the instigation of Loki, without meaning to do so. He is the type of night and darkness, as Baldur is of light and day.

Ho'nir. In Asgard tales, name given to the god of mind or thought.

Ho'ræ. Daughters of Zeus and Themis, the goddesses of the order of nature and of the seasons, who guarded the doors of Olympus, and promoted the fertility of the earth.

Ho'rus. The Egyptian god of the sun, who was also worshiped in Greece and at Rome.

Hu'gin. One of Odin's two ravens, who carried him news from earth, and who, when not thus employed, perched upon his shoulders. The personification of thought or intellect.

Hu'go'. A kind of evil spirit in the popular superstition of France — a sort of ogre made use of to frighten children.

Hundred-eyed. Argus, in Greek and Latin fable. Juno appointed him guardian of Io, but Jupiter caused him to be put to death; whereupon Juno transplanted his eyes into the tail of her peacock.

Hy'acinthus. A youth beloved by Apollo, and accidentally slain by him while playing at quoits. From his blood sprang the flower which bears his name.

Hy'ades. A class of nymphs commonly said to be seven in number.

Hy'dra. Name of a monstrous serpent in the Lake Lerna, with numerous heads. When one of these heads was cut off, another or two others immediately grew in its place, unless the blood of the wound was stopped by fire. The destruction of the Hydra was a labor assigned to Hercules, which he accomplished by the aid of Iolaus, who applied lighted brands or a heated iron as each head was removed. The arrows of Hercules, being dipped in the Hydra's blood, caused incurable wounds.

Hygei'a. The goddess of health, and a daughter of Æsculapius, though some traditions make her the wife of the latter. In works of art she is represented in a long robe, feeding a serpent from a cup.

Hy'men or **Hymenæ'us.** One of the imaginary companions of Venus. He presided over marriage.

Hy'mir. In mythology of Northern lands, the frost-giant who owned the great kettle called "Mile-deep."

Hyperbo'reans. A fabulous people, supposed to live in a state of perfect happiness, in a land of perpetual sunshine.

Hype'rion. Son of Cœlus and Terra. The model of manly beauty, synonymous with Apollo. The personification of the sun. Hyperion was the father of the Sun, Moon, and Dawn. He is, therefore, the original sun-god, and is painted with splendor and beauty.

Iac'chus. The solemn name of Bacchus in the Eleusinian mysteries, whose name was derived from the boisterous song called "Iacchus." In these mysteries Iacchus was regarded as the son of Zeus and Ceres, and was distinguished from the Theban Bacchus (Dionysus), the son of Zeus and Semele.

Iap'etos. The father of Atlas and ancestor of the human race, called the progeny of Iapetos. By many considered the same as Japheth, one of the sons of Noah.

Ic'arius. An Athenian, who hospitably received Dionysus in Attica, and was taught the cultivation of the vine.

Ic'aros. Son of Dæ'dalos, who flew with his father from Crete; but the sun melted the wax with which his wings were fastened on, and he fell into the sea, hence called the Ica'rian.

Ida. A mountain range of Mysia, in Asia Minor, celebrated in mythology as the scene of the rape of Ganymede and of the judgment of Paris. In Homer the summit of Ida is the place from which the gods watch the battles in the plain of Troy. It is an ancient seat of the worship of Cybele. A mountain in Crete, known as Mount Ida, was closely connected with the worship of Jupiter.

Idæ'an Mother. Cyb'ele, who had a temple on Mount Ida, in Asia Minor.

Idom'eneus. He led the Cretans against Troy, and was one of the bravest heroes in the Trojan War. He vowed to sacrifice to Poseidon whatever he should first meet on his landing, if the god would grant him a safe return. This was his own son, whom he accordingly sacrificed. As Crete was thereupon visited by a plague, the Cretans expelled Idomeneus, who went to Italy.

Idun'a or **Idun'.** Daughter of the dwarf Svald, and wife of Bragi. She kept in a box the golden apples which the gods tasted as often as they wished to renew their youth. Loki on one occasion stole the box, but the gods compelled him to restore it. Iduna seems to personify that part of the year when the sun is north of the equator. Her apples indicate fruits generally. Loki carries her off to Giant-Land, when the Sun descends below the equator, and he steals her apples. In time, Iduna makes her escape, in the form of a sparrow, when the Sun again rises above the equator; and both gods and men rejoice in her return.

I'fing. In Scandinavian mythology the great stream between the earth and the sacred lands, whose waters never froze.

In'achus. One of the river-gods, a son of Oceanus and Tethys, and father of Phoroneus and Io, was the first King of Argos, and said to have given his name to the river Inachus.

In'dra. In Hindu mythology, the ever youthful god of the firmament, and the omnipotent ruler of the elements. He is a most important personage in Indian fable. In the Vedic period of the Hindu religion, he occupied a foremost rank, and, though degraded to an inferior position in the Epic, he long enjoyed a great legendary popularity. In works of art, he is represented as riding on an elephant.

I'o. The daughter of Inachus, first King of Argos, beloved by Zeus, and metamorphosed, through fear of Hera, into a heifer.

Iola'us. The son of Iphicles and Automedusa. Iphicles was the half-brother of Hercules, and Iolaus was the faithful companion and charioteer of the hero.

I'ole. The daughter of Eurytus of Oechalia, beloved by Hercules, who tried to gain her in marriage for himself. Eurytus promised his daughter to the man who should conquer him and his sons in shooting with the bow. Hercules defeated them; but Eurytus and his sons, with the exception of Iphitus, refused to give Iole to him, because he had murdered his own children.

I'on. The fabulous ancestor of the Ionians, son of Xuthus and Creusa, or of Apollo and Creusa, grandson of Helen. According to some traditions he reigned in Attica.

Iphigeni'a. A daughter of Agamemnon and Clytemnestra, and sister to Orestes. Iphigeneia was to have been sacrificed on entering upon the expedition against Troy; but was rescued by Diana, who carried her to Tauris, where she became a priestess in her temple. She was afterwards recognized by her brother, Orestes, and enabled to save him with his friend, Pylades.

Ire'ne. The Roman goddess of peace, and daughter of Zeus and Themis, and one of the Horæ.

I'ris. Name given among the Greeks to the rainbow, as personified and imagined a goddess. Her father was said to be Thaumas, and her mother Electra, one of the daughters of Oceanus. Her residence was near the throne of Juno, whose commands she bore as messenger to the rest of the gods and to mortals. Sometimes, but rarely, she was Jupiter's messenger, and was employed even by other deities.

Irus. The beggar of gigantic stature, who kept watch over the suitors of Penel'ope. His real name was Ar'neos, but the suitors nicknamed him Irus because he carried their messages for them. Ulysses, on his return, felled him to the ground.

I'sis. In Egyptian mythology, the sister-wife of Osiris. She was originally the goddess of the earth, and afterwards of the moon.

Isme'ne. Daughter of Œ'dipus and Jocasta. Antig'one was buried alive by the order of King Creon, for burying her brother Polynices. Ismene declared that

she had aided her sister, and requested to be allowed to share the same punishment. Denied of this, she is said to have died from grief. The story is told by Sophocles, and the modern artist, Teschendorf, has made a noted picture of the two sisters.

Is'rafil. Known among Arabians as the angel of music, who possessed the most melodious voice of all God's creatures. This is the angel who is to sound the Resurrection Trump, and make music for the saints in Paradise. Israfil, Gabriel, and Michael were the three angels that warned Abraham of Sodom's destruction.

Ith'aca. In mythology, the island-kingdom of Ulysses. The city of Ithaca, the residence of Ulysses was situated on a precipitous, conical hill, now called "eagle's cliff," occupying the whole breadth of the isthmus. Ithaca was also the home of Penelope.

Ithu'riel. One of the angels commissioned by Gabriel to search for Satan, who had effected his entrance into Paradise.

Ixi'on. A fabled king of Thessaly, who became father of the Centaurs. The story by which he is most noted runs: When Deïoneus demanded of Ixion certain gifts he had promised, Ixion treacherously invited him to a banquet, and contrived to make him fall into a pit filled with fire. Ixion, as a punishment, was chained by Hermes with his hands and feet to a wheel, which is described as winged or fiery, and said to have rolled perpetually.

Jamshid'. King of the Genii, famous for a golden cup full of the elixir of life. This cup, hidden by the genii, was discovered while digging the foundations of Persep'olis.

Ja'nus. One of the superior gods of the Romans. The myths represent him as reigning over the earliest inhabitants of Italy, in the time of Saturn. It was to Janus that Saturn fled, and under them was the "golden age," a period of peace. To Janus, Romulus dedicated that celebrated temple, which was always open in time of war, and was closed with much solemnity, whenever there was general peace in the Roman Empire; a thing which happened but three times during 700 years. From this deity the month of January was named, and the first day of the month was sacred to him.

Ja'son. He was a shoot of the heroic stem of Æolus, but not the son of a god; and Juno, while she persecuted the sons of Jupiter, took him under her especial protection. His father, Æson, who reigned at Iolcus, was deprived of the kingdom by his half-brother Pelias, who attempted to take the life of the infant Jason. He was saved by his friends, and intrusted to the care of the Centaur Chiron. When he had grown up he came to Iolcus, and demanded the kingdom, which Pelias promised to surrender to him, provided he brought the golden fleece, which was in the possession of King Æetes in Colchis, and was guarded by an ever-watchful dragon. The greatest feat recorded of him is his voyage in the Argo to Colchis to obtain the golden fleece, which, aided by Juno, he succeeded in doing. He married Medea, daughter of the King of Colchis, who was a magician, and on Jason having vowed eternal fidelity to her, she gave him charms to protect him from danger.

Jinn. A sort of fairies in Arabian mythology, the offspring of fire. They are governed by a race of kings named Suleyman, one of whom "built the pyramids." Their chief abode is the mountain Kâf, and they appear to men under the forms of serpents, dogs, cats, monsters, or even human beings, and become invisible at pleasure. The evil jinn are ugly, but the good are beautiful. According to fable, they were created from fire two thousand years before Adam was made of earth.

Jord. Daughter of Night and mother of Thor. In Scandinavian mythology the name given to primitive earth.

Jove. Known in classical mythology as the god of thunder. The name Jove is but another appellation, rarely given to Zeus or Jupiter.

Juggernaut or **Jaggernaut.** A Hindu god. The temple of this god is in a town of the same name in Orissa.

Ju'no. The wife and sister of Jupiter, daughter of Saturn and Rhea, and as wife of Jupiter mistress of gods and men. Her birthplace was assigned by the Greeks to Argos, or the Island Samos, and to other spots in Greece, although her story and her worship were rather of Phenician origin. The chief peculiarities of her character were love of power and jealousy. The worship of Juno was far spread, and the number of her temples and festivals was very great. The same goddess was worshiped among the Greeks under the name of Hera.

Ju'piter. The highest and most powerful among the gods. By this god was originally represented nature in general; and finally the supreme existence. The worship of Jupiter was universal, and numerous temples were erected to his honor. The largest and the most celebrated in Greece was that in Olympia, remarkable for its own magnificence, and for its statue of Jupiter wrought by Phidias, and for the Olympic games held in its vicinity. His oracle in the grove of oaks at Dodona was renowned, and considered the most ancient in Greece. In Rome the capitol was specially dedicated to him, and he had in that city many temples. Among the Greeks he was known as Zeus.

Kama. The Hindu god of love. His wife is Rati (voluptuousness), and he is represented as riding on a sparrow, holding in his hand a bow of flowers and five arrows, each tipped with the bloom of a flower supposed to conquer one of the senses. His power is so much exalted that even the god Brahma is said to succumb to it.

Ka'mi. The gods of ancient Japan. The name, in modern times, designates any spiritual saint and may also be applied to a prince.

Kaswa. The camel admitted into Moslem paradise, the favorite camel of Mahomet which fell on its knees in adoration when "the prophet" delivered the last clause of the Koran to the assembled multitude at Mecca.

Kelpie. In mythology of Scotland, a spirit of the water seen in the form of a horse. Each lake has its Kelpie.

Kobold. A house-spirit in German superstition. In northern lands the name is sometimes used in place of elf or dwarf representing an under-ground spirit. Probably the same as the Scotch brownie.

Koppelberg. The hill which miraculously opened to receive the children who followed the Pied Piper. This belongs to mythology, as people in the Middle Ages considered Odin as the leader of disembodied spirits, and from this came the Pied Piper. The rats were the restless souls of the dead, which the Pied Piper released by drowning.

Krish'na. In Hindu mythology, the eighth incarnation of Vishnu. According to some authorities he is considered distinct from all the Avatars, as these had only a portion of the divinity, and Krishna was Vishnu himself in form of "the Black One."

Kro'nos. Kronos (Time) was the youngest of the Titans, and as the heavens measure out time to us, and earth is considered its beginning, he is said to be born of Uranos and Ge. He was generally worshiped under the name of Saturn.

Kuve'ra. In Hindu mythology, the god of riches, represented as frightfully deformed, and as riding in a car drawn by hobgoblins.

Lach'e-sis. One of the three fates; the one that spun the thread of life.

Ladon. The dragon who guarded the apples of the Hesperides, and was slain by Hercules. Ladon is also the name of the father of Daphne and Metope.

Læ'ding. In Norse mythology the strong chain with which the wolf, Fenris, was bound. He easily broke the chain and from this legend has grown the saying, "to get loose out of Læding." A stronger chain was known as Droma.

Lær'tes. Mythical King of Ithaca and father of Ulysses. Lærtes took part in the Calydonian hunt, and in the expedition of the Argonauts. He was still alive when Ulysses returned to Ithaca, after the fall of Troy. During the absence of Ulysses he had withdrawn to the country in grief and bowed with age, and Penelope, the wife of Ulysses, is represented as weaving the shroud of her father-in-law, the work with which she put aside her many suitors.

La'ius. King of Thebes, son of Labdacus, husband of Jocasta, and father of Oedipus, by whom he was slain.

La'mia. A monstrous specter, which was believed to devour human beings.

Laoc'oon. Son of Priam and priest of Apollo. He opposed the reception of the Wooden Horse into Troy, thinking it some artifice of the deceitful Greeks. He and his two sons were killed by two monstrous serpents which came from the sea. The people believed that they were struck by the gods because of their interference. The death of Laocoon is the subject of one of the most magnificent and celebrated works of ancient sculpture still in existence; it was discovered in 1506 at Rome, and is now preserved in the Vatican. It is a single block of marble, and was the work of Agesander of Rhodes and two other sculptors.

Laodam'a. The wife of Protesilaus, who was slain before Troy. She begged to be allowed to converse with her dead husband for only three hours, and her request was granted. Hermes (Mercury) led Protesilaus back to the upper world; and when Protesilaus died a second time, Laodama died with him.

Laom'edon. The king who built the walls of Troy assisted by Neptune and Apollo, who had displeased

Jupiter and were sent to work for wages. Neptune built the walls of Troy, while Apollo tended the king's flocks on Mount Ida. When the two gods had done their work, Laomedon refused the reward he had promised and expelled them from his dominions. Neptune sent a seamonster to ravage the country; and a maiden, chosen by lot, was from time to time sacrificed to propitiate it.

Lap'ithæ. A mythical people of Thessaly, noted for their defeat of the Centaurs.

La'res. Inferior gods at Rome, and known as domestic Lares and public Lares. There was in every house their proper sanctuary (lararium) and altar. They seem to have been viewed as the spirits of the departed ancestors, the fathers and forefathers of the family, who sought the welfare of their descendants. The Lares and the Penates are often confounded, but were not the same. "The Penates were originally gods, the powers of nature personified. The Lares were originally themselves human beings, who, becoming pure spirits after death, loved still to hover round the dwelling they once inhabited; to watch over its safety, and to guard it as the faithful dog guards its master."

Lati'nus. A king of Latium, son of Faunus and the nymph Marica, brother of Lavinius, husband of Amata, and father of Lavinia, whom he gave in marriage to Æneas. Italy was so called from Lavinia, daughter of Lati'nus and wife of Æneas. Æneas built a town which he called Lavin'ium, capital of La'tium. According to one account, Latinus, after his death, became Jupiter Latiaris, just as Romulus became Quirinus.

Lat'mus. A mountain in Cairia. It was the mythological scene of the story of Selene (Luna) and Endymion.

Lato'na. Daughter of Cœus, a Titan, and Phœbe, and by Jupiter, the mother of Apollo and Diana. The love of the king of the gods procured for her the hatred of Juno.

Lavin'ia. The daughter of Latinus and Amata, betrothed to Turnus, but married to Æneas. Æneas founded the town of Lavinium, called after Lavinia, the daughter of Latinus.

Le'da. The mother of Helen. Jupiter visited her in the form of a swan, and "Leda and the Swan" has been a favorite subject with artists. Correggio and Michael Angelo have both left paintings of the same subject.

Lepra'caun. The fairy shoemaker of Ireland, so called because he is always seen working at a single shoe.

Les'trigons. A mythical race of giants who lived in Sicily. Ulysses sent two of his men to request that he and his crew might land, but the king ate one and the other fled. The Lestrigons assembled on the coast and threw stones against Ulysses and his crew. Ulysses fled with much loss.

Leth'e. The river that separates Hades from the Elysian fields. The Greeks believed in a magical power of the waters of this river, which the souls of all the dead are obliged to taste, that they may forget everything said and done in the earth.

Li'ber. A name frequently given by the Roman poets to the Greek Bacchus or Dionysus. But the god Liber and the goddess Libera were ancient Italian divinities, presiding over the cultivation of the vine and the fertility of the fields. Hence they were worshiped in early times in conjunction with Ceres. The vine and ivy and the panther were especially sacred to him. Goats were usually offered in sacrifice to him, because they are particularly injurious to the vine.

Li'bertas. The goddess of liberty, to whom several temples were erected at Rome. Libertas is represented in works of art as a matron, with the pileus, the symbol of liberty, or a wreath of laurel. Sometimes she appears holding the Phrygian cap in her hand.

Lib'issa. Queen of fays and fairies.

Libiti'na. An ancient goddess of Rome, who presided over the burial of the dead. At her temple at Rome everything necessary for funerals was kept, and persons might there either buy or hire such things. Hence a person undertaking the burial of a person (an undertaker) was called "libitinarius," and his business "libitina."

Lidskial'fa. The throne of Alfader, whence he can view the whole universe.

Lif. In Norse mythology the name given to man who is to occupy the purified earth when goodness resumes its sway.

Lil'inau. In American Indian folk-lore Lilinau was wooed by a phantom. She followed his green waving plume through the forest, and was never seen again.

Li'lith. In Hebrew mythology a female specter who lies in wait for children in order to destroy them. The older traditions tell of Lilith as a former wife of Adam and the mother of demons. Amulets were worn as protection from her powers.

Lob'aircin. In Irish mythical tales a fairy shoemaker resembling an old man, who resorts to out-of-the-way places, where he is discovered by the noise of his hammer. He is rich, and while anyone keeps his eye fixed upon him cannot escape, but the moment the eye is withdrawn he vanishes.

Lo'fen. The Scandinavian god who guards friendship.

Lof'ua. The Scandinavian goddess who reconciles lovers.

Lo'ki. The great god of fire in Norse mythology.

Lo're-lei'. In German legend a siren who haunted a rock of the same name on the right bank of the Rhine. She combed her hair with a golden comb, and sang a wild song which enticed fishermen and sailors to destruction on the rocks and rapids at the foot of the precipice. In Northern mythology Lorelei is represented as immortal, a daughter of the Rhine, and dwelling in the river bed.

Lo'tis. A nymph, who, to escape the embraces of Priapus, was metamorphosed into a tree, called after her Lotus.

Lubins. A species of goblins in Normandy that take the form of wolves, and frequent churchyards. They are very timorous, and take flight at the slightest noise.

Lu'cifer. As the bringer of light, is the name of the planet Venus, when seen in the morning before sunrise. The same planet was called "Hesperus," when it appeared in the heavens after sunset.

Lu'na. She was the daughter of Hyperion and Theia, and was distinct in name, descent, and story, from Diana, who was taken as goddess of the moon. To Luna was ascribed great influence in relation to the birth of men, Luna seems to have been especially worshiped by the Atlantides.

Lycome'des. A king in the Island of Scyros, to whose court Achilles was sent, disguised as a maiden, by his mother, Thetis, who was anxious to prevent his going to the Trojan War. Some traditions say that Lycomedes treacherously killed Thesus by throwing him from a rock.

Maenalaus. A mountain in Arcadia, extending from Megalopolis to Tegea, celebrated as the favorite haunt of the god Pan. The Roman poets frequently use the adjectives "Maenalius" and "Maenalis" as equivalent to Arcadian.

Mæ'ra. The dog of Icarios. Icarios having made wine, gave it to some shepherds, who, thinking themselves poisoned, killed him; recovering themselves, they buried him. His daughter, Erigone, being shown the spot by his faithful dog Mæra, hung herself through grief.

Mam'mon. In demonology, placed at the head of nine ranks of demons. Also a Syriac word used in the Scriptures to signify either riches or the god of riches. By poetic license, Milton makes Mammon one of the fallen angels.

Ma'nes. In Roman mythology these are found among the demons of the Genii. Although often spoken of as the spirits or souls of the departed, they seem more commonly to have been considered as guardians of the deceased, whose office was to watch over their graves, and hinder any disturbance of their tranquillity.

Ma'ni. Name given in ancient Norse mythology to the moon. Later known as the son of Mundilfori; taken to heaven by the gods to drive the moon-car. He is followed by a wolf, which, when time shall be no more, will devour both Mani and his sister Sol.

Man'itou. The great spirit of American Indians.

Mars. The god of war and battles was a son of Jupiter and Juno, and educated in Thrace. He was viewed as presiding over rude and fierce war, the origin of which was ascribed to him, while Minerva had the credit of inventing tactics and the proper military art. The Romans regarded him as the father of Romulus, and the founder and protector of their nation.

Mar'syas. The Phrygian flute-player who challenged Apollo to a contest of skill, and, being beaten by the god, was flayed alive for his presumption. From his blood arose the river so called. The flute on which Marsyas played was one Athe'na had thrown away, and, being filled with the breath of the goddess, discoursed most excellent music.

Max'imus. One of the appellations of Jupiter, being the greatest of the gods.

Mede'a. A daughter of Æetes, skilled in charms and witchcraft. She had scarcely beheld Jason, when, through the influence and disposal of the gods, a tender affection for the hero was raised in her bosom, which soon kindled to a flame of the most violent passion. Jason went to the temple of Hecate to supplicate the mighty goddess, where he was met by Medea. She disclosed her love to him, at the same time promising her assistance in the dangers which threatened him, and her powerful

help in accomplishing his glorious undertaking, provided he would swear fidelity to her. Jason complied, and Medea, reciprocating the oath, rendered the hero invincible by means of her magical incantations.

Medu'sa. One of the three Gorgons whose hair was entwined with hissing serpents, and their bodies were covered with impenetrable scales; they had wings, and brazen claws, and enormous teeth, and whoever looked upon them was turned to stone. Medusa, who alone of the sisters was mortal, was, according to some legends at first a beautiful maiden, but her hair was changed into serpents by Athena (Minerva), in consequence of her having become by Poseidon (Neptune) the mother of Chrysaor and Pegasus, in one of Athena's temples. She was killed by Perseus, and her head was fixed on the shield of Minerva. From her blood sprang the winged horse, Pegasus.

Megæ'ra. One of the Furies; sometimes said to personify a guilty conscience. The names of the Furies were: Tisiphone, whose particular work was to originate fatal epidemics and contagion; Alecto, to whom was ascribed the devastations and cruelties of war; and Megæra, the author of insanity and murders. Temples were consecrated to them among both the Greeks and the Romans, and among the latter a festival also.

Me'gin-giord. A magic belt worn by the god Thor. He once proposed to show his strength by lifting great weights, but when challenged to pick up the giant's cat, he tugged and strained, only to succeed in raising one paw from the floor, although he had taken the precaution to enhance his strength as much as possible by tightening his belt Megin-giörd.

Melea'ger. Son of the Calydonian King Oeneus; took part in the Argonautic expedition. He distinguished himself as one of the Argonauts, and by his skill in throwing the javelin.

Mel'ia. One of the daughters of Oceanus and mother of Phoroneus, one of the fabulous kings of Argos.

Mel'ian Nymphs. The nymphs sent to bear the infant Jupiter to the cave on Mount Ida.

Melicer'tes. A son of the Theban King Athamas by Ino. He was metamorphosed into a sea-god.

Melissa. A nymph, said to have discovered the use of honey, and from whom bees were believed to have received their name. There can be no doubt, however, that the name really came from a Greek word meaning honey, and was hence given to nymphs.

Mello'na. One of the rural divinities, the goddess of bees.

Mel-pom'e-ne. One of the Muses. Melpomene, the Muse of tragedy, was supposed to preside over melancholy subjects of all kinds.

Melusi'na. The most noted among French fairies. She was condemned to become every Saturday a serpent from the waist downward, as a punishment for having, by means of a charm, inclosed her father in a high mountain, in order to avenge an injury her mother had received from him. She married Raymond, Count of Poitiers, and, having been seen by him during her loathsome transformation — in violation of his solemn promise never to visit her on a Saturday — was immured in a subterranean dungeon of the castle of Lusignan.

Mem'non. A son of Tithonus and Aurora, and King of Ethiopia. After the fall of Hector, he went to the assistance of his uncle, Priam, with ten thousand men, and displayed great courage in the defense of Troy, but was at length slain by Ajax, or by Achilles, in single combat, whereupon he was changed into a bird.

Men'des. An Egyptian god like Pan. He was worshiped in the form of a goat.

Menela'us. A son of Plisthenes or Atreus, and younger brother of Agamemnon, was King of Lacedæmon, and married to the beautiful Helen, by whom he became the father of Hermione. His early life, the rape of his wife by Paris, and the expedition of the Greeks to Asia to punish the Trojans, are related under Agamemnon. In the Trojan War Menelaus killed many Trojans, and would have slain Paris also in single combat had not the latter been carried off by Aphrodite (Venus) in a cloud.

Menoe'ceus. (1) A Theban, grandson of Pentheus, and father of Hipponome, Jocasta, and Creon. (2) Grandson of the former, and son of Creon, put an end to his life because Tiresias had declared that his death would bring victory to his country, when the seven Argive heroes marched against Thebes.

Menoe'tius. Brother of Atlas and son of one of the Titans. On account of his pride and strength he was killed by Jupiter's lightnings.

Men'tor. A friend of Ulysses in Ithaca, whose form Minerva assumed, to give instructions to Ulysses' son Telemachus, whom she accompanied to Pylos and Lacedæmon.

Meph'is-toph'e-les. One of the seven chief devils in the old demonology, the second of the fallen archangels, and the most powerful of the infernal legions after Satan. He figures in the old legend of Dr. Faustus as the familiar spirit of that magician. To modern readers he is chiefly known as the cold, scoffing, relentless fiend of Goethe's "Faust," and the attendant demon (Mephistophilis) in Marlowe's "Faustus."

Mercury. Has been identified with the Greek Hermes. The Romans of later times transferred all the attributes and myths of Hermes to their own god. [Hermes.] The Fetiales, however, never recognized the identity; and, instead of the "caduceus," they used a sacred branch as the emblem of peace. The resemblance between Mercurius and Hermes is indeed very slight. The worship of Mercury was very common among Egyptians, Greeks, and Romans, and many temples were consecrated to him. At Rome there was a particular festival held for the expiation of merchants in honor of Mercury.

Meri'ones. A Cretan hero, son of Molus, was one of the bravest heroes in the Trojan War, and usually fought along with his friend Idomeneus.

Mer-maids. Wave maidens of Northern mythology and classed with nymphs in Grecian and Roman. They were generally represented as young and beautiful virgins, partially covered with a veil or thin cloth, bearing in their hands vases of water, or shells, leaves, or grass, or having something as a symbol of their appropriate offices. They were attendants of the gods.

Me'u. In Hindu mythology, a sacred mountain, 80,000 leagues high, situated in the center of the world. It is the abode of Indra, and abounds with every charm that can be imagined.

Mi'das. In mythology, known as King of Phrygia, who restored to Bacchus his nurse and preceptor Silenus, and received as a compensation the fatal attribute of turning into gold everything he touched. But this proved to be very inconvenient, as it prevented him from eating and drinking, and he prayed that the gift might be revoked. At the command of the god, he washed in the Pactolus, the sands of which became, in consequence, mixed with gold. Another tradition is, that in a musical contest between Pan and Apollo, he gave judgment in favor of the satyr; whereupon Apollo in contempt gave the king a pair of ass's ears. Midas, hid them under his Phrygian cap; but his servant, who used to cut his hair, discovered them, and was so pleased with the "joke," which he durst not mention, that he dug a hole in the earth, and relieved his mind by whispering in it, "Midas has ass's ears."

Mid'gard. In Scandinavian mythology the name given to the earth. Out of the giant's flesh they fashioned Midgard (middle garden), as the earth was called, which was placed in the exact center of the vast space, and hedged all round with Ymir's eyebrows which formed its bulwarks or ramparts. The solid portion of Midgard was surrounded by the giant's blood or sweat, which now formed the ocean, while his bones made the hills, his flat teeth the cliffs, and his curly hair the trees and all vegetation.

Midgard Sormen (earth's monster). The great serpent that lay in the abyss at the root of the celestial ash. Child of Loki.

Mi'mir. In Scandinavian mythology, the god of wisdom. Also god of the ocean, which is called "Mimir's well," in which wit and wisdom lay hidden, and of which he drank every morning from the horn Gjallar. Odin once drank from this fountain, and by doing so became the wisest of gods and men; but he purchased the privilege and distinction at the cost of one eye, which Mimir exacted from him.

Miner'va. Under the name of Minerva among the Romans and of Athena among the Greeks, ancient fiction personified and deified the idea of high intelligence and wisdom. She was a daughter of Jupiter, sprung from his head. The Greeks ascribed to this goddess the invention of many arts and sciences, which had a great influence on their civilization. She was regarded as inventress of the flute, of embroidery and spinning, the use of the olive, and various instruments of war; in short, of most works indicating superior intelligence or skill. Arachne's contest with her in working with the needle, and consequent despair and transformation are beautifully described by Ovid. The city of Athens was consecrated to Minerva, and boasted of receiving its name from her.

Minos. Son of Lycastus, and grandson of the former, was likewise a king and lawgiver of Crete. In order to avenge the wrong done to his son Androgeos at Athens, he made war against the Athenians, and compelled them to send to Crete every year, as a tribute, seven youths and seven maidens, to be devoured in the laby-

rinth by the Minotaurus. From Minos we have Minois, a daughter or a female descendant of Minos, as Ariadne, and the adjectives Minoius and Minous, used by the poets as equivalent to Cretan.

Mino'taur. A celebrated monster with the head of a bull and the body of a man. The labyrinth in which it was kept was constructed by Daedalus. This monster was slain by Theseus, with the assistance of Ariadne, the daughter of Minos. [Theseus.] Daedalus having fled from Crete to escape the wrath of Minos, Minos followed him to Sicily, and was there slain by Cocalus and his daughters.

Mith'ras. In Persian mythology, one of the principal gods of the ancient Persians, a personification of the sun. He was regarded as a mediator between the two opposite deities, Ormuzd and Ahriman, or the principle of good and the principle of evil.

Mjolnir. From mythology of northern lands. The name of Thor's celebrated hammer — a type of the thunderbolt — which, however far it might be cast, was never lost, as it always returned to his hand; and which, whenever he wished, became so small that he could put it in his pocket.

Mnemos'yne. Mother of the Muses and goddess of memory. Jupiter courted the goddess in the guise of a shepherd.

Mnes'theus. A Trojan, and a companion of Æneas in his voyage to Italy; the reputed progenitor of the family of the Memmii in Rome. At the funeral games, by which Æneas celebrated the death of his father, Anchises, Mnestheus took part in a naval contest, and, though not the victor, obtained a prize for skill and energy.

Moakkibat. A class of angels, according to the Mohammedan mythology. Two angels of this class attend every child of Adam from the cradle to the grave. At sunset they fly up with the record of the deeds done since sunrise. Every good deed is entered ten times by the recording angel on the credit or right side of his ledger, but when an evil deed is reported the angel waits seven hours, "if haply in that time the evil-doer may repent."

Moi'rae. The Greek name for Parcae or the Fates. These grave and mighty goddesses were represented by the earliest artists with staffs or scepters, the symbol of dominion.

Morpheus. The son of Sleep and the god of dreams. The name signifies the fashioner or molder, because he shaped or formed the dreams which appeared to the sleeper.

Mowis. The bridegroom of Snow, who (according to American Indian tradition) wooed and won a beautiful bride; but when morning dawned, Mowis left the wigwam, and melted into the sunshine. The bride hunted for him night and day in the forests, but never saw him more.

Muses. Nine daughters of Jupiter and Mnemosyne, goddesses of poetry, history, and other arts and sciences. Calliope was the muse of eloquence and heroic poetry (to her the ancients gave precedence); Clio, of history; Erato, of amorous poetry; Euterpe, of music; Melpomene, of tragedy; Polyhymnia, of eloquence and imitation; Terpsichore, of dancing; Thalia, of comic and lyric poetry; and Urania, of astronomy. Their usual residence was Mount Parnassus in Helicon.

Mysterious Three, The, of Scandinavian mythology were "Har" (the Mighty), the "Like-Mighty," and the "Third Person," who sat on three thrones above the rainbow. Then came the "Æsir," of which Odin was chief, who lived in Asgard (between the rainbow and earth); next come the "Vanir," or gods of the ocean, air, and clouds, of which deities Niord was chief.

Myr'midons. The trusty followers of Achilles. They are said to have inhabited originally the island of Ægina, and to have emigrated with Peleus into Thessaly; but modern critics, on the contrary, suppose that a colony of them emigrated from Thessaly into Ægina. The Myrmidons disappear from history at a later period. The ancients derived their name either from a mythical ancestor, Myrmidon, son of Zeus (Jupiter) and Eurymedusa, and father of Actor; or from the ants in Ægina, which were supposed to have been metamorphosed into men in the time of Æacus.

Naiads. The nymphs of fresh water, whether of rivers, lakes, brooks, or springs. Many of these nymphs presided over springs, which were believed to inspire those who drank of them. The nymphs themselves were, therefore, thought to be endowed with prophetic power, and to be able to inspire men. Hence all persons in a state of rapture, such as seers, poets, madmen, etc., were said to be caught by the nymphs.

Nar'aka. The hell of the Hindus. It has twenty-eight divisions, in some of which the victims are mangled by ravens and owls; in others they will be doomed to swallow cakes boiling hot, or walk over burning sands.

Narcis'sus. The beautiful youth Narcissus was son of the river-god Cephissus and the sea-nymph Liriope. Echo, who was enamored of him, died of grief. But Nemesis, to punish him, caused him to see his own image reflected in a fountain, whereupon he became so enamored of it that he gradually pined away, until he was metamorphosed into the flower which bears his name. According to another tradition Narcissus had a sister of remarkable beauty, to whom he was tenderly attached. She resembled him in features, was similarly attired, and accompanied him in the hunt. She died young, and Narcissus, lamenting her death, frequented a neighboring fountain to gaze upon his own image in its stream. The strong resemblance that he bore to his sister made his own reflection appear to him, as it were, the form of her whom he had lost. The gods looked with pity upon his grief, and changed him to the flower that bears his name.

Nausica'a. A daughter of Alcinous, King of the Phæacians, and Arete, who conducted Ulysses to the court of her father.

Nec'tar. Wine conferring immortality, and drunk by the gods.

Ne'leus. Son of Neptune and Tyro, and brother to Pelias. He became king in Peloponnesus; was the father of twelve sons, all of whom were killed by Hercules.

Neme'an Lion. A monstrous lion, near the forest of Nemæa, wasted the surrounding country and threatened destruction to the herds. Hercules promised to deliver the country of the monster, and Thespius rewarded Hercules by making him his guest so long as the chase lasted. Hercules slew the lion, and henceforth wore its skin as his ordinary garment, and its mouth and head as his helmet. Others related that the lion's skin of Hercules was taken from the Nemean lion. This great adventure happened while he was watching the oxen of his father.

Nem'esis. A Greek goddess, who measured out to mortals happiness and misery, and visited with losses and sufferings all who were blessed with too many gifts of fortune. This is the character in which she appears in the earlier Greek writers; but subsequently she was regarded, like the Erinyes or Furies, as the goddess who punished crimes.

Neoptol'emus. The son of Achilles. Neoptolemus was reared in Scyros, in the palace of Lycomedes, and was brought from thence by Ulysses, because it had been prophesied that Neoptolemus and Philoctetes were necessary for the capture of Troy. At Troy Neoptolemus showed himself worthy of his great father. He was one of the heroes concealed in the wooden horse. At the capture of the city he killed Priam, and sacrificed Polyxena to the spirit of his father.

Nep'tune. The sea. In Roman mythology the divine monarch of the ocean. The principal exploits and merits ascribed to Neptune are, the assistance to Jupiter against the Titans; the building of the walls and ramparts of Troy; the creation and taming of the horse; the raising of the Island Delos out of the sea; and the destruction of Hippolytus by a monster from the deep. He was feared also as the author of earthquakes and deluges, which he caused or checked at pleasure by his trident.

Ne'reids. Sea-nymphs, generally regarded as belonging to the Mediterranean. The chief characteristics of these minor deities of the sea were the power of divination and ability to change their forms at pleasure. The daughters of Nereus and Doris were the so-called "Nereides," or sea-nymphs, fifty in number. They belonged to the train of Neptune and were subservient to his will.

Ne'reus. A son of Pontus and Gæa, and husband of Doris, by whom he became the father of the fifty Nereides.

Nes'tor. A son of Neleus and Chloris, and King of Pylos in Triphylia. He took a prominent part in the Trojan War, acting as counselor of the other Grecian chiefs, but was equally distinguished for his valor in the field of battle. Homer extols his wisdom, justice, bravery, and eloquence. He lived to so great an age that his advice and authority were deemed equal to those of the immortal gods.

Nickar or **Hnickar.** The name assumed by Odin when he personated the destroying principle.

Nicneven. A gigantic and malignant female spirit of the old popular Scottish mythology. The hag is represented as riding at the head of witches and fairies at Hallow-e'en.

Nidhug. The dragon that gnaws at the root of Yggdrasil, the tree of the universe in Scandinavian mythology.

Nifiheim. Mist-home of old Norse mythology. The region of endless cold and everlasting night, ruled over

by Hela. It consists of nine worlds, to which are consigned those who die of disease or old age. This region existed "from the beginning" in the North, and in the middle thereof was the well Hvergelmeer, from which flowed twelve rivers.

Ni'nus. The son of Belus, the husband of Semiramis, and the reputed builder of Nineveh and founder of the Assyrian monarchy.

Ni'o-be. The daughter of Tantalus, and the wife of Amphion, King of Thebes. Niobe slighted the divinity of Latona, and the latter engaged both her children, Apollo and Diana, to avenge her; they, by their arrows, slew the seven sons and seven daughters of Niobe, who by grief was changed into stone. She was transported in a whirlwind to the top of Mount Sipylus, where she has ever since remained, her tears flowing unceasingly.

Niord. The Scandinavian sea-god. He was not one of the Æsir. Niord's son was Frey (the fairy of the clouds), and his daughter was Freyja. His home was Noatun. Niord was not a sea-god, like Neptune, but the spirit of water and air. The Scandinavian Neptune was Ægir, whose wife was Skadi. His temples were near the sea shore and all aquatic plants belonged to him.

Ni'sus. A Trojan youth who accompanied Æneas to Italy, after the fall of Troy, and who is celebrated for his devoted attachment to Euryalus.

Nix. Little creatures not unlike the Scotch brownie and German kobold. They wear a red cap, and are ever ready to lend a helping hand to the industrious and thrifty.

Noko'mis. Daughter of the moon, American Indian myths. Sporting one day with her maidens on a swing made of vine canes, a rival cut the swing, and Nokomis fell to earth, where she gave birth to a daughter named Weno'nah.

Nornir or **Norns.** The three fates of Scandinavian mythology, past, present, and future. They spin the events of human life, sitting under the ash-tree Yggdrasil (Igg'-dra-sil'), which they carefully tend. Their names are Urda (the past), Verdandi (the present), and Skulda (the future). Besides these three Norns, every human creature has a personal Norn or fate. The home of the Norns is called in Scandinavian mythology "Doomstead."

Nox. Goddess of night was considered among the ancients as one of their oldest divinities, and was worshiped by them with great solemnity. In the temple of Diana, at Ephesus, was a famous statue of her. She became the mother of Æther (air), and Dies (day). She is likewise, according to some, the mother of the inexorable Parcæ; of the avenging Nemesis, who punishes hidden crime; of the Furies, who torment the wicked; of Charon, the ferry-man of hell; and of the twin brothers, Sleep and Death.

Nymphs. The nymphs of ancient fiction were viewed as holding a sort of intermediate place between men and gods, as to the duration of life; not being absolutely immortal, yet living a vast length of time. Oceanus was considered as their common father, although the descent of different nymphs is given differently. Their usual residence was in grottoes or water-caves. Their particular offices were different, and they were distinguished by various names according to the several objects of their patronage, or the regions in which they chiefly resided. Thus there were the "Oreades," or nymphs of the mountains; "Naiades," "Nereides," and "Potamides," nymphs of the fountains, seas, and rivers; "Dryades" and "Hamadryades," nymphs of the woods; "Napææ," nymphs of the vales.

Oce'anids. Nymphs of the ocean, said to be three thousand in number; daughters of Oceanus.

Oce'anus. The god of the water which was believed to surround the whole earth, is called the son of Heaven and Earth, the husband of Tethys, and the father of all the river-gods and water-nymphs. The early Greeks regarded the earth as a flat circle, which was encompassed by a river perpetually flowing round it, and this river was Oceanus. Out of and into this river the sun and the stars were supposed to rise and set; and on its banks were the abodes of the dead. Before Neptune, Oceanus, son of the heavens and the earth, and husband of Thetis, was honored as god of the sea.

Odhærir. In Scandinavian mythology, the mead or nectar made of Kvasir's blood, kept in three jars. The second of these jars is called "Sohn," and the "Bohn." Probably the nectar is the "spirit of poetry."

Odin. The king of gods and men, and the reputed progenitor of the Scandinavian kings. He corresponds both to the Jupiter and the Mars of classical mythology. As god of war, he holds his court in Valhalla, surrounded by all warriors who have fallen in battle, and attended by two wolves, to whom he gives his share of food; for he himself lives on wine alone. On his shoulders he carries two ravens, Hugin (mind) and Munin (memory), whom he dispatches every day to bring him news of all that is doing throughout the world. He has three great treasures: namely, Sleipnir, an eight-footed horse of marvelous swiftness; Gungnir, a spear, which never fails to strike what it is aimed at; and Draupnir, a magic ring, which every ninth night drops eight other rings of equal value. The German tribes worshiped Odin under the name of "Woden." The fourth day of the week, Wednesday (i. e., Woden's day), was sacred to him.

O'dur. In Scandinavian mythology, husband of Freyja, whom he deserted. He abandoned his wife on her loss of youth and beauty, and was punished.

Odys'seus. A Greek form of the name Ulysses.

Œd'i-pus. He was the son of Laius, King of Thebes, and his wife Jocasta. Laius, having been warned by an oracle that his throne and life were in danger from this son, gave him to a herdsman to be killed. But his life was saved, and he was reared by a peasant. Afterwards he ransomed Thebes from the Sphinx by answering her riddle, unwittingly killed his own father, married Jocasta, and became King of Thebes. Subsequently discovering his parentage, he destroyed his eyesight, and wandered away from Thebes, attended by his daughter, Antigone, who remained with him till his death.

O'gres of nursery mythology are giants of very malignant dispositions, who live on human flesh.

Olym'pus. A range of mountains in Thessaly, the abode of the gods. A gate of clouds, kept by the goddesses named the Seasons, unfolded to permit the passage of the Celestials to earth, or to receive them on their return.

Ophi'on. (1) One of the Titans. (2) One of the companions of Cadmus. (3) Father of the Centaur Amycus, who is hence called "Ophionides."

Ops. A goddess of plenty, fertility, and power, the wife of Saturn, and the patroness of husbandry; identical with Cybele, or Rhea.

Ores'tes. The son of Agamemnon and Clytemnestra. On the murder of his father by Ægisthus and Clytemnestra, Orestes was saved from the same fate by his sister Electra, who caused him to be secretly carried to Strophius, King in Phocis, who was married to Anaxibia, the sister of Agamemnon. There he formed a close and intimate friendship with the king's son, Pylades; and when he had grown up, he repaired secretly to Argos with his friend, and avenged his father's death by slaying Clytemnestra and Ægisthus. After the murder of his mother he was seized with madness, and fled from land to land, pursued by the Erinyes or Furies. At length, on the advice of Apollo, he took refuge in the temple of Athena (Minerva), at Athens, where he was acquitted by the court of the Areopagus, which the goddess had appointed to decide his fate. (See Pylades.)

O-ri'on. A mighty giant and hunter, famous for his beauty. Having come to Chios, he fell in love with Merope, the daughter of Oenopion; his treatment of the maiden so exasperated her father, that, with the assistance of Dionysus (Bacchus), he deprived the giant of his sight. Being informed by an oracle that he should recover his sight if he exposed his eyeballs to the rays of the rising sun, by following the sound of a Cyclops' hammer, he reached Lemnos, where he found Vulcan, who gave him Cedalion as a guide to the abode of the sun. After the recovery of his sight he lived as a hunter with Artemis (Diana). Orion was slain by Diana, or, as some say, by Jupiter, and placed among the stars, where he forms the most splendid of all the constellations, appearing as a giant wearing a lion's skin and a girdle, and wielding a club.

Orithy'ia. A daughter of Erechtheus, beloved by Boreas, who carried her off as she was wandering near the River Ilissus. (See Boreas.)

Or'log. A god of Norse fable personifying the eternal law of the universe, from whose decree there was no appeal.

Ormuzd. The name of the supreme deity of the ancient Persians, and of their descendants, the Parsees and Guebers. He is an embodiment of the principle of good, and was created by the will of the great eternal spirit, Zervan-Akharana, simultaneously with Ahriman, the principle of evil, with whom he is in perpetual conflict. Ormuzd is the creator of the earth, sun, moon, and stars, to each of which he originally assigned its proper place, and whose various movements he continues to regulate.

Or'pheus. The son of Oeagrus and Calliope, lived in Thrace at the period of the Argonauts, whom he accompanied in their expedition. Presented with the

lyre by Apollo, and instructed by the Muses in its use, he enchanted with its music not only the wild beasts, but the trees and rocks upon Olympus, so that they moved from their places to follow the sound of his golden harp. After his return from the Argonautic expedition, he took up his abode in Thrace, where he married the nymph Eurydice. His wife having died of the bite of a serpent, he followed her into the abodes of Hades. Here his lyre so charmed King Pluto that Eurydice was released from death on the condition that Orpheus would not look back till he reached the earth. He was just about to place his foot on the earth when he turned round, and Eurydice vanished from him in an instant.

Osiris, in Egyptian mythology, is said to have been the son of Jupiter by Niobe, and to have ruled first over the Argives, and afterwards to have become king of the Egyptians. His wife was Isis, who is by many said to be the same with the Io, daughter of Inachus. Osiris was at length slain by Typhon, and his corpse concealed in a chest and thrown into the Nile. Isis, after much search, by the aid of keen-scented dogs, found the body, and placed it in a monument on an island near Memphis. The Egyptians paid divine honor to his memory, and chose the ox to represent him, because, as some say, a beast so appeared to them after the body of Osiris was interred, or according to others, because Osiris had instructed them in agriculture. Osiris was generally represented with a cap on his head like a mitre, with two horns; he held a crook in his left hand, and in his right a whip with three thongs. Sometimes he appears with the head of a hawk.

Otus. This giant and his brother, Ephialtes, were usually called the Aloidae. They were renowned for their extraordinary strength and daring spirit.

Pactolus. The river whose sands turned to gold when Midas washed in the waters by order of Bacchus.

Paimosaid'. In American Indian myths a walking deity, especially one who walks through cornfields about harvest time to pluck the ears of maize or corn.

Palæmon. Originally called Melicertes. Son of Ino; called Palæmon after he was made a sea-god. The Roman Portunus, the governing god of harbors, is the same.

Pales. The goddess of shepherds, presided over cattle and pastures, whose festival, the Palilia, was celebrated on the 21st of April, the day on which Rome was founded.

Palamedes. A Greek hero. He was sent by the Greek princes, who were going to the Trojan War, to bring Ulysses to the camp, who, to withdraw himself from the expedition, had pretended to be insane. Palamedes soon penetrated the deception, and Ulysses was obliged to join in the war.

Palladium. A Trojan statue of the goddess Pallas, which represented her as sitting with a spear in her right hand and in her left a spindle or distaff. On this statue the fate of the city was supposed to depend: for while this sacred image was kept intact, Troy was supposed to be impregnable. The Palladium is said to have fallen from heaven near the tent of Ilus, at the time when that prince was employed in building the citadel of Ilion or Troy; and Apollo, by an oracle, declared that the city should never be taken whilst the Palladium was contained within its walls.

Pallas. [1] One of the giants. [2] The father of Athena, according to some traditions. [3] Son of Lycaon and grandfather of Evander. [4] Son of Evander, and an ally of Æneas.

Pallas-Athene. She is in Homer, and in the general popular system, the goddess of wisdom and skill. In war she is opposed to Ares, the wild war-god, as the patroness and teacher of just and scientific warfare. The great poet is on the side of the Greeks, and he on that of the Trojans. Ulysses was her special favorite. As the patroness of arts and industry in general, Pallas-Athene was regarded as the inspirer and teacher of all able artists. Thus she taught Epius to form the wooden horse, by means of which Troy was taken; and she also superintended the building of the ship Argo.

Pan. One of the most singular of the inferior gods was Pan, whose worship was universally regarded. He was the god of shepherds and herdsmen, of groves and fields, and whatever pertained to rural affairs. His worship was probably derived from the Egyptians. He was said to be the son of Mercury and Dryope. His favorite residence was in the woods and mountains of Arcadia. From his love to Syrinx, who was changed into a reed, he formed his shepherd-pipe out of seven reeds and called it by her name. His pride in this invention led him into his unlucky contest with Apollo. Pan was originally, among the Egyptians, worshiped in the form of a goat, and under the name of Mendes. In Greece, Arcadia was especially sacred to him, and here he is said to have given oracles on Mount Lycæus. His festivals were introduced by Evander among the Romans, and by them called Lupercalia. Goats, honey, and milk were the usual offerings to Pan. Pan, like other gods, who dwelt in forests was dreaded by travelers, to whom he sometimes appeared, and whom he startled with sudden awe or terror. Hence sudden fright, without any visible cause, was ascribed to Pan, and was called a panic fear.

Pandora. The first mortal female that ever lived. She was made of clay by Vulcan, and having received life, all the gods made presents to her. Venus gave her beauty and the art of pleasing; the Graces gave her the power of captivating; Apollo taught her how to sing; Mercury instructed her in eloquence and brought her to Epimetheus, who made her his wife, forgetting the advice of his brother Prometheus, not to receive gifts from the gods.

Parcæ. (The fates.) Powerful goddesses who presided over the birth and life of mankind. They were three in number, Clotho, Lachesis, and Atropos, daughters of Nox and Erebus. Parcæ is from "pars," a lot; and the corresponding Moiræ is from "meros," a lot. The fates were so called because they decided the lot of every man. Among early peoples the superiority which they ascribed to their deities consisted chiefly in freedom from bodily decay, a sort of immortal youth, ability to move with wonderful celerity, to appear and disappear at pleasure with a noble and beautiful form, and to exert an immediate influence upon the condition of mortals. In these respects, however, their power was limited, according to the general opinion, being controlled by an eternal and immutable relation of things, termed fate, and to the Parcæ, or fates, was attributed a power over all destinies and at times control of the gods themselves.

Paris. The son of Priam, King of Troy, and Hecuba; he was also called Alexander. The tradition is that at the marriage of Peleus and Thetis the goddess of discord, who had not been invited, showed her displeasure by throwing into the assembly of the gods, who were at the nuptials, a golden apple on which were the words: "Let it be given to the fairest." The apple was claimed by Hera (Juno), Aphrodite (Venus), and Athena (Minerva). Zeus (Jupiter), ordered Hermes (Mercury), to take the goddesses to Mount Ida, and to intrust the decision of the dispute to the shepherd Paris. The goddesses accordingly appeared before him. Hera promised him the sovereignty of Asia. Athena renown in war, and Aphrodite the fairest of women for his wife. Paris decided in favor of Aphrodite, and gave her the golden apple. This judgment called forth in Hera and Athena fierce hatred against Troy. Under the protection of Aphrodite, Paris now sailed to Greece, and was hospitably received in the palace of Menelaus at Sparta. Here he succeeded in carrying off Helen, the wife of Menelaus, who was the most beautiful woman in the world. Hence arose the Trojan War. Paris fought with Menelaus before the walls of Troy, and was defeated, but was carried off by Aphrodite. He is said to have killed Achilles, either by one of his arrows or by treachery.

Parnassos (Greek). **Parnassus** (Latin). A mountain near Delphi, in Greece. It was well wooded; at its foot grew myrtle, laurel and olive trees, and higher up firs; and its summit was covered with snow during the greater part of the year. It contained numerous caves, glens, and romantic ravines. It has two summits, one of which was consecrated to Apollo and the Muses, the other to Bacchus. It was anciently called Larnassos, from larnax, an ark, because Deucalion's ark stranded there after the flood. After the oracle of Delphi was built at its foot it received the name of Parnassos. It is celebrated as one of the chief seats of Apollo and the Muses, and an inspiring source of poetry and song.

Parthenope. One of the sirens, whose dead body was washed ashore on the present site of Naples. She threw herself into the sea out of love for Ulysses.

Patroclus. The gentle and amiable friend of Achilles in Homer's Iliad.

Pauguk. Name given to the great power, death, in American-Indian mythology.

Pau'puk-kee'wis. In American-Indian folk-lore a mischievous magician, who is pursued by Hiawatha, goes through a series of wonderful transformations in his endeavors to escape, and finally becomes an eagle.

Pax. The goddess of peace, worshiped in Greece under the name Irene. Pax wears a crown of laurel, and holds in her hand the branch of an olive tree.

Peboan. In American-Indian folk-lore the personification of winter in form of a great giant who shook the snow from his hair and turned water into stone by his breath.

Peg'asus. The winged horse which sprang from the blood of Medusa when her head was struck off by Perseus. He was called Pegasus because he made his appearance near the sources of Oceanus.

Pe'leus. King of the Myrmidons at Phthia, in Thessaly. Having, in conjunction with his brother Telamon, murdered his half-brother Phocus, he was expelled by Æacus from Ægina, and went to Thessaly. He was purified from the murder by Eurytion, who gave Peleus his daughter Antigone in marriage, and a third part of his kingdom.

Pe'lias. The name of the spear of Achilles, which was so large that none could wield it but the hero himself.

Pe'li-on. A high mountain in Thessaly celebrated in mythology. Near its summit was the cave of the Centaur Chiron. The giants, in their war with the gods, are said to have attempted to heap Ossa and Olympus on Pelion, or Pelion and Ossa on Olympus, in order to scale heaven. On Pelion the timber was felled with which the ship Argo was built.

Pe'lops. A Phrygian prince, grandson of Jupiter, and son of Tantalus. Expelled from Phrygia, he came to Elis, where he married Hippodamia, daughter of Œnomaus, whom he succeeded on the throne. By means of the wealth he brought with him, his influence became so great in the peninsula that it was called after him "the Island of Pelops."

Pena'tes. The Penates were also domestic or household gods, but they were not a distinct class by themselves, because the master of the dwelling was allowed to select any deity according to his pleasure, to watch over his family affairs, or preside over particular parts of them.

Penel'ope. The faithful wife of Ulysses, who being importuned, during his long absence, by numerous suitors for her hand, postpones making a decision among them until she shall have finished weaving a funeral pall for her father-in-law, Lærtes. Every night she secretly unravels what she has woven by day, and thus puts off the suitors till Ulysses returns.

Pe'ri. Peris are delicate, gentle, fairy-like beings of Eastern mythology, begotten by fallen spirits. They direct with a wand the pure in mind the way to heaven. These lovely creatures, according to the Koran, are under the sovereignty of Eblis; and Mohammed was sent for their conversion, as well as for that of man.

Per'se. A daughter of Oceanus, and wife of Helios (the sun), by whom she became the mother of Aeetes, Circe, Pasiphae, and Perses.

Perse'is. A name given to Hecate, as the daughter of Perses by Asteria.

Perseph'one. The Greek name of Proserpine. Homer describes her as the wife of Hades (Pluto), and the formidable, venerable, and majestic queen of the shades, who rules over the souls of the dead, along with her husband.

Per'seus. He was one of the most distinguished of the early heroes. He was the son of Jupiter and Danæ, educated by Polydectus on the Island Seriphus. His chief exploit was the destruction of the gorgon Medusa, whose head he struck off with a sword given to him by Vulcan. From the blood that fell, sprang the winged horse Pegasus, on which Perseus afterwards passed over many lands. Of his subsequent achievements, the most remarkable were his changing King Atlas into a high rock or mountain, by means of Medusa's head, and his deliverance of Andromeda, when bound and exposed to be devoured by the sea-monster.

Phæ'dra. Daughter of Minos, and wife of Theseus, who falsely accused her step-son Hippolytus.

Pha'eton. A son of Sol, or, according to most mythologists, of Phœbus and Clymene. Anxious to display his skill in horsemanship, he was so presumptuous as to request his father to allow him to drive the chariot of the sun across the heavens for one day. Helios was induced by the entreaties of his son and of Clymene to yield, but the youth being too weak to check the horses, they rushed out of their usual track, the chariot was upset, and caused great mischief; Libya was parched into barren sands, and all Africa was more or less injured, the inhabitants blackened, and vegetation nearly destroyed. Zeus killed him with a flash of lightning, and hurled him down into the River Eridanus. His sisters, the Heliadæ or Phaethontiades, who had yoked the horses to the chariot, were metamorphosed into poplars, and their tears into amber.

Pha'on. A boatman at Mitylene, is said to have been originally an ugly old man; but having carried Aphrodite (Venus) across the sea without accepting payment, the goddess gave him a box of ointment, with which, when he anointed himself, he grew so beautiful that Sappho became enamored of him; but when the ointment had all been used Phaon returned to his former condition, and Sappho, in despair, drowned herself.

Philocte'tes. The most celebrated archer in the Trojan War. He was the friend and armor-bearer of Hercules, who bequeathed to him his bow and the poisoned arrows, for having set fire to the pile on Mount Œta, on which Hercules perished.

Philomela. A daughter of Pandion, King of Athens. Her sister Procne had married Tereus, King of Thrace, and being separated from Philomela spent her time in great melancholy. Tereus treated Philomeia with great cruelty. In poetry we frequently find the nightingale alluded to as Philomela.

Phœ'be. The goddess of the moon, and sister of Phœbus; a name of Diana. See Diana.

Phœ'bus. The god of archery, prophecy, and music; was the son of Jupiter and Latona, and brother of Diana (Artemis). He was god of the sun, as Diana, his sister, was the goddess of the moon.

Phœnix. A fabulous bird described as being as large as an eagle; its head finely crested with a beautiful plumage, its neck covered with gold-colored feathers, its tail white, and its body purple or crimson.

Phyl'lis. (1) A daughter of King Sithon of Thrace, who hung herself, thinking that she was deserted by her lover, and was changed by the gods into an almond tree. (2) A country girl in Virgil's third and fifth Eclogues; hence, a rustic maiden in general.

Pire'ne. A celebrated fountain of Corinth, at which Bellerophon is said to have caught the horse Pegasus. It gushed forth from the rock in the Acrocorinthus, was conveyed down the hill by subterraneous conduits, and fell into a marble basin, from which the greater part of the town was supplied with water. The poets frequently used Pirenis in the general sense of Corinthian.

Plei'ades. Means the "sailing stars," because the Greeks considered navigation safe at the return of the Pleiades, and never attempted it after those stars disappeared. The Pleiades were the seven daughters of Atlas and Pleione, named Electra, Alcyone, Celæno, Maia, Sterope, Taygete, and Merope. They were transformed into stars, one of which (Merope), is invisible out of shame, because she alone married a human being. Some call the invisible star "Electra," and say she hides herself from grief for the destruction of the city and royal race of Troy.

Pluto. He was a second brother of Jupiter, and received, as his portion in the division of empire, the infernal regions, or the world of shades. Under this idea the ancients imagined the existence of regions situated down far below the earth. The chief incident in the history of Pluto is his seizure and abduction of Proserpine, who thereby became his wife, and the queen of the lower world.

Plu'tus. The god of riches, was probably of allegorical rather than mythical origin, since his name in Greek is but the common term for wealth.

Pluvius. "The sender of rain," a surname of Jupiter among the Romans, to whom sacrifices were offered during long-protracted droughts.

Podali'rius. The son of Æsculapius, and brother of Machaon, with whom he led the Thessalians of Tricca against Troy. He was, like his brother, skilled in the medical art.

Pol'ias. Meaning "the goddess protecting the city," a surname of Athena at Athens, where she was worshiped as the protecting divinity of the acropolis.

Poli'tes. A son of Priam and Hecuba, and father of Prian the younger, was slain by Pyrrhus.

Pol'lux. A son of Jupiter and Leda, brother to Castor.

Polydo'rus. (1) King of Thebes, son of Cadmus and Harmonia, husband of Nycteis, and father of Labdacus. (2) Son of Priam and Hecuba. When Ilium was on the point of falling into the hands of the Greeks, Priam intrusted Polydorus and a large sum of money to Polymestor or Polymnestor, King of the Thracian Chersonesus.

Polyhym'nia. Daughter of Jupiter and Mnemosyne. One of the Muses, who presided over singing and rhetoric.

Pol'y-phe'mus. A son of Neptune, and one of the Cyclops, who dwelt in Sicily. He was a cruel monster, of immense size and strength, and had but one eye, which was in the middle of his forehead. He dwelt in a cave near Mount Ætna, and fed his flocks upon the mountain. He fell in love with the nymph Galatea, but as she rejected him for Acis, he destroyed the latter by crushing him under a huge rock. When Ulysses landed in Sicily, he, with twelve of his companions, got caught in the cave of Polyphemus, and six of the number were eaten by the tremendous cannibal. The rest were in expectation of the same fate, but their cunning leader enabled

them to escape, by contriving to intoxicate Polyphemus, and then destroying his single eye with a fire-brand.

Polyx'ena. The daughter of Priam and Hecuba, was beloved by Achilles.

Pomo'na. A nymph at Rome, who was supposed to preside over gardens and to be the goddess of fruit trees.

Pone'mah. In American-Indian mythology the name of the land of the future life, or the spirit-land.

Posei'don. Called Neptune by the Romans; was the god of the Mediterranean Sea. He was a brother of Zeus (Jupiter), and Hades (Pluto), and it was determined by lot that he should rule over the sea. The palace of Poseidon was in the depth of the sea, near Ægæ, where he kept his horses with brazen hoofs and golden manes. With these horses he rides in a chariot over the waves of the sea, which become smooth as he approaches, while the monsters of the deep play around his chariot. Poseidon, in conjunction with Apollo, is said to have built the walls of Troy for Laomedon.

Pri'am. King of Troy when that city was sacked by the allied Greeks. His wife's name was Hec'uba; she was the mother of nineteen children, the eldest of whom was Hector. When the Greeks landed on the Trojan coast Priam was advanced in years, and took no active part in the war. Once only did he venture upon the field of battle, to conclude the agreement respecting the single combat between Paris and Menelaus. After the death of Hector, Priam went to the tent of Achilles to ransom his son's body for burial, and obtained it. When the gates of Troy were thrown open by the Greeks concealed in the wooden horse, Pyrrhus, the son of Achilles, slew the aged Priam.

Prœ'tus. Twin brothers of Acrisius and son of Abas. In the dispute between the two brothers for the Kingdom of Argos, Prœtus was expelled, whereupon he fled to Iobates in Lycial, and married Antea, the daughter of the latter. With the assistance of Iobates, Prœtus returned to his native land, and Acrisius gave him a share of his kingdom, surrendering to him Tiryns, Midea, and the coast of Argolis.

Pro-me'theus. A son of Iapetus and Clymene, the brother of Epimetheus, and the father of Deucalion. He made men of clay, and animated them by means of fire which he stole from heaven; for this he was chained by Jupiter to Mount Caucasus, where an eagle, or, as some say, a vulture, preyed by day upon his liver, which grew again by night. The word means forethought, and one of his brothers was Epimetheus or afterthought.

Pros'erpine. Known as Persephone also. A goddess, daughter of Jupiter and Ceres. The seizure and abduction of Proserpine by Pluto has been subject of many tales.

Psy'che. "The soul," occurs in the later times of antiquity as a personification of the human soul. Psyche was the youngest of the three daughters of a king, and excited by her beauty the jealousy and envy of Venus. In order to avenge herself, the goddess ordered Cupid or Amor to inspire Psyche with a love for the most contemptible of all men; but Cupid was so stricken with her beauty that he himself fell in love with her. He accordingly conveyed her to a charming spot, where unseen and unknown he visited her every night, and left her as soon as the day began to dawn. But her jealous sisters made her believe that in the darkness of night she was embracing some hideous monster, and accordingly once, while Cupid was asleep, she drew near to him with a lamp, and, to her amazement, beheld the most handsome and lovely of the gods. In the excitement of joy and fear, a drop of hot oil fell from her lamp upon his shoulder. This awoke Cupid, who censured her for her mistrust, and fled. Psyche's happiness was now gone, and after attempting in vain to throw herself into a river, she wandered about from temple to temple, inquiring after her lover, and at length came to the palace of Venus. There her real sufferings began, for Venus retained her, treated her as a slave, and imposed upon her the hardest and most humiliating labors. Psyche would have perished under the weight of her sufferings had not Cupid, who still loved her in secret, invisibly comforted and assisted her in her toils. With his aid she at last succeeded in overcoming the jealousy and hatred of Venus; she became immortal, and was united to him forever. In this pleasing story Psyche evidently represents the human soul, which is purified by passions and misfortunes, and thus prepared for the enjoyment of true and pure happiness. In works of art Psyche is represented as a maiden with the wings of a butterfly, along with Cupid in the different situations described in the allegory.

Pukwa'na. The smoke from the calumet or peace-pipe among American Indians. The pipe was made from stone found near the head waters of the Mississippi. A quarry, located near the mountains, was famous among the Indians, who had made the adjacent territory neutral ground. Here they came and provided themselves with pipes. To apply the stone to any other use than that of pipe-making would have been sacrilege in their mind. From the color, they even fancied it to have been made, at the great deluge, out of the flesh of the perishing Indian.

Pukwudj'ies. The pygmies of American-Indian folk-lore; little wild men of the woods.

Pygma'lion. A grandson of Agenor. He made a beautiful statue, which he fell so deeply in love with, that Venus, at his earnest petition, gave it life. In Gilbert's comedy of Pygmalion and Galatea, the sculptor is a married man, whose wife (Cynisca) was jealous of the animated statue (Galatea), which, after enduring great misery, voluntarily returned to its original state. This, of course, is mixing up two Pygmalions, wide as the poles apart.

Pyl'ades. Son of Anaxibia, sister of Agamemnon. His father was King of Phocis; and after the death of Agamemnon, Orestes was secretly carried to his father's court. Here Pylades contracted that friendship with Orestes which became proverbial.

Pyr'amus. The lover of Thisbe, who, on account of her supposed death, stabbed himself under a mulberry tree. Thisbe, afterward, finding the body of her lover, killed herself on the same spot with the same weapon; and the fruit of the mulberry has ever since been as red as blood.

Pyr'rhus. Known also as Neoptolemus, a son of Achilles, remarkable for his cruelty at the siege of Troy. He was slain at Delphi, at the request of his own wife, by Orestes.

Pythia. The priestess of Apollo and Delphi. She is represented as crowned with laurels and seated on a tripod similarly adorned and placed over a chasm whence arose a peculiar vapor. Whoever inhaled this intoxicating air was thrown into convulsive ravings, which were thought to be an evidence of divine inspiration. The prophetic influence was at first variously attributed to different gods, but was at length assigned to Apollo only. A priestess, called the Pythia, was appointed to inhale the hallowed air and utter inspired words, which were interpreted by the priests.

Py'thon. The monster serpent hatched from the mud of Deucalion's deluge. He lived in the caves of Mount Parnassus, but was slain by Apollo, who founded the Pythian games in commemoration of his victory, and received in consequence the surname Pythius.

Rach'aders. In Indian mythology, the second tribe of giants or evil genii, who had frequently made the earth subject to their kings, but were ultimately punished by Shiva and Vishnu.

Radegaste. In Slavonic mythology, a tutelary god of the Slavi. The head was that of a cow, the breast was covered with an ægis, the left hand held a spear, and a cock surmounted its helmet.

Ragnarok (twilight of the gods). The day of doom, when the present world and all its inhabitants will be annihilated. Vidar of Vali will survive the conflagration, and reconstruct the universe. In Scandinavian mythology is the belief taught that after this time the earth or realm will become imperishable and happiness sure.

Ra'hu. In Hindu mythology, the demon that causes eclipses. One day Rahu stole into Valhalla to quaff some of the nectar of immortality. He was discovered by the Sun and Moon, who informed against him, and Vishnu cut off his head. As he had already taken some of the nectar into his mouth, the head was immortal, and he ever afterwards hunted the Sun and Moon, which he caught occasionally, causing eclipses.

Rak'shas. Evil spirits in Hindu myths, who guard the treasures of Kuvera, the god of riches. They haunt cemeteries and devour human beings; assume any shape at will, and their strength increases as the day declines. Some are hideously ugly, but others, especially the female spirits, allure by their beauty.

Rava'na, according to Indian mythology, was fastened down between heaven and earth for 10,000 years by Siva's leg, for attempting to move the hill of heaven to Ceylon. He is described as a demon giant with ten faces.

Ravens. According to an oracle from the gods, delivered at ancient Athens, ravens prognosticate famine and death because they bear the characters of Saturn, the author of these calamities, and have a very early perception of the bad disposition of that planet.

Rem'bha. A Hindoo goddess of pleasure.

Rhadaman'thus. A son of Jupiter and Europa, brother of Minos, and King of Lycia. He was so renowned for his justice and equity, that, after death, he was made one of the three judges in the under-world.

Rham'nus. A daughter of Nox, and otherwise known as Nemesis. Having belonged with the original

deities, those mysterious beings who were regarded with awe by gods and men, she is allowed the same rank among the modern heathen deities, and was particularly worshiped at Rhamnus in Attica, where she had a celebrated statue.

Sat'urn. This was one of the most ancient of the gods, called Chronos by the Greeks and Saturnus by the Romans. He was said to be the son of Uranos and Titæa, i. e., the heavens and the earth, and to have possessed the first government of the universe. His wife was Rhea, who was his sister. Saturn and his five brethern were called Titans, probably from their mother; Rhea and her five sisters likewise Titanides. Saturn seized upon the government of the universe by his superiority over his father and brothers; yet pledged himself to rear no male children; accordingly he is represented as devouring his sons as soon as born. But this fate, three of them, Jupiter, Neptune, and Pluto, escaped, through the artifice of Rhea, their mother, who gave him stones to devour instead of the children at their birth. Jupiter aided Saturn in recovering his throne, after he had been driven from it by his brothers, the Titans, and bound in Tartarus. But soon he made war, himself, upon Saturn, and seized the government.

Sa'tyr. A sylvan deity, or demi-god, represented as a monster, half man and half goat; having horns on his head, a hairy body, with the feet and tail of a goat. They belong in the train of Bacchus, and have been distinguished for lasciviousness and riot. Although mortal, they are superior to the cares and sorrows of mortal life.

Scyl'la. A maiden whose body the enchantress Circe changed below the waist into frightful monsters always barking. The old Greek story is, that Circe was jealous of Scylla, and so deformed her by pouring the juice of poisonous herbs into the water in which she bathed. This sudden metamorphosis so terrified Scylla, that she threw herself into the sea, and became the rocks which bear her name.

Sedrat. The lotus tree which stands on the right-hand side of the invisible throne of Allah. Its branches extend wider than the distance between heaven and earth. Its leaves resemble the ears of an elephant. Each seed of its fruit encloses a houri; and two rivers issue from its roots. Numberless birds sing among its branches, and numberless angels rest beneath its shade.

Sile'nus. The older satyrs were generally termed Sileni; but one of these Sileni is commonly the Silenus, who always accompanies Dionysus (Bacchus), whom he is said to have brought up and instructed. He is represented as a jovial old man, with a bald head, pug nose, and rubicund visage, and generally as intoxicated, and, therefore, riding on an ass or supported by satyrs. He was fond of music and dancing and is often accompanied by the flute. But it is a peculiar feature in his character that he was an inspired prophet, yet, when he was drunk and asleep he was in the power of mortals, who might compel him to prophesy and sing by surrounding him with chains of flowers. Like the sea-gods, Silenus was noted for wisdom; and it would, therefore, appear that a Silen was simply a river-god; and the name probably comes from the Greek verb, signifying to roll, expressive of the motion of the streams. The connection between Silenus, Bacchus, and the Naiades thus becomes easy of explanation, all being deities relating to moisture.

Silva'nus or Sylva'nus. A deity presiding over woods, forests, and fields. He is also called the protector of the boundaries of fields.

Si'rens. They were a sort of sea-goddesses, said by some to be two in number, by others, three, and even four. Homer mentions but two, and describes them as virgins, dwelling upon an island, and detaining with them every voyager who was allured thither by their captivating music. They would have decoyed even Ulysses, on his return to Ithaca, but were not permitted. By others they were described as daughters of the river-god Achelous, and companions of Proserpine, after whose seizure they were changed into birds, that they might fly in search of her. In an unhappy contest with the Muses in singing they lost their wings as a punishment. Others make them sea-nymphs, with a form similar to that of the Tritons, with the faces of women and the bodies of flying fish. Their fabled residence was placed by some on an island near Cape Pelorus in Sicily: by others, on the islands or rocks called Sirennusæ, not far from the promontory of Surrentum on the coast of Italy. Various explanations of the fable of the Sirens have been given. It is commonly considered as signifying the dangers of indulgence in pleasure.

Sir'ius. Known in mythology as the faithful dog of Orion, and set in the heavens as a bright star by Diana when she mourned the display of her archery which caused Orion's death.

Sol. Although the Greeks and Romans worshiped Apollo as the god and dispenser of light, and in view of this attribute named him Phœbus, yet they conceived another distinct divinity, distinguished from Apollo especially in the earlier fables, under the literal name applied to designate the sun, viz, Sol. These words, therefore, were employed to express not only the actual body in the heavens, but also a supposed being having a separate and personal existence.

Som'nus. The personification and god of sleep, is described as a brother of Death and as a son of Night.

Specter of the Brock'en. Among German myths, a singular colossal apparition seen in the clouds, at certain times of the day, by those who ascend the Brocken, or Blocksberg, the highest mountain of the Hartz Mountains.

Sphinx. A monster said to be a daughter of Chimæra, in the neighborhood of Thebes. Seated on a rock, she put a riddle to every Theban that passed by, and whoever was unable to solve it was killed by the monster. This calamity induced the Thebans to proclaim that whoever should deliver the country of the sphinx should obtain the kingdom and Jocasta as his wife. The riddle ran as follows: "What is that which has one voice, and at first four feet, then two feet, and at last three feet, and when it has most is weakest?" Œdipus explained the enigma by saying that it was man, who, when an infant, creeps on all fours, when a man, goes on two feet, and, when old, uses a staff, a third foot. The monster immediately flung herself into the sea and perished. The form of the so-called Egyptian sphinxes is that of a winged lion with a human head and bust, always in a lying attitude, whereas the Greek sphinxes are represented in any attitude which might suit the fancy of the poet.

Styx. The word, or name, comes from the Greek, meaning to abhor, and Styx is called the River of Hate and represented as the river of the lower world. The classic fables concerning it are of Egyptian origin. It was said to flow nine times round the infernal regions. The third river, Cocytus, flows out of the River Styx and the murmur of its waters, the sound of which imitates howlings, is inexpressibly dismal; Phlegethon, the fourth river, rolls slowly along its waves of fire. As a mythical being, Styx is described as a daughter of Oceanus and Tethys. As a nymph, she dwelt at the entrance of hades, in a lofty grotto which was supported by silver columns. She became the divinity by whom the most solemn oaths were sworn. When one of the gods had to take an oath by Styx, Iris fetched a cup full of water from the Styx, and the god, while taking the oath, poured out the water.

Tan'talus. The son of Jupiter, and king of Lydia, who, according to some legends, was punished for betraying the secrets of his father by being placed in a lake, in the infernal regions, whose waters fled from him when he sought to quench his thirst, and amid trees laden with fruit, whose boughs avoided every effort he made to seize them.

Tar'tarus. A dark abyss under the earth in which the Titans were chained when their father feared their strength. The music of Orpheus penetrated its depths and caused the condemned to cease their toil. The name has come to signify an inner region of hell, to which the gods sent the exceptionally depraved.

Tel'amon. A son of Æacus and Endeis, and brother of Peleus. Having assisted Peleus in slaying their half-brother Phocus, Telamon was expelled from Ægina, and came to Salamis, where he was made king. He afterward became the father of Atlas. Telamon himself was one of the Calydonian hunters and one of the Argonauts. He was also a great friend of Hercules, whom he joined in his expedition against Laomedon of Troy, which city he was the first to enter. Hercules, in return, gave to him Hesione, a daughter of Laomedon.

Telem'achus. The son of Ulysses and Penelope. He was an infant when his father went to Troy; and when he had been absent nearly twenty years, Telemachus went to Pylos and Sparta to gather information concerning him. He was hospitably received by Nestor, who sent his own son to conduct Telemachus to Sparta. Menelaus also received him kindly, and communicated to him the prophecy of Proteus concerning Ulysses. From Sparta Telemachus returned home; and on his arrival there he found his father, whom he assisted in slaying the suitors. (See Penelope.)

Themis. The goddess of justice was one of the most celebrated of the Titanides, or daughters of Uranus and Titæa. To her is ascribed the first uttering of oracles, and also the first introduction of sacrifices.

Thersi'tes. The ugliest and most scurrilous of the Greeks before Troy. He spared, in his revilings, neither prince nor chief, but directed his abuse principally against Achilles and Ulysses. He was slain by Achilles for deriding his grief for Penthesilea. The name is often used to denote a calumniator.

The'seus. He became king of Athens, finding the sword and sandals of his father, Ægeus. Of the many adventures of Theseus, one of the most celebrated was his expedition against the Amazons. He is said to have assailed them before they had recovered from the attack of Hercules, and to have carried off their queen, Antiope. The Amazons, in their turn, invaded Attica, and penetrated into Athens itself, and the final battle, in which Theseus overcame them, was fought in the very midst of the city. Theseus figures in almost all the great heroic expeditions.

Thes'pian Maids, The. The nine Muses. So called from Thespia, in Bœotia, near Mount Helicon, often called Thespia Rupes.

The'tis. One of the daughters of Nereus and Doris, was a marine divinity, and dwelt — like her sisters, the Nereids — in the depths of the sea, with her father Nereus. She there received Dionysus (Bacchus) on his flight from Lycurgus, and the god in his gratitude presented her with a golden urn. When Vulcan was thrown down from heaven, he was likewise received by Thetis. Thetis rejected the offers of Zeus, because she had been brought up by Hera, and the god, to revenge himself, decreed that she should marry a mortal.

Thor. In Scandinavian mythology, the eldest son of Odin and Frigga; strongest and bravest of the gods. He launched the thunder, presided over the air and the seasons, and protected man from lightning and evil spirits. His wife was Sif ("love"); his chariot was drawn by two he-goats; his mace or hammer was called Mjolner; his belt was Megingjard, whenever he put it on his strength was doubled; his palace was Thrudvangr. It contained 540 halls; Thursday is Thor's day. The word means "Refuge from terror."

Ti'tans. The enterprises of the Titans are celebrated in the ancient fables of the Greeks. They have been mentioned in the account of Saturn, to whom they were brothers, being generally considered as sons of Uranus or Cœlus and Titæa, or Gaia. The oldest was called Titan, and from him, or their mother, they derived their common name.

Titho'nus. A son of Laomedon, king of Troy. He was so beautiful that Aurora became enamored of him, and persuaded the gods to make him immortal; but, as she forgot to ask for eternal youth, he became decrepit and ugly, and was, therefore, changed by her into a cicada.

Tit'yus. A famous giant, son of Jupiter and Terra. His body was so vast that it covered nine acres of ground. He had dared to offer an insult to Juno and in punishment was chained like Prometheus while a vulture feasted on his liver. He is mentioned by Virgil.

Tri'ton. Son of Neptune, who dwelt with his father and mother in a golden palace in the bottom of the sea, or, according to Homer, at Agae. Later writers describe him as riding over the sea on sea-horses or other monsters.

Trolls. Dwarfs of Northern mythology, living in hills or mounds; they are represented as stumpy, misshapen, and humpbacked, inclined to thieving, and fond of carrying off children or substituting one of their own offspring for that of a human mother. They are called hill-people, and are especially averse to noise, from a recollection of the time when Thor used to fling his hammer after them.

Truth. A daughter of Time, because Truth is discovered in the course of Time. Democritus says that Truth lies hidden at the bottom of a well.

Troy. The classic poets say that the walls of this famous city were built by the magic sound of Apollo's lyre.

Tyr. In Norse mythology, he was a warrior deity, and the protector of champions and brave men; he was also noted for his sagacity. When the gods wished to bind the wolf Fenrir, Tyr put his hand into the demon's mouth as a pledge that the bonds should be removed again. But Fenrir found that the gods had no intention of keeping their word, and revenged himself in some degree by biting the hand off. Tyr was the son of Odin and brother of Thor.

Ulys'ses. Called "Odysseus" by the Greeks, one of the principal Greek heroes in the Trojan War, was a son of Laertes, or, according to a later tradition, of Sisyphus, and was married to Penelope, the daughter of Icarius, by whom he became the father of Telemachus. During the siege of Troy he distinguished himself by his valor, prudence, and eloquence, and after the death of Achilles, contended for his armor with the Telamonian Ajax, and gained the prize. He is said by some to have devised the stratagem of the wooden horse The most celebrated part of his story comes after the Trojan War. Among his adventures he entered the cave of the Cyclops and escaped with some sheep. One of the gods gave to him a bag of winds which should carry him home, but the winds were let loose and his ships driven to an island inhabited by the sorceress Circe. After many wanderings and strange adventures, a ship was provided to convey him to Ithaca, from which he had been absent twenty years. During his absence his father Laertes, in grief and old age, had withdrawn into the country; his mother Anticlea had died; his son Telemachus grown to manhood, and his wife Penelope had rejected all the offers that had been made to her by the importunate suitors from the neighboring islands. In order that he might not be recognized, Athena metamorphosed Ulysses into an unsightly beggar. He was kindly received by Eumæus, the swineherd, made himself known to him, and a plan of revenge was resolved on. Penelope, with great difficulty, was made to promise her hand to him who should conquer the others in shooting with the bow of Ulysses. As none of the suitors were able to draw this bow, Ulysses himself took it up, and, directing his arrows against the suitors, slew them all. Ulysses now made himself known to Penelope. The people rose in arms against Ulysses; but Athena, who assumed the appearance of Mentor, brought about a reconciliation.

Valhal'la. In Scandinavian mythology the palace of immortality wherein are received the souls of heroes slain in battle.

Val'kyrs. The battle-maidens of Scandinavian mythology. They were mounted on swift horses and held drawn swords. They rushed with battle and selected those destined to death and conducted them to Valhalla. The number of Valkyrs differs greatly according to the various mythologists, and ranges from three to sixteen, the greater part of them, however, naming only nine.

Ve'nus. The goddess of beauty, and mother of love. She is said to have sprung from the foam of the sea, and was immediately carried to the abode of the gods on Olympus, where they were all charmed with her extreme beauty. According to other legends she was the daughter of Jupiter and Dione. She bore as many names as there are aspects of love, and finally they were regarded as the names of different deities. Sparrows and doves were customarily yoked to her chariot; her girdle inspired all hearts with passion for the wearer; and her son, Cupid, was her attendant and minister. The myrtle was sacred to her. Her favorite residence was at Cyprus.

Ves'ta. The ancient goddess of fire. Æneas was believed to have brought the eternal fire of Vesta from Troy, along with the images of the Penates; and the prætors, consuls, and dictators, before entering upon their official functions, sacrificed, not only to the Penates, but also to Vesta at Lavinium. In the ancient Roman house, the hearth was the central part, and around it all the inmates daily assembled for their common meal (cœna); every meal thus taken was a fresh bond of union and affection among the members of a family, and at the same time an act of worship of Vesta, combined with a sacrifice to her and the Penates.

Vish'nu. In Hindu mythology one of the great deities of the Hindu triad, ranking as the "Preserver," after Brahma, the "Creator," and before Siva, the "Destroyer." It is believed that he has appeared on earth nine times, his tenth "avatar," or incarnation, having yet to come.

Vul'can. The god of fire. Traces of the worship of fire are found in the earliest times.

Wo'den. The Anglo-Saxon form of the Scandinavian god Odin; Wednesday is called after him.

Zem. The sacred well of Mecca. According to Arab tradition, this is the very well that was shown to Hagar when with Ishmael in the desert. It is supposed to be in the heart of the city of Mecca.

Zeus. Called "Jupiter" by the Romans, the greatest of the Olympian gods, was a son of Cronus (Saturnus), and Rhea. When Zeus and his brothers distributed among themselves the government of the world by lot, Poseidon obtained the sea, Hades the lower world, and Zeus the heavens and the upper regions, but the earth became common to all. According to Homer, Zeus dwelt on Mount Olympus in Thessaly, which was believed to penetrate into heaven itself. He is called the father of gods and men. He is the supreme ruler, who with his counsel manages everything; the founder of law and order, whence Dice, Themis, and Nemesis are his assistants. Everything good, as well as bad, comes from Zeus; according to his own choice he assigns good or evil to mortals; fate itself was subordinate to him.

NAMES IN FICTION, LITERARY PLOTS, AND ALLUSIONS

A-bad'don. The Hebrew name of an evil spirit or destroying angel called Apollyon in Greek. In mediæval literature he is regarded as the chief of the demons of the seventh hierarchy and the one who causes wars and uproars. Klopstock has introduced him in his Messiah under the name of Abbadona. He represents him as a fallen angel still bearing traces of his former dignity and repenting of his part in the rebellion against God. In Bunyan's "Pilgrim's Progress," he meets and fights with Pilgrim.

Abdall'ah. Life of Mohammed, Washington Irving. A hero in Mohammedan legend. It is said that Abdallah, the father of Mohammed, was so beautiful, that, when he married Amina, two hundred virgins broke their hearts from disappointed love.

Ab-di'el. Paradise Lost, Milton. The name of the seraph, who, when Satan stirred up a revolt, boldly withstood him.

Abon'de. A character in French literature that corresponds to our Santa Claus. She is the good fairy who comes at night, especially New Year's night, to bring toys to children while they sleep.

Ab'ou Hassan. Arabian Nights. As related in "Arabian Nights," a merchant of Bagdad who was carried in his sleep to the bed of the Caliph Haroun-al-Raschid and on awaking was made to believe himself the caliph. Twice in this way he was made to believe himself caliph. He afterward became in reality the caliph's favorite and companion.

A-brax'as. In Persian literature a word denoting a supreme being. In Greek notation it stands for the number 365. In old tales or romances Abraxas presides over 365 impersonated virtues, one of which is supposed to prevail on each day of the year. In the Second Century the word was employed by the Basilid'ians for the deity; it was also the principle of the Gnostic hierarchy, and that from which sprang their numerous Æons.

Ab'sa-lom. Absalom and Achitophel, Dryden. A name given by Dryden, in his satirical poem "Absalom and Achitophel," to the Duke of Monmouth, a natural son of Charles II. Like Absalom, the son of David, Monmouth was remarkable for his personal beauty, his popularity, and his undutifulness to his father.

Ab'solute, Captain. The Rivals, Sheridan. A character in Sheridan's comedy, "The Rivals." He is distinguished for his gallant, determined spirit, his quickness of speech, and dry humor.

Absolute, Sir Anthony. The Rivals, Sheridan. An amusing character in Sheridan's "Rivals." He is represented as testy, positive, impatient, and overbearing, but yet of a warm and generous disposition.

Abu'dah. A merchant of Bagdad. He finds the only way to rid himself of the torment of an old hag by whom he is haunted is "to fear God and keep His commandments."

A-ca'di-a. The name said to be derived from "Shubenacadie, the name of one of the principal rivers" of Nova Scotia: in old grants called "L'Acadie," and "La Cadie," the original, and now the poetic, name of Nova Scotia. In 1755, the French inhabitants were seized, forcibly removed, and dispersed among the English colonists on the Atlantic Coast. Longfellow has made this event the subject of his poem "Evangeline."

A-chit'o-phel. Absalom and Achitophel, Dryden. Achitophel, a nickname given to the first Earl of Shaftesbury by his contemporaries, and made use of by Dryden in his poem "Absalom and Achitophel," a satire designed as a defense of Charles II. against the Whig party. There is said to be a striking resemblance between the character and career of Shaftesbury and those of Achitophel, or Ahithophel, the treacherous friend and counselor of David, and the fellow-conspirator of Absalom.

A-cra'si-a. Faërie Queene, Spenser. A witch represented as a lovely and charming woman, whose dwelling is the Bower of Bliss, which is situated on an island floating in a lake or a gulf, and is adorned with everything in nature that can delight the senses. The word signifies intemperance. She is the personification of sensuous indulgence and intoxication. Sir Guyon, who illustrates the opposite virtue, is commissioned by the fairy queen to bring her into subjection, and to destroy her residence.

A'cres, Bob. The Rivals, Sheridan. A character in "The Rivals" celebrated for his cowardice and his peculiar method of allegorical swearing.

Acrostic. A form of verse in which the first letters of the lines form a word, usually a name. The Hebrews wrote a form of acrostic poetry in which the initial letters made their alphabet in regular order. Some of the Psalms of the Old Testament are on this plan, especially the one hundred and nineteenth psalm.

Ad'am. (1) A character frequently alluded to in the "Talmud." Many strange legends are related of him. He was buried, so Arabian tradition says, on Aboncais, a mountain of Arabia. (2) In **As You Like It, Shakespere.** An aged servant to Orlando who offers to accompany Orlando in his flight and to share with him his carefully-hoarded savings of 500 crowns. (3) In **Comedy of Errors, Shakespere.** An officer known by his dress, a skin-coat.

Adamas'tor. Lusiad, Camoens. (1) A hideous phantom described by Camoens as the spirit of the stormy cape (Cape of Good Hope). (2) One of the giants who invaded heaven.

Ad'ams, Parson. Joseph Andrews, Fielding. A character in Fielding's story of "Joseph Andrews." He is distinguished for his goodness of heart, poverty learning, and ignorance of the world, combined with courage, modesty, and a thousand oddities.

Ad'emar or Ad'e-ma-ro. Jerusalem Delivered, Tasso. An ecclesiastical warrior who besought the pope that he might be sent on the crusades He was slain in an attack on Antioch but in the final attack on Jerusalem his spirit came with three squadrons of angels to aid the besiegers.

Adol'pha. Maid of Mariendorpt, Knowles. The daughter of General Kleiner, Governor of Prague, and wife of Idenstein. She is known for her "excess of too sweet nature," which Knowles in his romance pictures as a fault.

Ad'o-na'is. A poetical name given by Shelley to the poet Keats, on whose untimely death he wrote an elegy bearing this name for its title. The name was coined by Shelley probably to hint an analogy between Keats's fate and that of Adonis.

Adrastus. Jerusalem Delivered, Tasso. An Indian prince from the banks of the Ganges, who aided the King of Egypt against the crusaders. He was distinguished by his garment, a serpent's skin. Adrastus was slain by Rinaldo.

Æ-ne'as. The hero of Virgil's Æneid, son of Anchises and the goddess Venus; to him is ascribed the foundation of the Roman Empire. He is called the "Pious Æneas," because he carried his father Anchises on his shoulders from burning Troy.

Æneid. An epic of national life. Virgil introduces into his poem the outlines of the Roman history, and a number of interesting episodes. The first three books are not arranged in the order of time. The second book, which relates the downfall of Troy, and is the basis of the poem, is the first in time. The third, which relates the voyage of Æneas, until after his departure from Sicily for Italy, follows. The first, which relates the dispersion of his fleet, and his arrival in Africa, with his kind reception by Dido, succeeds the third. By this change the hero relates the downfall of his country, and the fortunes of his long and eventful voyage. The idea which underlies the whole action of the poem is the great part played by Rome in the history of the world.

Agamem'non. A Tragedy by Æschylus. The first of a trilogy consisting of Agamemnon, Choëphori, and Eumenides.

Aga'pida, Fray Antonio. The imaginary chronicler of the "Conquest of Granada," written by Washington Irving.

A'gib. Arabian Nights' Entertainment. The third Calendar in the story of "The Three Calendars," in the "Arabian Nights."

Ag'nes. (1) A young girl in Molière's "L'Ecole des Femmes," who affects to be remarkably simple and ingenuous. The name has passed into popular use, and is applied to any young woman unsophisticated in affairs. (2) A strong womanly character in David Copperfield, who proves a true friend to David's "child-wife," Dora, and to David himself. Later Dora dies and David marries Agnes.

A-gra-man'te or **Ag'ra-mant.** King of the Moors in Ariosto's poem of "Orlando Furioso."

A'gue-cheek, Sir Andrew. Twelfth Night, Shakespere. A simpleton in "Twelfth Night," to whom life consists only of eating and drinking. He is stupid even to silliness, but so devoid of self-love or self-conceit that he is delightful in his simplicity.

Ah'med, Prince. Arabian Nights. A hero who possessed a magic tent which would cover a whole army but might be carried in the pocket. He also possessed a magic apple which would cure all diseases.

A-lad'din. One of the best known characters in the "Arabian Nights Tales." Aladdin becomes possessed of a wonderful lamp and ring. On rubbing them, two genii appear, who are the slaves of anyone who possesses the lamp and ring. They obey Aladdin and perform most incredible deeds by their magic.

Al A'raf (*ăl ā'raf*). The Mohammedan limbo. The subject of an uncompleted poem by Edgar A. Poe.

A-las'nam. The hero of a story in the "Arabian Nights' Entertainments" entitled "The History of Prince Zeyn Alasnam and the Sultan of the Genii." Alasnam has eight diamond statues, but had to go in quest of a ninth more precious still, to fill the vacant pedestal. The prize was found in the lady who became his wife, at once the most beautiful and the most perfect of her race.

Al-ba'nia, Al'ba-ny. A name given to Scotland or the Scottish Highlands in old romances and early histories.

Al'bi-on. An ancient name of Briton, now used only in poetic allusion. Some say the name is derived from the lofty white cliffs on the south coast. Others derive it from the name of a fabulous giant, Albion, son of Neptune, who called the island after his own name, and ruled it forty-four years.

Albrac'ca. Orlando Innamorato, Bojardo. A castle of Cathay to which Angelica retires in grief at being scorned and shunned by Rinaldo, with whom she is deeply in love. Here she is besieged by Agricane, King of Tartary, who resolves to win her, notwithstanding her indifference to his suit.

Al-ceste'. Le Misanthrope, Molière. A noble but misanthropic man, the hero of Molière's comedy.

Al-ci'na. Orlando Innamorato, Bojardo. A fairy represented as carrying off Astolfo. She reappears in great splendor in Ariosto's "Orlando Furioso."

Al'di-bo-ron'ti-phos'co-phor'ni-o. A character in Henry Carey's burlesque tragedy "Chrononhotonthologos."

Aldine Edition. This name is now applied to some elegant editions of English works. The original Aldine editions were books from the press of Aldus Manutius, printed in the years 1490-1597. These books have been highly prized both for their literary value and their handsome exterior. The Aldus printing establishment was kept up for 100 years. The distinguishing mark of the Aldine books is an anchor entwined with a dolphin. Collections of these books have been made. Many of the works are now very rare and are highly prized.

Al'din-gar, Sir. A character in an ancient legend, and the title of a celebrated ballad, preserved in Percy's "Reliques." This ballad relates how the honor of Queen Elianor, wife of Henry Plantagenet, impeached by Sir Aldingar, her steward, was submitted to the chance of a duel, and how an angel, in the form of a little child, appeared as her champion, and established her innocence.

Alexandrian Codex. A manuscript of the Scriptures in Greek, which belonged to the library of the patriarchs of Alexandria, in Africa, A. D., 1098. In 1628, it was sent as a present to Charles I., and was placed in the British Museum. It is on parchment, in uncial letters, and contains the Septuagint version (except the Psalms), a part of the New Testament, and the Epistles of Clemens Romanus. This is much consulted by Biblical scholars, especially in the critical study of the epistles.

Alice Brand. Lady of the Lake. Sir Walter Scott. Alice signed Urgan the dwarf thrice with the sign of the cross, and he became "the fairest knight in all Scotland"; when Alice recognized in him her own brother.

Al'lan-a-Dale'. A friend of Robin Hood's in the ballad. He is introduced into Sir Walter Scott's "Ivanhoe" as Robin Hood's minstrel.

All's Well that Ends Well, a comedy by Shakespere. The hero and heroine are Bertram, Count of Rousillon, and Hel'ena, a physician's daughter, who are married by the command of the king of France, but part because Bertram thought the lady not sufficiently well-born for him. Ultimately, however, all ends well.

All'worthy, Mr. Tom Jones, Fielding. Distinguished for his benevolence. This character is said to be drawn from Fielding's friend Ralph Allen.

Alp. Siege of Corinth, Byron. The hero of this poem.

Alph. Kubla Khan, Coleridge. A name invented by Coleridge and applied to a river mentioned in this poem.

Al'qui-fe. A personage that figures in all the books of the lineage of Amadis as a powerful wizard.

Al-Rakin'. A fabulous dog connected with the legend of the "Seven Sleepers." The Mohammedans have given him a place in paradise.

Al-Sirat'. A bridge from this world to the next extending over the abyss of hell. This narrow bridge, less than the thread of a famished spider, must be passed over by every one who would enter the Mohammedan paradise.

Am'-a-dis de Gaul. The hero of an ancient and celebrated Portuguese romance. A French version was printed in 1555.

Aman'da. A young woman who impersonates spring in Thompson's "Seasons."

A-mai'mon, or A-may'mon. An imaginary king of the East, one of the principal devils who might be bound or restrained from doing hurt from the third hour till noon, and from the ninth hour till evening. He is alluded to in Shakespere's "Merry Wives of Windsor."

Ama'urot. Utopia, Sir Thomas More. Amaurot was the chief city in Utopia.

Amaurote. A bridge in Utopia.

Ame'lia. The title of one of Fielding's novels, and the name of its heroine, who is distinguished for her tenderness and affection. The character of Amelia is said to have been drawn from Fielding's wife.

Amine'. In Arabian Nights a female character who leads her three sisters by her side as a leash of hounds.

Aminte'. Les Pre'cieuses Ridicules, Molière. A contradictory character in this comedy. She dismisses her admirers for proposing to marry her, scolds her uncle for not carrying himself as a gentleman, and marries a valet whom she believes to be a nobleman.

Am'let, Richard. The name of a gamester in Vanbrugh's "Confederacy."

Am'o-ret. The name of a lady married to Sir Scudamore, in Spenser's "Faëry Queen." She is the type of a devoted, loving wife. (2) The heroine of Fletcher's pastoral drama, "The Faithful Shepherdess."

A'mys and Amyl'ion. Two faithful friends. The Pylades and Orestes of the feudal ages. Their adventures are the subjects of ancient romances. An abstract of this early romance is found in Ellis' "Specimens of Early English Metrical Romances."

Anacreontic Verse. Commonly of the jovial or Bacchanalian strain, named after Anacreon, of Teos, the Greek lyric poet, born at Teos, an Ionian city in Asia Minor. He removed to Abdera, in Thrace, when Teos was taken by the Persians, but he lived chiefly at Samos, under the patronage of Polycrates. After the death of Polycrates, he went to Athens at the invitation of the tyrant Hipparchus. He died at the age of 85, probably about the year 550 B. C. In his poems Anacreon sung chiefly the praises of love and wine, to the enjoyment of which his life would also appear to have been dedicated. Many fragments of his songs are preserved, which are models of delicate grace, simplicity and ease.

Anagram, a transposition of the letters of a name or sentence, the change of one word or phrase into another, by reading the letters backwards, or by transposing them.

An-as-ta'si-us. Anastasius, Hope. The hero of this novel purports to be a Greek, who, to escape the consequences of his own crimes and villainies, becomes a renegade, and passes through a long series of the most extraordinary vicissitudes.

Ancient Man. Idylls of the King, Tennyson. Meaning Merlin, the old magician, King Arthur's protector and teacher.

Ancient Mariner. Rime of the Ancient Mariner, Coleridge. The ancient mariner, for the crime of having shot an albatross, a bird of good omen to voyagers, is doomed to undergo terrible suffering. Dreadful penalties are visited upon his companions, who have made themselves accomplices in his crime. The penalties are at last remitted in consequence of his repentance. When pity enters his heart he can pray, and the dead albatross, bound about his neck, falls off. The ship moves on and he returns to his home port. There he encounters a hermit to whom he relates his story. At certain times the agony of remorse returns and drives him on, like the Wandering Jew, from land to land, compelled to relate the tale of his suffering and crime as a warning to others, and as a lesson of love and charity towards all God's creatures. The conception of this poem and the mystical imagery of the skeleton-ship are said to have been borrowed by Coleridge from a dream.

Andrews, Joseph. The hero in a novel by the same name, written by Fielding, to ridicule Richardson's "Pamela." Fielding presents "Joseph Andrews" as a brother to the modest and prudish Pamela, and pictures him as a model young man.

Androcles and the Lion. A story of a runaway slave who befriended a lion, and was in turn befriended by the lion. This story is found in the "Gesta Romanorum" and in "Æsop's Fables."

Angelica. An infidel princess of exquisite beauty in Bojardo's "Orland Innamorato" and Ariosto's "Orlando Furioso."

Angelus Domini. A prayer of the Roman Catholic Church, embodying a passage in Scripture beginning with those words. It was ordered by Pope John XXII., in 1326, to be repeated three times a day, morning, noon, and night, when the church-bell gives the people warning.

An-tiph'o-lus of Eph'e-sus, An-tiph'o-lus of Syr'a-cuse. Twin brothers, sons to Ægeon and Æmilia, in Shakespere's "Comedy of Errors."

An-to'ni-o. (1) The "Merchant of Venice" in Shakespere's play of that name, the friend to Bassanio, and the object of Shylock's hatred. (2) The usurping Duke of Milan, and brother to Prospero, in Shakespere's "Tempest." (3) The father of Proteus, in Shakespere's "Two Gentlemen of Verona." (4) A minor character in Shakespere's "Much Ado about Nothing." (5) A sea-captain, friend to Sebastian, in Shakespere's "Twelfth Night."

Antony and Cleopatra. Historical tragedy by Shakespere which may be considered as a continuation of Julius Cæsar. In the opening scene of Julius Cæsar absolute power is lodged in one man. In the conclusion of Antony and Cleopatra a second Cæsar is again in possession of absolute power and the entire Roman world is limited under one imperial ruler. There are four prominent characters in this play: Cleopatra, voluptuous, fascinating, gross in her faults, but great in the power of her affections; Octavius Cæsar, cool, prudent, calculating, avaricious; Antony, quick, brave, reckless, prodigal; Enobarbus, a friend of Antony, at first jocular and blunt, but transformed by penitence into a grief-stricken man who dies in the bitterness of despair.

Aonian Mount. Milton says his muse is to soar above "the Aonian Mount," i. e., above the flight of fable and classic themes, because his subject was "Jehovah, lord of all."

Ap'e-man'tus. A churlish philosopher in Shakespere's play, "Timon of Athens."

Apocalypse. The Greek name of the last book of the New Testament, termed in English "Revelations." It has been generally attributed to the Apostle St. John, but some wholly reject it as spurious. In the first centuries many churches disowned it, and in the Fourth Century it was excluded from the sacred canon by the council of Laodicea, but was again received by other councils, and confirmed by that of Trent, held in the year 1545. Most commentators suppose it to have been written after the destruction of Jerusalem, about A. D. 96; while others assign it an earlier date. Its figures and symbols are impressive.

Apocrypha. The word originally meant secret or hidden and it is said that the books of the Apocrypha are not found in either the Chaldean or the Hebrew language. These books were not in the Jewish canon, but they were received as canonical by the Catholic Church, by the Council of Trent. The apocryphal writings are ten in number: Baruch, Ecclesiasticus, Wisdom of Solomon, Tobit, Judith, two books of the Maccabees, Song of the Three Children, Susannah, and Bell and the Dragon. Their style proves that they were a part of the Jewish-Greek literature of Alexandria, within three hundred years before Christ; and as the Septuagint Greek version of the Hebrew Bible came from the same quarter, it was often accompanied by these Greek writings, and they gained a general circulation. No trace of them is found in the Talmud; they are mostly of legendary character, but some of them are of value for the historical information, for their moral and maxims, and for the illustrations they give of ancient life.

Apollyon. An evil spirit introduced by Bunyan in his allegorical romance, "Pilgrim's Progress." See Abaddon.

Arabian Nights Entertainments, consisting of one thousand and one stories, told by the Sultana of the Indies to divert the Sultan from the execution of a bloody vow he had made to marry a lady every day and have her head cut off next morning, to avenge himself for the disloyalty of the first Sultana. The story on which all the others hang is familiar. Scheherezade, the generous, beautiful young daughter of the vizier, like another Esther, resolves to risk her life in order to save the poor maidens of her city whom the Sultan is marrying and beheading at the rate of one a day. She plans to tell an interesting story each night to the Sultan, breaking off in a very exciting place in order that the Sultan may be tempted to spare her life so that he may hear the sequel.

Ar'den, Enoch. The hero of Tennyson's poem of the same name, a seaman who is wrecked on an uninhabited, tropical island, where he spends many years, and who returns home at last only to find that his wife, believing him to be dead, has married his old playfellow and rival, and is prosperous and happy. In a spirit of heroic self-sacrifice, he determines not to undeceive her, and soon dies of a broken heart.

Ar'cher. Beaux' Stratagem, Farquhar. A servant to Aimwell and an amusing fellow.

Ar-chi-ma'go or **Ar'chi-mage. Faery Queen, Spenser.** As the name implies a hypocrite or deceiver. He is an enchanter in the "Faëry Queen," and is opposed to holiness embodied in the Red Cross Knight. He wins the confidence of the knight in the disguise of a reverend hermit, and by the help of Duessa, or Deceit, separates him from Una, or Truth.

Ar-ci'te. Palamon and Arcite, Chaucer. Palamon and Arcite in the first story told by Chaucer in his "Canterbury Tales." Chaucer borrowed this story from Boccacio, who, in his turn, borrowed it from a more ancient mediæval tale. Dryden later put the same story into verse. Dryden pronounced the word Ar'cite' or Ar-ci-te'. Arcite, a young Theban knight, made prisoner by Duke Thesus, is shut up in a prison in Athens with Palamon. Both the captives fall in love with Emily, the Duke's sister-in-law. Both gain their liberty and Emily is promised by the duke to the one who wins in a tournament. Arcite wins but is killed by a fall from a horse and Emily marries Palamon. This story is better known through Dryden's "Palamon and Arcite."

Ar-e-thu'sa. The name of a sylph in Pope's "Rape of the Lock."

Argalia. Orlando Innamorato, Bojardo. A brother to Angelica in this romantic poem. He is celebrated as the possessor of an enchanted lance which threw whomsoever it touched. Ferrau eventually killed him, and Astolfo obtained the lance.

Ar-mi'da. Jerusalem Delivered, Tasso. The most important character in this poem.

Ar-nolphe'. L'Ecole des Femmes, Molière. A selfish and morose cynic.

Ar'ga-lus. An unhappy lover in Sir Philip Sidney's "Arcadia."

Ar'gan. The hero of Molière's comedy "Le Malade Imaginaire."

Ar-ga-li'a. A brother to Angelica, in Bojardo's "Orlando Innamorato." He is celebrated as the possessor of an enchanted lance which overthrew whomsoever it touched.

A'ri-el. In the denomology of the Cabala, a water spirit; in the fables of the Middle Ages, a spirit of the air, the guardian angel of innocence; in Shakespere's "Tempest," an airy and tricksy spirit, once imprisoned in a tree but released by Prospero and now becomes his messenger, assuming any shape, or rendering himself invisible, in order to execute the commands of his master.

Ar-i-o-dan'tes. A lover in Ariostos' "Orlando Furioso."

Armi'da. Jerusalem Delivered, Tasso. A beautiful sorceress with whom Rinaldo fell in love. By a talisman he is disenchanted. Not being able to allure him back, Armida rushes into the midst of a combat and is slain.

Ar'oun-dight. The sword of Lancelot of the Lake.

Ar-sin'oe. Le Misanthrope, Molière. A prudish character in this comedy.

Ar'te-gal, also written **Artegall, Arthegal, and Artegale.** (1) A legendary king of Briton mentioned by Geoffrey of Monmouth in his chronicles and by Milton in his History of Britain. (2) A character in Spenser's "Faëry Queen" representing justice. (3) The hero in a poem by William Wordsworth, entitled "Artegal and Elidore."

Arthur, King. A poetical character, based on historical traditions. The Arthur of the old Welsh bards was a warrior chieftain ruling over fierce and war-like tribes. Every generation of poets have added something to this picture until the Arthur of modern romance is the Christian gentleman as Tennyson pictures him in his "Idylls of the King" surrounded by his chivalrous knights, all bound together in one quest, the Holy Grail.

Arthurian Romances. These may be divided into six parts: (1) The romance of the "San Graal." (2) "The Merlin," which celebrates the birth and exploits of King Arthur. (3) "The Launcelot." (4) The search or "Quest of the San Graal." (5) The "Mort d'Arthur," or death of Arthur. (6) "Sundry Tales."

Arthur's Drinking-Horn. No one could drink from this horn who was either unchaste or unfaithful.

Arthur's Sword, Escal'ibur or Excal'iber. Geoffrey calls it Caliburn, and says it was made in the isle of Avallon, by Merlin.

Arthur's Round Table. It contained seats for 150 knights. Three were reserved, two for honor, and one (called the "siege perilous") for Sir Galahad, destined to achieve the quest of the Holy Grail.

As'ca-part. The name of a giant whom Bevis of Southampton conquered. This is a favorite story of the old British romancers, The effigy of As'ca-part may be seen on the city gates of Southampton. He is said to have been thirty feet high, and to have carried Sir Bevis, his wife, and horse, under his arm. Allusions to him occur in Shakespere, Drayton, and other English poets.

Ash'ton, Sir William. The Lord Keeper of Scotland; a prominent character in Scott's "Bride of Lammermoor."

As'mo-de'us. In the Jewish demonology, an evil spirit, the demon of vanity, or dress. In modern times he has been spoken of as the destroying demon of matrimonial happiness.

As-pa'ti-a. The unfortunate heroine of Beaumont and Fletcher's play "The Maid's Tragedy."

As'tolot. The home of Elaine in Tennyson's "Idylls of the King."

As-tol'fo or **As-tol'pho.** A celebrated character in the romantic tales and poems founded upon the supposed adventures of Charlemange and his Paladins.

As You Like It, a comedy by Shakespere. A French duke, driven from his dukedom by his brother, sought a refuge in the forest of Arden with a few of his followers. Here they lived a free and easy life. Rosalind, the daughter of the banished duke, remained at court with her cousin Celia. At a wrestling match Rosalind fell in love with Orlando, who threw his antagonist, a giant and professional athlete. The usurping duke (Frederick) now banished her from the court, but her cousin Celia resolved to go to Arden with her; so Rosalind, in boy's clothes, and Celia, as a rustic maiden, started to find the deposed duke. Orlando being driven from home by his elder brother, also went to the forest of Arden, and was taken under the duke's protection. Here he met the ladies, and a double marriage was the result — Orlando married Rosalind, and his elder brother Oliver married Celia. The usurper retired to a religious house, and the deposed duke was restored to his dominions.

Ath'a-lie. Athalie, Racine. Daughter of Ahab and Jezebel in Racine's famous tragedy by this name.

Auburn. The name of a village immortalized by Oliver Goldsmith in his "Deserted Village"; it has been identified with Lissoy, in Ireland, near Athlone.

Au'drey. A country wench, in Shakespere's "As You Like It."

Autol'ycus. The craftiest of thieves. He stole the flocks of his neighbors, and changed their marks. Si'syphus outwitted him by marking his sheep under their feet. Shakespere introduces him in "The Winter's Tale" as a peddler, and says he was called the son of Mercury.

Av'a-lon, or **A-vil'ion.** The earthly paradise of the Britains. In Middle-Age romance the name of an ocean island, and of a castle. It is represented as the abode of Arthur and Oberon and Morgan le Fay. It is most fully described in the old French romance of "Ogier le Danois." It is the Island Kingdom to which King Arthur is finally borne by the mysterious barge in Tennyson's "Passing of Arthur." Some identify Avalon with the modern Glastonbury.

Aver'nus. A lake in Campania so called from the belief that its vapors would kill all life. Poets call it the entrance to the infernal regions.

Ay'mer, Prior. A Benedictine Monk, prior of Jorvaulx Abbey, in Sir Walter Scott's "Ivanhoe."

Ay'mon. A semi-mythical personage who figures in romances.

Aza'zil. Paradise Lost, Milton. Represented in this poem as Satan's standard bearer. According to the Koran, when God commanded the angels to worship Adam, Azazil replied, "Why should the son of fire fall down before a son of clay?" and God cast him out of heaven.

A'zo. The name given by Byron to the Prince of Este, in his poem of "Parisina."

Az'rafil. In the Koran the archangel commissioned to blow the trumpet of the resurrection.

Babes in the Wood. Wonderful Gent's Last Will, Ancient Ballad. According to some authorities this old story in verse was founded on the deed of King Richard III., of England, who made his two young nephews prisoners in the Tower of London from which they disappeared. It was believed that they were murdered by his orders. A common tale, much liked by English children, in its many forms, grew from this ballad. Perhaps the best known was the one in which the lost babes were covered with leaves by the birds in the woods.

Baboon, Lewis. History of John Bull, Arbuthnot. A name given to Louis XIV. of France. The name Philip Baboon was given in the same writing to Philip Bourbon, Duke of Anjou.

Backbite, Sir Benjamin. School for Scandal, Sheridan. A vacantly busy man who peddled scandal.

Bagstock, Joe. Dombey and Son, Dickens. The insistent and selfish "J. B.," "old J. B.," and "Joey B," of the story.

Baillif, Harry. Canterbury Tales, Chaucer. The jolly landlord at Tabard Inn, where the Canterbury Pilgrims gathered in making ready for their journey.

Balafre. Quentin Durward, Scott. Name given to an old archer belonging to the Scottish Guards.

Balderstone, Caleb. Bride of Lammermoor, Scott. A bore and an intrusive buffoon who tries to appear rich but lives in discomfort and often in hunger and want. His pretentions have often been laughingly quoted.

Baldwin. Jerusalem Delivered, Tasso. The brother of Godfrey of Bouillon. In the tale of "Reynard the Fox" the name, Baldwin, is given to one of the beasts.

Balmawhapple. Waverly, Scott. An obstinate stupid-faced blundering Scotch laird.

Balthazar. Comedy of Errors, Shakespere. A merchant ordered to furnish impossible merchandise. In "Much Ado About Nothing" Balthazar appears as servant to Don Pedro. Balthazar is also the name of one of the Wise Men who followed the star to Bethlehem.

Balwhidder, Annals of the Parish, Galt. A sincere, kind, talkative Scotch Presbyterian clergyman. With natural prejudices and old-fashioned ways he is too "easy" to carry on his parish work with zeal. His friends enjoy Balwhidder's jokes.

Banquo. Macbeth, Shakespere. A thane of Scotland said to belong to the Eleventh Century and ancestor of the Stuarts. In fiction made immortal as the innocent laird murdered by Macbeth. Banquo's ghost is more famous than Banquo himself.

Barabas. The Jew of Malta, Marlowe. A monster, the hero of the tragedy, who wears a big nose and invents infernal machines.

Bardell, Mrs. Pickwick Papers, Dickens. The landlady, a widow, who sues Mr. Pickwick for breach of promise to marry her.

Bard of Avon. Name given to Shakespere who was born and buried in Stratford-on-Avon.

Bard of Ayrshire. A name often given to Robert Burns, the great poet of Scotland, who was a native and resident of the county of Ayr.

Bard of Hope. A title sometimes given to Thomas Campbell, author of "The Pleasures of Hope," one of the most beautiful didactic poems in the language.

Bard of Memory. A name used to designate the poet Rogers, author of "The Pleasures of Memory."

Bard of Rydal Mount. An epithet sometimes applied to the poet Wordsworth, who resided at Rydal, a chapelry of England, in the County of Westmoreland. His dwelling overlooked a beautiful view of Lake Rydal.

Bardolph. Merry Wives of Windsor, Shakespere. A follower of Falstaff, known as "the knight of the burning lamp," from his red nose. He is a poor, lowbred drunkard.

Barkis. David Copperfield, Dickens. Remembered by the much-quoted "Barkis is willing," his form of proposing marriage to his beloved Clara Pegotty.

Barley-Corn, Sir John. Tam O'Shanter, Burns. Name given to the personification of a malt liquor made from barley. Sir Barley-corn has also been noticed by the authors Scott and Hawthorne. The name comes down to us from an old English pamphlet of uncertain date in which Sir John Barley-corn is arraigned in court, tried by jury and acquitted.

Barnaby Rudge. Barnaby Rudge, Dickens. A half-witted lad who wanders about with a pet raven. They flit together through many adventures, including a No-popery riot.

Basilisco. Soliman, and Perseda, old Play. A boasting knight who became so popular with his foolish bragging that his name grew into a proverb.

Bassanio. Merchant of Venice, Shakespere. The lover of Portia who won her when he chose a leaden casket in which her portrait was hidden.

Bath, Major. Amelia, Henry Fielding. A noble-minded gentleman, pompous in spite of poverty, and

striving to live according to the "dignity and honor of man." He tries to hide his poverty under bold speech even when found doing menial service.

Battle, Sarah. Essays of Elia, Lamb. Sarah considered whist the business of life and literature one of the relaxations. When a young gentleman, of a literary turn, said to her he had no objection to unbend his mind for a little time by taking a hand with her, Sarah declared "Whist was her life business; her duty; the thing she came into the world to do. She unbent her mind afterwards over a book."

Bayard. Old Poems and Romances. Bayard was a famous horse belonging to the four sons of Amyon, a semi-mythical character. He seemed but an ordinary horse when one person rode, but if the four mounted, the horse accommodatingly grew in length. Among wonderful things related of him his hoof-prints have been found on rocks and in deep forests. Bayard is also known as the property of Amadis de Gaul in an old Portuguese romance. He was found under the watch of a dragon whom a wizard knight charmed and then rescued the horse. In French tales Bayard is represented to be yet living in some of the forests of France but disappears when disturbed. Bayard is also the name of the horse belonging to Fitz-James in Scott's poem, "Lady-of-the-Lake." "Bayardo's Leap" belongs to this story. It is said that Rinaldo was riding on his favorite steed, when a demon sprang behind him, but the animal in terror took three tremendous leaps and unhorsed the fiend.

Bayes. The Rehearsal, George Villiers. This farce, or satire, was written about the year 1670 and its wit has been much quoted. In its present form the hero, Bayes, is intended to represent Dryden as at the head of heroic rhymes. He is shown as greedy for applause; impatient of censure or criticism; inordinately vain, yet obsequious to those who, he hopes, will gratify him by returning his flattery, and, finally, as anxiously mindful of the minute parts of what, even in the whole, is scarce worthy of attention.

Beatrice. Divine Comedy, Dante. Daughter of an illustrious family of Florence for whom Dante had a great love. In his poem she is represented as being his guide through paradise. Beatrice is also the name of the heroine of Shakespere's "Much Ado About Nothing." Of her Mrs. Jameson says: "The extraordinary success of this play in Shakespere's own day, and ever since, in England, is to be ascribed more particularly to the parts of Benedict and Beatrice, two humorsome beings, who incessantly attack each other with all the resources of raillery. In Beatrice, high intellect and high animal spirits meet, and excite each other like fire and air. In her wit there is a touch of insolence, not infrequent in women when the wit predominates over reflection and imagination. In her temper, too, there is a slight infusion of the termagant. But Beatrice, though willful, is not wayward; she is volatile, not unfeeling."

Beauty and the Beast. Fairy Tale, Mme. Villeneuve. Oft-repeated in stories for children. Beauty and the Beast are known in many forms. In the original tale young and lovely Beauty saved the life of her father by putting herself in the power of a frightful, but kind-hearted, monster, whose respectful affection and deep melancholy finally overcame her aversion to his hideousness, and induced her to consent to marry him. By her love Beast was set free from enchantment and allowed to assume his own form, a handsome and graceful young prince.

Bede, Adam. Adam Bede, George Eliot. An ideal workman, hero of the novel.

Bedivere. Tales of the Round Table. Bedivere was the last knight of King Arthur's Round Table. He had served as a butler, was of much importance and was sent by the dying king to throw his sword, Excalibar, into the lake. A hand and arm rose from the lake, caught the sword, flourished it three times and sank. Bedivere watched King Arthur's departure for Avalon, the "Isle of the Blest." This knight is noticed, under the name Bedver, in Geoffry's British History.

Beggar's Daughter. Reliques, Percy. First known as the Beggar's daughter of Bethnal Green, a beautiful girl named Bessie, who is wooed by a knight, and whose father turns out to be a son of Simon de Montford, living in disguise as a blind beggar. The story was dramatized by Sheridan Knowles.

Belch, Sir Tony. Twelfth Night, Shakespere. Uncle to Olivia, a jolly, care-free fellow, type of the roisterers of Queen Elizabeth's days.

Belinda. Rape of the Lock, Pope. Poetical name of the heroine whose real name was said to be Arabella Fermor. In a frolic Lord Petre cut a lock from the lady's hair, this was so much resented that it broke the great friendship between the two families. The poem, "Rape of the Lock," was written to bring the people into a better temper and lead to reconciliation. Belinda is also the name of the heroine in a novel written by Maria Edgeworth.

Bell, Adam. Old Ballad. A famous wild outlaw belonging to the north country and celebrated for his skill as an archer.

Bell, Laura. Pendennis, Thackeray. One of the sweetest heroines in English literature.

Bell-man. L'Allegro, Milton. The watchman who patrolled the streets and called out the hour of night. Sometimes he repeated scraps of pious poetry in order to charm away danger.

Bell, Peter. Peter Bell, a Tale in verse, Wordsworth. A wandering tinker, subject of Wordsworth's poem, whose hard heart was touched by the fidelity of an ass to its dead master. Shelley wrote a burlesque of this poem, entitled "Peter Bell the Third," intended to ridicule the ludicrous puerility of language and sentiment which Wordsworth often affected. This burlesque was given the name of the Third because it followed a parody, already published as "Peter the Second."

Bell-the-Cat. Name given to a nobleman at Lauder, Scotland, early in the Sixteenth Century. King James II. called an assembly of Scottish barons to resist a threatened invasion of his realm by Edward IV., of England. After long discussion one of the barons related the nursery tale of a convention of mice in which it was proposed to hang a bell on the cat's neck, to give warning of her presence. No one would serve on the Mouse Committee. To the story Archibald Douglas responded by saying "I will bell the cat" and was afterwards known by the name, Bell-the-cat.

Beloved Physician. Bible. Name given to St. Luke and first suggested in the Apostle Paul's letter to the Colossians.

Belphoebe. Faery Queen, Spenser. A delicate and graceful flattery offered to Queen Elizabeth through the huntress, Belphoebe, intended as a likeness of the Queen. The name taken from belle, meaning beautiful, and Phoebe, a name sometimes bestowed on Diana.

Belvawney, Miss. Nicholas Nickleby, Dickens. She belonged to the wonderful Portsmouth theater, always took the part of a page and gloried in silk stockings.

Belvidera. Venice Preserved, Otway. The beautiful heroine of the almost forgotten tragedy. Sir Walter Scott said "more tears have been shed, probably, for the sorrows of Belvidera and Moninia than for those of Juliet and Desdemona."

Benedick. Much Ado About Nothing, Shakespere. A young lord of Padua who is gentleman, wit, and soldier. He was a pronounced bachelor, but after a courtship full of witty sayings and coquetry he marries the lovely Beatrice. From this gentleman comes the name Benedick or Benedict, applied to married men who were not going to marry.

Benengell, Cid Hamet. Don Quixote, Cervantes. Supposed to be a writer of chronicles among the Moors and claimed as authority for the tales of adventure recorded by Cervantes. The name, Cid Hamet, has been often quoted by writers.

Ben Hur, General Lew Wallace. Messala, the Roman playmate and young friend of Ben Hur, afterward became his remorseless enemy. Ambitious, hard, and cruel, when he came into power he made Ben Hur a galley slave, confiscated his property and imprisoned the mother and sister. Ben Hur escaped, returned later as a wealthy Roman, and entered in the famous chariot race against Messala who had put up enormous sums in wagers. Messala recognized Ben Hur and hoped to win the race and bring him to final ruin; but Messala himself was thrown and seriously injured. His cruelties were made known and he was at last slain by his wife, Isas, the daughter of Balthasar.

Bennet, Mrs. Amelia, Fielding. An improper character.

Benvolio. Romeo and Juliet, Shakespere. One of Romeo's friends who would "quarrel with a man that had a hair more or a hair less in his beard than he had." Mercutio says to him, "Thou hast quarreled with a man for coughing in the street."

Beowulf. Anglo-Saxon Poem. He was a Gothic warrior who slew the monster Grendel, which infested the great hall of Hrothgar, King of the West Danes. This great poem of over 6,000 lines is divided into two parts. The first part describes the beautiful palace of King Hrothgar, the ravages wrought by the fiend Grendel and his mother, and the deliverance wrought by the hero Beowulf. The second part describes the combat between the aged King Beowulf and the dragon which was wasting the land of the Goths. The Beowulf who

took part in Hygelac's historical expedition against the Hetware is probably historical, but the Beowulf of the four great exploits of the poem, the swimming match with Breca, and the contests with Grendel, with his dam, and with the dragon, is probably a character allied to the Norse divinities.

Bertram, Guy Mannering, Scott. The character was suggested by James Annesley, Esq., rightful heir of the earldom of Anglesey, of which he was dispossessed by his uncle Richard. He died in 1743. Bertram was also the name of the haughty and dissolute count, husband of Helena in Shakespere's comedy "All's Well that Ends Well."

Bianca, Othello, Shakespere. Cassio's sweetheart.

Biblio'mancy, a mode of divination much practiced during many ages. The diviner opened the Bible and observed the first passage which occurred or upon entering a place of worship took notice of the first words of the Bible heard after entering. The application was often very fanciful, and depended rather upon the mere sound of the words than upon their proper signification, or the scope of the passage. Prayer and fasting were sometimes used as a preparation for a mode of consulting the divine oracles, than which nothing could be more contrary to their purpose and spirit, and which was in harmony only with the notions and practices of heathenism.

Bibliomania, signifies book-madness. It is a passion for rare and curious books. While the ordinary collector is satisfied with the possession of works which are valuable, either on account of their established reputation or as assisting him in his literary or professional pursuits, the bibliomaniac is actuated by other motives. With him utility is of secondary importance, rarity being the first and great requisite. Thus even a common book becomes valuable in his eyes if it be one of a few copies thrown off on vellum or on large paper, or if it has been bound by Derome, Bozerian, Lewis, or Payne; and for the same reason, he sometimes prefers an inferior to a better article. The formation of complete sets of such books as the "Elzevir Republics" (see Elzevir), or of the works of a single author, provided they be scarce, is a favorite pursuit with many.

Bigendians, Gulliver's Travels, Swift. The name of a religious party in the imaginary Empire of Lilliput who made it a matter of duty and conscience to break their eggs at the large end. They were regarded as heretics by the law, which required all persons to break the smaller end of their eggs, under pain of heavy penalties in case of disobedience.

Bilfil, Tom Jones, Fielding. Allworthy's nephew, a talebearer.

Birch, Harvey, The Spy, Cooper. The chief character of the novel.

Black-eyed Susan, Ballad, John Gay. The heroine of the popular sea-song.

Blatant Beast, Faery Queen, Spenser. A bellowing monster typical of slander; or, an impersonation of what we now call "Vox Populi," or the "Voice of the People."

Blimber, Miss Cornelia, Dombey and Son, Dickens. The daughter of Dr. Blimber, the head of a first-class educational establishment conducted on the forcing or cramming principle. She is a very learned, grave, and precise young lady, "no light nonsense about her," who has become "dry and sandy with working in the graves of deceased languages."

Blouzalinda, Shepherd's Week, John Gay. The country girl, heroine of this pastoral poem, written more than one hundred and fifty years ago, but quoted as a picture of the poverty and rudeness of rural life at that time.

Bobadil, Captain, Every Man in His Humor, Jonson. A boasting coward, who passes himself off with young and simple people for a Hector.

Boeuf, Front de, Ivanhoe, Scott. One of King John's followers. A ferocious scoundrel.

Bois Guilbert, Brian de, Ivanhoe, Scott. A brave but cruel, crafty, and dissolute commander of the Knights Templar.

Boniface, The Beaux' Stratagem, Farquhar. A fine representation of an English landlord. Hence applied to landlords generally.

Bontemps, Roger, Song, Beranger. Known in France as the personification of care-free leisure. The equivalent, among the French peasantry, for the English proverb, "There's a good time coming," is "Roger Bontemps." This one of Beranger's most celebrated songs was written in 1814.

Bottom, Nick, A Midsummer Night's Dream, Shakespere. A man who fancies he can do everything, and do it better than anyone else. Shakespere has drawn him as profoundly ignorant, and with an overflow of self-conceit. Oberon, the fairy king, desiring to punish Titania, his queen, commissioned Puck to watch her till she fell asleep, and then to annoint her eyelids with the juice of a plant called "love-in-idleness," the effect of which, when she awoke, was to make her dote upon Bottom, upon whom Puck had fixed an ass's head.

Bowling, Tom, Roderick Random, Smollett. A name made almost famous as hero of the novel. Critics have said "The character of Tom Bowling, in 'Roderick Random,' will be regarded in all ages as a happy exhibition of those naval heroes to whom Britain is indebted for so much of her happiness and glory." The Tom Bowling referred to in Dibdin's famous seasong was Captain Thomas Dibdin, brother of Charles Dibdin, who wrote the song.

Box and Cox, Farce, Morton. Principal characters in the farce known as a "dramatic romance of real life."

Brag, Jack, Jack Brag, Theodore Hook. Hero of the novel and a spirited embodiment of the arts employed by a vulgar pretender to creep into aristocratic society, and of his ultimate discomfiture. General Burgoyne figures in an old ballad known as "Sir Jack Brag."

Bramble, Matthew, Humphrey Clinker, Smollett. Noted character in the novel described as "an odd kind of humorist," afflicted with the gout, and "always on the fret," but full of generosity and benevolence.

Brass, Sally, and Sampson, Old Curiosity Shop, Dickens. Brother and sister, well mated, he a shystering lawyer and she getting ahead of him in villany. Sampson was dishonest, sentimental, and affected in manner, and both are interesting characters to read about.

Brentford, the two Kings of, The Rehearsal, Villiers. Much question has been raised as to who was to be ridiculed under these characters. The royal brothers, Charles II. and James II., have been suggested, others say the fighting Kings of Granada. In the farce the two kings are represented as walking hand in hand, as dancing together, as singing in concert, and, generally, as living on terms of the greatest intimacy and affection.

Brick, Mr. Jefferson, Martin Chuzzlewit, Dickens. A ranting American politician who makes a ridiculous figure as editor.

Brook Farm. The full name was "Brook Farm Institute of Agriculture and Education," a stock company of nearly 70 members, located on a farm of 200 acres at West Roxbury, Mass. Among the members were George Ripley, Charles A. Dana, George William Curtis, Margaret Fuller and Nathaniel Hawthorne. Among their frequent visitors were Ralph Waldo Emerson, Theodore Parker, Bronson Alcott. This idyllic life lasted about five years, from 1841 to 1846. Brook Farm was a financial failure but it was important in intellectual results. Hawthorne has written the story of the experiment in "Blithedale Romance."

Brown, Tom, Tom Brown's School Days and Tom Brown at Oxford, Thomas Hughes. The hero of these stories of school days, a typical English schoolboy and undergraduate.

Brunehild, Nibelungen-lied. The story of Brunehild holds large place in ancient German romance. She was, herself, a warrior, proud and skillful and she promised to be the bride of the man who could conquer her in three trials, in hurling the lance, in throwing the stone, and in leaping after the stone when thrown. By the arts and bravery of Siegfried, she was deluded into marrying Gunther, King of Burgundy; but, discovering the trick, she planned and accomplished the destruction of Siegfried, and the humiliation of Chriemhild, his wife.

Bumble, Mr, Oliver Twist, Dickens. A pompous, disagreeable beadle who figures largely in the beginning of the story. The name, Bumble, has since attached itself to the office.

Bunthorne, Patience, Sullivan. A gloomy poet showing most distinctly in his gloom surrounded by the characters of a comic opera. He was inserted as a satire on the æsthetic craze, turning into ridicule the imitators of Rosetti.

Bunsby, Jack, Dombey and Son, Dickens. A commander of a ship looked up to as an oracle by his friend Captain Cuttle. He is described as wearing a "rapt and imperturable manner," and seeming to be "always on the lookout for something in the extremest distance."

Burchell, Mr, Vicar of Wakefield, Goldsmith. A prominent character who passes himself off as a poor man, but is really a baronet in disguise. He is noted for his habit of crying out "Fudge!" by way of expressing his strong contempt for the opinions of others.

Burd, Helen, Scotch Ballad. A traditional name standing for constancy. She was carried to England by fairies and imprisoned in a castle. The youngest brother

of the fair Burd Helen was guided by the enchanter Merlin and accomplished the perilous task of rescuing his sister. This is recited in the line "Childe Roland to the dark tower came," quoted by Shakespere. Only a fragment of the old ballad has been preserved.

Buskin. Tragedy. The Greek tragic actors used to wear a sandal some two or three inches thick, to elevate their stature. To this sole was attached a very elegant buskin.

Buz-Fuz, Serjeant. Pickwick Papers, Dickens. A pompous, chaffing lawyer, who bullies Mr. Pickwick and the witnesses in the famous breach of promise suit, Bardell vs. Pickwick.

Byfield. A New England parish the scene of an historical novel by John Lewis Ewell. Here lived the ancestor of Longfellow, to whom the poet dedicated "The Village Blacksmith," himself a blacksmith, keeping his accounts in peculiar orthography. According to the deed of sale in 1681, the Byfield Indians got a larger price from the first English settlers than was paid for Manhattan Island.

Cab'ala. The oral law of the Jews delivered down from father to son by word of mouth. It is the usual belief that God instructed Moses, and Moses his brother Aaron, and so on from age to age.

Cabalistic Science. This science consists mainly in understanding the combination of certain letters, words, and numbers, said to be significant.

Cadme'an Victory. A victory purchased at great expense of life. The allusion is to the armed men who sprang out of the ground from the teeth of the dragon sown by Cadmus. These men fell foul of each other, and only five of them escaped death.

Cai'us, Doctor. Merry Wives of Windsor. Shakespere. A physician in the comedy who adds a touch of humor. He is most conspicuous as the lover of Anne Page.

Calandri'no. A simpleton frequently introduced in Boccaccio's "Decameron"; expressly made to be befooled and played upon. His mishaps, as Macaulay states, "have made all Europe merry for more than four centuries."

Ca'leb. (1) The enchantress who carried off St. George in infancy. (2) A character in Dryden's satire of "Absalom and Achitophel," meant for Lord Grey, one of the adherents of the Duke of Monmouth.

Ca'leb Quo'tem. A parish clerk or jack-of-all-trades, in Coleman's play "The Review, or Ways of Windsor." Coleman borrowed the character from "Throw Physic to the Dogs," an old farce.

Cal'i-ban. A savage and deformed slave of Prospero in Shakespere's "Tempest." He is represented as being the "freckled whelp" of Sycorax, a foul hag, who was banished from Argier (or Algiers) to the desert island afterward inhabited by Prospero. From his rude, uncouth language we get the phrase "Caliban style," "Caliban speech," meaning the coarsest possible use of words.

Cal'i-dore. A knight in Spenser's "Faëry Queen," typical of courtesy, and said to be intended for a portrait of Sir Philip Sidney.

Ca-lis'ta. The name of a celebrated character in Rowe's "Fair Penitent."

Callip'olis, Battle of Alcazar. George Peele. A character in the "Battle of Alcazar," used by Sir Walter Scott and others as a synonym for lady-love, sweetheart, charmer. Sir Walter always spells the word Callipolis, but Peele calls it Calipolis.

Cal'y-don. A forest celebrated in the romances relating to King Arthur and Merlin.

Camaral'zaman, Prince. Arabian Nights. One of the stories of the Arabian Nights and the name of a prince who fell in love with Badou'ra, Princess of China, the moment he saw her.

Ca-ma'cho. Don Quixote, Cervantes. A character in an episode in "Don Quixote," who gets cheated out of his bride after having made great preparations for their wedding.

Cam'ba-lo, or **Cam'bel. Faery Queen, Spenser.** A brother of Candace. He challenged every suitor to his sister's hand, and overthrew all except Tri'amond, who married the lady.

Cam'ba-lu. In the "Voyages" of Marco Polo the chief city of the province of Cathay.

Cam'buscan'. A Tartar king identical with Genghis Khan. The King of the far East sent Cambuscan, a "steed of brass, which, between sunrise and sunset, would carry its rider to any spot on the earth." All that was required was to whisper the name of the place in the horse's ear, mount upon his back, and turn a pin set in his ear. When the rider had arrived at the place required, he had to turn another pin, and the horse instantly descended, and, with another screw of the pin, vanished till it was again required. This story is begun by Chaucer in the "Squire's Tale," but was never finished.

Cam'e-lot. A parish in Somersetshire, England (now called Queen's Camel), where King Arthur is said to have held his court. In this place there are still to be seen vast intrenchments of an ancient town or station —called by the inhabitants "King Arthur's Palace."

Ca'mille'. A member of the Parisian demimonde and the heroine of a play dramatized from the novel of "La Dame aux Camélias," by Alexander Dumas, the younger.

Can'a-ce. Faery Queen, Spenser. A paragon among women, the daughter of King Cambuscan to whom the King of the East sent as a present a mirror and a ring. The mirror would tell the lady if any man on whom she set her heart would prove true or false, and the ring (which was to be worn on her thumb) would enable her to understand the language of birds and to converse with them. Can'ace was courted by a crowd of suitors, but her brother gave out that anyone who pretended to her hand must encounter him in single combat and overthrow him. She ultimately married Tri'amond, son of the fairy Ag'apë.

Can-dide'. The hero of Voltaire's novel so called. All sorts of misfortunes are heaped upon him, and he bears them all with philosophical indifference.

Cani'dia. A sorceress, alluded to by Horace, who could bring the moon from heaven.

Candor, Mrs. A most energetic slanderer in Sheridan's "School for Scandal."

Ca'ora. Description of Guiana, Raleigh. A river, on the banks of which are a people whose heads grow beneath their shoulders. Their eyes are in their shoulders, and their mouths in the middle of their breasts. The original picture is found in Hakluyt's "Voyages" 1598.

Cap'u-let. The head of a noble Veronese house in Shakespere's tragedy of "Romeo and Juliet,"—hostile to the house of Montague. He is at times self-willed and tyrannical, but a jovial and testy old man.

Cap'u-let, Lady. The proud and stately wife of Capulet, and mother of Juliet.

Carad'oc. A Knight of the Round Table. Also in history, the British chief whom the Romans called Caractacus. Caradoc is the hero of an old ballad entitled "The Boy and the Mantle."

Carker. A scoundrelly clerk in Dickens's "Dombey and Son."

Car'ton, Sidney. A hero transformed by unselfish love in Dickens's "Tale of Two Cities." He voluntarily goes to the guillotine to save his successful rival in love.

Car-ras'co, Sanson. A waggish bachelor of Salamanca, in Cervantes' romance, "Don Quixote."

Cas'ca. Julius Cæsar, Shakespere. A blunt-witted Roman, one of the conspirators against Julius Cæsar.

Cas-san'dra. A daughter of Priam, King of Troy, gifted with the power of prophecy; but Apollo, whom she had offended, brought it to pass that no one believed her predictions. Shakespere makes use of this character in "Troilus and Cressida."

Ca-sel'la. The name of a musician and old friend of Dante, immortalized by him in his poem "La Divina Commedia."

Cassib'elan. Great-uncle to Cymbeline, in Shakespere's play by that name.

Cas'si-o. A Florentine and lieutenant of Othello, and a tool of Iago, in Shakespere's tragedy of "Othello." Iago made Cassio drunk, and then set on Roderi'go to quarrel with him. Cassio wounded Roderigo. Othello suspended Cassio, but Iago induced Desdemo'na to plead for his restoration. This interest in Cassio, confirmed the jealous rage of Othello to murder Desdemona and kill himself. After the death of Othello, Cassio was appointed governor of Cypreus.

Castle Dangerous. A keep belonging to the Douglas family, which gives its name to one of Sir Walter Scott's "Tales of my Landlord." It was so called by the English because it was always retaken from them by the Douglas.

Castle of Indolence. The title of a poem by Thomson, and the name of a castle described in it as situated in a pleasing land of drowsiness, where every sense was steeped in the most luxurious and enervating delights.

Cas'tlewood, Beatrix. The heroine of Thackeray's novel "Henry Esmond," a picture of splendid, lustrous, physical beauty.

Caudle, Mrs. Margaret. The feigned author of a series of curtain lectures delivered to her husband, Job Caudle, who was a patient sufferer under this form of persistent nagging by his wife. The real author of these humorous lectures was Douglas Jerrold.

Cauline, Sir. The hero of an ancient English ballad preserved in Percy's "Reliques."

Cave of Mammon. The abode of the god of riches, described in the second book of Spenser's "Faëry Queen."

Cax'ton, Pi-sis'tra-tus. The hero of Bulwer Lytton's novel "The Caxtons," and of its sequel "My Novel."

Ce-cil'ia, St. A patron saint of the blind, also patroness of musicians, and "inventor of the organ." According to tradition, an angel fell in love with her for her musical skill, and used nightly to visit her. A crown of martyrdom was bestowed both upon her and her husband. Dryden and Pope have written odes in her honor, and both speak of her charming an angel by her musical powers.

Ced'ric. A Saxon thane in Scott's "Ivanhoe."

Ce'lia, Faëry Queen, Spenser. (1) Mother of Faith, Hope, and Charity. She was herself known as Heavenliness and lived in the hospices Holiness. (2) Celia, cousin to Rosalind in Shakespere's Comedy "As You Like It." Celia is a common poetical name for a lady or a lady-love.

Ceph'alus and Procris. Cephalus was the husband of Procris, who, out of jealousy, deserted him. Cephalus went in search of her, and rested awhile under a tree. Procris discovered him, and crept through some bushes to ascertain if a rival was with him. Cephalus heard the noise and, thinking it to be made by some wild beast, hurled his javelin into the bushes and slew Procris. When the unhappy man discovered what he had done, he slew himself in anguish of spirit with the same javelin. This story is alluded to in "Pyramus and Thisbe," in Shakespere's "Midsummer Night's Dream," where they are humorously miscalled "Shafalus and Procus."

Chad'band, The Rev. A clerical character in Dickens' "Bleak House." He will always stand as a type of hypocritical piety.

Chan'ticleer. The cock, in the tale of "Reynard the Fox," and in Chaucer's "Nonne Prestes Tale."

Char'lemagne. The romance of Charlemagne and his Paladins is of French origin, as the romances of King Arthur and the Knights of the Round Table are of Celtic or Welsh origin. According to one tradition Charlemagne is not dead, but waits crowned and armed, in Odenberg, near Saltzburg, till the time of antichrist, when he will wake up and deliver Christendom. According to another tradition, Charlemagne appears in seasons of plenty. He crosses the Rhine on a golden bridge, and blesses both corn-fields and vineyards.

Char'mi-an. A kind-hearted but simple-minded female attendant on Cleopatra in Shakespere's play of "Antony and Cleopatra."

Chaucer's Canterbury Tales. The plan of the "Canterbury Tales" affords artistic scope for introducing a company of pilgrims on their way to the shrine of Thomas à Becket. It represents all classes of society and presents a series of tales of great interest set in the midst of beautiful descriptions of nature. The stories best worth reading are: "The Clerk's Tale" (Griseldis); "The Knight's Tale" (Palamon and Arcite); "The Man of Law's Tale" (Constance); "The Prioress's Tale" (Hugh of Lincoln); "The Priest's Tale" (Chanticleer and Pertelote).

Chery and Fair-Star. Countess d'Auluoy's Fairy Tales. Two children of royal birth, whom their father's brothers and their mother's sisters cast out to sea; they are found and brought up by a Corsair and his wife. Ultimately they are told of their birth by a green bird and marry each other. A similar tale is found in "The Arabian Nights."

Cheer'y-ble Brothers, The. A firm of benevolent London merchants in Dickens' "Nicholas Nickleby."

Chev'y Chase. The subject and the title of a famous old English ballad. The event which is commemorated is probably the battle of Otterburn, which happened in August, 1388, but it is impossible to reconcile the incidents of the poem with history.

Chib'iabas. The musician in Longfellow's "Hiawatha," personifying harmony in nature.

Childe Harold. Childe, so often used in old English ballads, is a title of honor as "Childe Harold," "Childe of Ellechilde Waters," "Childe Roland," "Childe Tristram," "Childe Arthur," etc. In Byron's poem "Childe Harold," the "Childe" is the poet himself represented as a man, sated of the world roaming from place to place. In canto I., he visits Portugal and Spain; in canto II., Turkey in Europe; in canto III., Belgium and Switzerland; and in canto IV., Venice, Rome, and Florence.

Children in the Wood. Two characters in an ancient and well-known ballad entitled "The Children in the Wood, or The Norfolk Gent's Last Will and Testament." This is said to be a disguised recital of the alleged murder of his nephews by Richard III. This is the story as related in Percy's "Reliques." The master of Wayland Hall, Norfolk, on his deathbed left a little son, three years old, and a still younger daughter, named Jane, to the care of his wife's brother. If the children died before they came to their majority, their uncle was to inherit their estate. After twelve months had elapsed, the uncle hired two ruffians to murder the two babes. As they went along one of the ruffians relented, and killed his fellow; then, putting down the children in a wood, left them. The poor babes gathered blackberries to allay their hunger, but died during the night, and "Robin Redbreast" covered them over with strawberry leaves. Addison says of the ballad referred to, that it is "one of the darling songs of the common people."

Chil'lingly, Kenelm. The hero in a novel by this name by Bulwer.

Chin-gach'gook. A sagamore of the Mohicans, and father of Uncas, in Cooper's "Leather-Stocking Tales."

Chlo'e, Daphins and Chloe Longue. (1) The shepherdess loved by Daphne. (2) "Paul and Virginia" by St. Pierre is founded on this romance. (3) Chloë is also a shepherdess in Shakespere's "As You Like It."

Chœ'reas. The lover of Callir'rhoë, in Cha'riton's Greek romance.

Chriemhild or **Chriemhilde.** The heroine of the German epic poem, the "Nibelungen Lied." She is represented as a woman of the rarest grace and beauty, and rich beyond conception. By the treacherous murder of her husband she is transformed into a furious creature of revenge. For plot of this epic cycle, see Kreimhild.

Chris'ta-bel. (1) The subject and heroine of an old romance by Sir Eglamour of Artois. (2) The heroine of an ancient ballad "Sir Cauline." (3) The lady in Coleridge's poem "Christabel."

Chris'tian. The hero of John Bunyan's allegory "Pilgrim's Progress." He flees from the "City of Destruction," and journeys to the "Celestial City." He starts with a heavy burden on his back, but it falls off when he stands at the foot of the cross. All his trials on the way are depicted.

Christian'a. The wife of Christian, who started with her children and Mercy from the "City of Destruction" forms the subject of Bunyan's "Pilgrim's Progress," part II. She was placed under the guidance of Mr. Great-Heart, and met her husband at the Celestial City.

Christopher, St. The giant that carried a child over a brook, and said, "Chylde, thou hast put me in grete peryll. I might bere no greater burden." The Chylde was the Christ and the burden was the "Sin of the world." This has been a favorite theme for painters.

Chris'tus, a Mystery. A dramatic triology by Henry W. Longfellow: Part I, "Divine Tragedy." Part II, "The Golden Legend"; Part III, "New England Tragedies."

Chrysalde. A character in Molière's "L'École des Femmes"; a friend of Arnolphe.

Chrysale. An honest, simple-minded, hen-pecked tradesman, in the same comedy by Molière.

Chuz'zle-wit, Martin. The hero of Dickens' novel of the same name.

Chuz'zle-wit, Jonas. A miser and a murderer, the opposite type of character from Martin.

Cid Campeador is the name given in histories, traditions, and songs to the epic hero of Spain. So greatly was he honored that he was called "Mio Cid el Campeador," my lord the champion. Relics of the "Blessed Cid," as he is still called in Spain, such as his sword, shield, banner, and drinking-cup, are still held in great reverence by the populace. The numerous "Cid Romances" that were first published in the Sixteenth Century, contain the most romantic improbabilities concerning the life and deeds of the "Cid." The most interesting chronicle of the "Cid" for English readers was written by Robert Southey.

Cim-me'ri-ans. A people described by Homer dwelling "beyond the ocean-stream," in a land where the sun never shines.

Cinderel'la. Heroine of a fairy tale. She is the drudge of the house, while her elder sisters go to fine balls. At length a fairy enables her to go to the prince's ball; the prince falls in love with her, and she is discovered by means of a glass slipper which she drops, and which will fit no foot but her own. She is represented as returning good for evil and heaping upon her half-sisters every kindness a princess can show.

Ci-pan'go. A marvelous island, described in the "Voyages" of Marco Polo, the Venetian traveler. It is represented as lying in the eastern seas, some 1,500 miles from land, and of its beauty and wealth many stories

are related. Columbus and early navigators made a diligent search for this island.

Clare, Ada. The wife of Carstone, and one of the most important characters in Dickens' "Bleak House."

Clem'en-ti'na, The Lady. A beautiful and accomplished woman, deeply in love with Sir Charles Grandison, in Richardson's novel of this name.

Clif'ford, Paul. An attractive highwayman and an interesting hero in Bulwer's novel by the same name. He is familiar with the haunts of low vice and dissipation, but afterward is reformed and elevated by the power of love.

Clinker, Humphrey. The hero of Smollett's novel entitled, "The Expedition of Humphrey Clinker," a philosophic youth who meets many adventures. Brought up in the work-house, put out by the parish as apprentice to a blacksmith, he was afterward employed as a hostler's assistant. Having been dismissed from the stable, and reduced to great want, he at length attracts the notice of Mr. Bramble, who takes him into his family as a servant. He becomes the accepted lover of Winifred Jenkins, and at length turns out to be a natural son of Mr. Bramble.

Clo'ten. A rejected lover of Imogen, in Shakespere's play of "Cymbeline."

Clorin'da, Jerusalem Delivered, Tasso. Clorinda, the heroine of this poem, is represented as an Amazon inspiring the most tender affection in others, especially in the Christian chief Tancred; yet she is herself susceptible of no passion but the love of military fame.

Clout, Colin. A name that Spenser applies to himself in the "Faëry Queen" and "Shepherd's Calendar." Colin Clout also is introduced into Gay's pastorals.

Cœ'lebs. The hero of a novel by Hannah More, "Cœlebs in Search of a Wife."

Col-lean', May. The heroine of a Scottish ballad.

Cologne, The Three Kings of. A name given to the three magi who visited the infant Saviour, and whose bodies are said to have been brought by the Empress Helena from the East to Constantinople, whence they were transferred to Milan. Afterward, they were removed to Cologne and placed in the principal church of the city, where, says Cressy, "they are to this day celebrated with great veneration." Their names are commonly said to be Jaspar, Melchior, and Balthazar.

Comedy of Errors, Shakespere. Twin brothers of exact likeness named Antipholus are served by attendant slaves named Dromio also of striking resemblance. The humor of the play lies in the complications that arise. The two brothers are lost at sea with their servants and are picked up by different vessels. After long separation they all reappear in Ephesus. There is great entanglement of plot until both brothers face each other in a trial before the duke and all is explained.

Co'mus. In Milton's poem entitled "Comus: a Masque," he is represented as a base enchanter, who endeavors, but in vain, to beguile and entrap the innocent by means of his enchantments.

Consuelo. The heroine of George Sand's novel of the same name, an impersonation of noble purity sustained amidst great temptations.

Co-phet'u-a. An imaginary African king, of whom a legendary ballad told that he fell in love with a beggar maid and married her. This ballad is found in Percy's "Reliques." Many poets have made use of the story. Tennyson has given us a modern version in "The Beggar Maid."

Cop'per-field, David. The hero of Dickens' novel of the same name. This is said to be Dickens' favorite among his works and somewhat autobiographic.

Corde'lia. King Lear, Shakespere. The youngest of Lear's three daughters, and the one that truly loved him.

Cor'y-don. A shepherd in one of the "Idyls of Theocritus," and one of the Eclogues of Virgil. Used by Shakespere and later poets to designate a rustic swain.

Cos'tard. A clown, in Shakespere's "Love's Labors Lost," who apes the display of wit and misapplies, in the most ridiculous manner, the phrases and modes of combination in argument that were then in vogue.

Cov'er-ley, Sir Roger de. One of the members of the imaginary club under whose direction the "Spectator" was professedly edited. He was a kind-hearted, simple-mind, type of an English Squire in the time of Queen Anne. He figures in thirty papers of the "Spectator."

Crabtree. A character in Smollett's novel, "The Adventures of Peregrine Pickle."

Crane, Ichabod. The name of a Yankee schoolmaster, whose adventures are related in the "Legend of Sleepy Hollow," in Irving's "Sketch-book."

Craw'ley, Rawdon. The husband of Becky Sharp in "Vanity Fair," Thackeray's novel without a hero.

Crea'kle, Mr. A tyrannical and cruel schoolmaster in Dickens' "David Copperfield."

Cres'si-da. The heroine of Shakespere's play, "Troilus and Cressida," also the heroine of one of Chaucer's "Canterbury Tales."

Croaker. A character in Goldsmith's comedy, "The Good-natured Man."

Crum'mles, Vincent. A theatrical head of a theatrical family in Dickens' "Nicholas Nickleby."

Cru'soe, Rob'in-son. The hero of De Foe's great novel; a ship-wrecked sailor who for many years leads a solitary existence on an uninhabited island of the tropics, where he employed the most admirable ingenuity in providing for his daily wants.

Cuneiform Letters. Wedge-shaped letters which occur in old Persian and Babylonian inscriptions. This is probably the oldest form of writing.

Cym'beline. A mythical king of Britain and the hero of Shakespere's play of the same name. Imogen, daughter of Cymbeline, king of Britain, married clandestinely Posthumus Leonatus; and Posthumus, being banished for the offense, retired to Rome. One day, in the house of Philario, the conversation turned on the merits of wives, and Posthumus bet his diamond ring that nothing could tempt the fidelity of Imogen. Through the villainy of Iachimo Cymbeline was forced to believe Imogen untrue. The villainy was in time disclosed and the beautiful character of Imogen revealed.

Cut'tle, Captain. A character in Dickens' "Dombey and Son," good-humored, eccentric, pathetic in his simple credulity.

Day'onet, Sir. In the romance "Le Mort d'Arthur" he is called the fool of King Arthur.

Dal-get'ty, Rittmaster Dugald. A soldier of fortune in Sir Walter Scott's "Legend of Montrose," distinguished for his pedantry, conceit, valor, vulgar assurance, knowledge of the world, greediness, and a hundred other qualities, making him one of the most amusing, admirable, and natural characters ever drawn by the hand of genius.

Dam'o-cles, a flatterer in the court of Dionysius of Syracuse. By way of answer to his constant praises of the happiness of kings, Dionysius seated him at a royal banquet, with a sword hung over his head by a single horsehair. In the midst of his magnificent banquet, Damocles, chancing to look upward, saw a sharp and naked sword suspended over his head. A sight so alarming instantly changed his views of the felicity of kings. The phrase signifies now evil foreboding or dread, a tantalizing torment.

Da'mon and Py'thias, or Phi'ntias, two noble Pythagoreans of Syracuse, who have been remembered as models of faithful friendship. Pythias having been condemned to death by Dionysius, the tyrant of Syracuse, begged to be allowed to go home, for the purpose of arranging his affairs, Damon pledging his own life for the reappearance of his friend. Dionysius consented, and Pythias returned just in time to save Damon from death. Struck by so noble an example of mutual affection, the tyrant pardoned Pythias, and desired to be admitted into their sacred fellowship.

Dandie Dinmont, A jovial, true-hearted store-farmer, in Sir Walter Scott's "Guy Mannering."

Dantes'que. Dante-like — that is, a minute life-like representation of the infernal horrors, whether by words, as in the poet, or in visible form, as in Doré's illustrations of the "Inferno."

Daph'nis and Chlo'e. A pair of lovers in the pastoral romance of the same name written by Longus in Greek prose in the Fourth Century.

Darby and Joan. A married couple said to have lived, more than a century ago, in the village of Healaugh, in the West Riding of Yorkshire, and celebrated for their long life and conjugal felicity. They are the hero and heroine of a ballad called "The Happy Old Couple," which has been attributed to Prior, but is of uncertain authorship. Timperley says that Darby was a printer in Bartholomew Close, who died in 1730, and that the ballad was written by one of his apprentices by the name of Henry Woodfall.

Da'res. One of the competitors at the funeral games of Anchises in Sicily, described in the fifth book of "Virgil's Æneid."

David. He was the uncle of King Arthur. St. David first embraced the ascetic life in the Isle of Wight, but subsequently removed to Menevia, in Pembrokeshire, where he founded twelve convents.

David, in Dryden's satire called "Absalom and Achitophel," represents Charles II.; Absalom, his beautiful but rebellious son, represents the Duke of Monmouth.

Davy. Henry IV., Shakespere. The varlet of justice Shallow, who so identifies himself with his master that he considers himself half host half varlet. Thus

when he seats Bardolph and Page at table, he tells them they must take "his" good will for their assurance of welcome.

Dawfyd, The Betrothed, Scott. "The one-eyed" freebooter chief.

Dawkins, Oliver Twist, Dickens. Known by the sobriquet of the "Artful Dodger." He is one of Fagin's tools. Jack Dawkins is a scamp, but of a cheery, buoyant temper.

Deans, Douce Davie. A poor herdsman at Edinburgh, and the father of Effie and Jeanie Deans, in Sir Walter Scott's novel, "The Heart of Mid-Lothian."

Deans, Effie. A beautiful but unfortunate character in Sir Walter Scott's "Heart of Mid-Lothian."

Deans, Jeanie. The heroine of "The Heart of Mid-Lothian," characterized by her kindness, sturdiness, and good sense. She journeys from Edinburgh to London, and obtains pardon for her sister Effie, condemned for child murder.

De'bon. One of the heroes who accompanied Brute to Britain. According to British fable, Devonshire is the county or share of Debon.

Decameron. A volume of one hundred tales told by Boccaccio. Ten ladies and their gentlemen assembled in one place agree that each shall tell one story every day for the entertainment of the rest. Thus ten stories daily are told for ten consecutive days. Chaucer borrowed the plan but reconstructed it for his "Canterbury Tales."

Dedlock, Sir Leicester. A character in **Bleak House, by Charles Dickens.** An honorable and truthful man but of such fixed ideas that no man could shake his prejudices. He had an idea that the one thing of greatest importance to the world was a certain family by the name of Dedlock. He loved his wife Lady Dedlock and believed in her implicitly. His pride had a terrible fall when he learned the secret of her life before her marriage and knew the terrible fact she had been hiding from him that she had a daughter.

Dedlock, Lady. Wife of Sir Leicester, beautiful, and apparently cold and heartless but suffering constant remorse. The daughter's name is Esther Summerson, the heroine of the novel.

Dedlock, Volumnia. Cousin of Sir Leicester, a young lady of sixty, who had the disagreeable habit of entering into other people's business.

Deerslayer. The hero of a novel by the same name, by James Fenimore Cooper. A strong fine character, honorable, truthful, brave, without cultivation but without reproach. This character appears under different names in five of Cooper's novels. "The Deerslayer," "The Pathfinder," "The Last of the Mo'hicans," "The Pioneers," and "The Prairie."

Defarge, Mons. Tale of Two Cities, Dickens. Keeper of a wine shop in the Faubourge St. Antoine, in Paris. He is a bull-necked, implacable-looking man.

Defarge, Mde, his wife, a dangerous woman, everlastingly knitting.

Del'phi. A famous oracle of Apollo in Phocis, at the foot of Mount Parnassus. [Erroneously written Delphos by early English writers.]

Delphin Classics. For the use of the dauphin, son of Louis XIV. (1674–91), the writings of thirty-nine Latin authors were collected and published in sixty volumes. Notes and an index were added to each work. An edition of the Delphin classics was published in London in the year 1818.

Delphine. The title of a novel by Mme. de Staël and the name of its heroine.

Delphine, Madame. Old Creole Days, George W. Cable. A free quadroon connected with the splendor of La Fitts, the smuggler and patriot. Madame Delphine disowned her beautiful daughter Olive in order to assure to her the rights of a white woman.

Demetrius. Midsummer Night's Dream, Shakespere. The young Athenian to whom Egeno promised his daughter Hermia in marriage.

De Profundis. "Out of the Depths." The 130th Psalm is so called from the first two words in the Latin version. In the Roman Catholic Liturgy it is sung when the dead are committed to the grave.

Deronda, Daniel. One of George Eliot's strongest character sketches in her novel by the same name.

Deserted Village. A poem by Goldsmith in which he describes rural England. He calls the village Auburn, but tells us it was the seat of his youth, every spot of which was dear and familiar to him. He pictures familiar persons, the preacher, the teacher, pastimes, and favorite haunts.

Desmas. The repentant thief is so called in "The Story of Joseph of Arimathea." Longfellow, in "The Golden Legend," calls him Dumachus. The impenitent thief is called Gestas, but Longfellow calls him Titus.

Dhu, Roderick. A highland chieftain and outlaw in Scott's poem "Lady of the Lake," cousin of Ellen Douglas, and also her suitor. He is slain by James-Fitz-James.

Di'do. The daughter of Belus, King of Tyre, and the wife of Sichæus, whom her brother Pygmalion murdered for his riches. Not far from the Phenician colony of Utica she built the city of Carthage. According to Virgil, when Æneas was shipwrecked upon her coast, in his voyage to Italy, she hospitably entertained him, fell in love with him, and, because he did not requite her passion, stabbed herself in despair.

Dies Iræ, the name generally given (from the opening words) to the famous mediæval hymn on the Last Judgment. On account of the solemn grandeur of the ideas which it brings before the mind, as well as the deep and trembling emotions it is fitted to excite, it soon found its way into the liturgy of the Church. The authorship of the hymn has been ascribed to Gregory the Great, St. Bernard of Clairvaux, Umbertus, and Frangipani, the last two of whom were noted as church-hymnists.

Diggon, Davie. A shepherd in the "Shephearde's Calendar," by Spenser. He tells Hobbinol that he drove his sheep into foreign lands, hoping to find better pasture; but he was amazed at the luxury and profligacy of the shepherds whom he saw there, and the wretched condition of the flocks.

Dimmes'dale, Arthur. In Hawthorne's romance "The Scarlet Letter," a Puritan minister of great eloquence and spirituality, in Colonial New England, who secretly commits adultery and afterwards makes a public confession.

Di'nah, Aunt. In Sterne's "Tristram Shandy." She leaves Mr. Walter Shandy £1,000, which he fancies will enable him to carry out all the schemes that enter into his head.

Dinah, Friendly. The Bashful Man, Moncrieff. Daughter of Sir Thomas Friendly.

Dinah. St. Ronan's Well, Scott. Daughter of Sandie Lawson, landlord of the Spa hotel.

Dinah. A character in Mrs. Stowe's "Uncle Tom's Cabin."

Ding'ley Hall. Pickwick Papers, Dickens. The home of Mr. Wardle and his family, and the scene of Tupman's love adventure with Miss Rachel.

Diome'des or **Diomed. Iliad, Homer.** King of Æto'lia, in Greece, brave and obedient to authority. He survived the siege of Troy; but on his return home found his wife untrue to him. He fled to Italy and remained in exile.

Dirlos, Count. One of Charlemagne's paladins, an ideal of valor, generosity, and truth.

Divine Comedy. Dante's immortal work, the "Divina Commedia," was written during the period 1300–18, and has been translated into English by Cary, Longfellow, and others. Dante called it a comedy only because the ending was not tragical, and the epithet divine was given to it in admiration. The name "Commedia" signifies lowly, written in the common tongue, or as some explain, "comedy" also signifies ending happily. The "Divine Comedy" is an epic poem, divided into three parts; Inferno, Purgatorio, Paradiso. The poet depicts a vision, in which he is conducted, first by Virgil (human reason) through hell and purgatory; and then by Beatrice (revelation), and finally by St. Bernard through the several heavens, where he beholds the triune God. In all parts of the regions thus traversed, there arise conversations with noted personages. The deepest questions of philosophy and theology are discussed and solved; and the social and moral condition of Italy, with the corruptions of Church and State, are depicted with indignation. Fifty-two years after the poet's death, the Republic of Florence, set apart an annual sum for public lectures to explain the "Divine Comedy" to the people in one of the churches, and Boccaccio himself was appointed first lecturer.

Doctour of Phisikes, Tale. Is the Roman story of Virginius, given by Livy. Told by Chaucer in "Canterbury Tales."

Doctor Syntax. The hero of a work entitled "The Tour of Dr. Syntax in Search of the Picturesque," Doctor Syntax is a simple-minded, pious, henpecked clergyman, but of excellent taste and scholarship who left home in search of the picturesque. His adventures are told in eight-syllable verse by William Combe. "Dr. Syntax's Horse." Grizzle, all skin and bone.

Dods. The old landlady in Scott's novel called "St. Ronan's Well." An excellent character, a mosaic of oddities, all fitting together, and forming an admirable whole. She was so good a housewife that a cookery book of great repute bears her name.

Dodson. The Three Warnings, Mrs. Thrale. A youth called upon by Death on his wedding day. Death told him he must go with him. "With you!" the hapless youth cried, "young as I am." Death then told him he would not disturb him yet, but would call again after giving him three warnings. When he was 80 years of age, Death called again. "So soon returned?" old Dodson cried. "You know you promised me three warnings." Death then told him that as he was "lame, and deaf, and blind," he had received his three warnings.

Dodson and Fogg. The lawyers employed by the plaintiff in the famous case of "Bardell *v.* Pickwick," in the "Pickwick Papers," by Charles Dickens.

Do'eg. Absalom and Achitophel, Dryden. Doeg was Saul's herdsman, who had charge of his mules and asses. He told Saul that the priests of Nob had provided David with food; whereupon Saul sent him to put them to death, and eighty-five were ruthlessly massacred.

Dogberry and Verges, two ignorant conceited constables, in Shakespere's "Much Ado About Nothing."

Dolly Murry. A character in Crabbe's "Borough," who was devoted to playing cards. She died at the card table.

Dolly Varden. Barnaby Rudge, Dickens. Daughter of Gabriel Varden, locksmith. Dolly dressed in the Watteau style, and was lively, pretty, and bewitching.

Dolopa'tos. Sandabar's Parables. The Sicilian king, who placed his son Lucien under the charge of "seven wise masters." The son fell under the father's fury and was condemned to death. By astrology the prince discovered that if he could tide over seven days his life would be saved; so the wise masters amused the king with seven tales, and the king relented. The prince himself then told a tale which embodied his own history; the eyes of the king were opened, and the queen was condemned to death.

Dom'bey. Dombey and Son, Dickens. Mr. Dombey, a self-sufficient, purse-proud, frigid merchant, who feels satisfied there is but one Dombey in the world, and that is himself. When Paul was born, his ambition was attained, his whole heart was in the boy, and the loss of the mother was but a small matter. The boy's death turned his heart to stone.

Dombey, Florence. A motherless child, hungering and thirsting to be loved, but regarded with indifference by her father, who thinks that sons alone are worthy of regard.

Dombey, Little Paul. A pathetic child in Dickens' novel "Dombey and Son." He is a delicate, thoughtful boy, the only son of a rich and pompous London merchant.

Dom-dan'i-el. A cave in the region adjoining Babylon, the abode of evil spirits. By some traditions said to have been originally the spot where the prophet Daniel imparted instruction to his disciples. In another form, the Domdaniel was a purely imaginary region, subterranean, or submarine, the dwelling-place of genii and enchanters.

Do'mesday Book, or **Doo'msday Book,** the name of one of the oldest and most valuable records of England, containing the results of a statistical survey of that country made by William the Conqueror, and completed in the year 1086. The origin of the name—which seems to have been given to other records of the same kind—is somewhat uncertain; but it has obvious reference to the supreme authority of the book in doom or judgment on the matters contained in it.

Domi'nical Letter, or **Sunday Letter,** is one of the seven letters A, B, C, D, E, F, G, used in almanacs, etc., to mark the Sundays throughout the year. The first seven days of the year being marked in their order by the above letters in their order, then the following seven, and all consecutive sets of seven days to the end of the year are similarly marked; so that the 1st, 8th, 15th, 22d, etc., days of the year are all marked by A; and the 2d, 9th, 16th, 23d, etc., by B; and so on. The days being thus marked, it is evident that on whatever day the first Sunday of the year falls, the letter which marks it will mark all the other Sundays in the year, as the number of the letters and of the days in the week is the same. As the common year consists of fifty-two weeks and one day over, the dominical letters go backwards one day every common year. If the dominical letter of a common year be G, F will be the dominical letter for the next year.

Dom'inie, Sampson. Guy Mannering, Scott. A village schoolmaster and scholar, poor as a church mouse, and modest as a girl. He cites Latin like a "porcus litera'rum," and exclaims "Prodigious!" He has fallen to the leeward in the voyage of life. He is no uncommon personage in a country where a certain portion of learning is easily attained by those who are willing to suffer hunger and thirst in exchange for acquiring Greek and Latin.

Don Ad'ri-a'no de Ar-ma'do. A pompous, fantastical Spaniard in Shakespere's "Love's Labor's Lost," "who has a mint of phrases in his brain." His language is fantastically out of proportion to the thought. He uses "examples suited only to the gravest propositions and impersonations, or apostrophes to abstract thoughts impersonated, which are, in fact, the natural language only of the most vehement agitations of the mind."

Don-a-tel'lo. The hero of Hawthorne's romance "The Marble Faun." He is a young Italian with a singular likeness to the Faun of Praxiteles. He leads an innocent but purely animal existence, until a sudden crime awakens his conscience and transforms his whole nature.

Don Cher'u-bim. The "Bachelor of Salamanca," in Le Sage's novel of this name; a man placed in different situations of life, and made to associate with all classes of society, in order to give the author the greatest possible scope for satire.

Don'e-gild. Man of Law's Tale, Chaucer. Mother of Alla, King of Northumberland, hating Constance, the wife of Alla, because she was a Christian, she put her on a raft with her infant son, and turned her adrift. When Alla returned from Scotland and discovered this cruelty of his mother, he put her to death. The tradition of St. Mungo resembles the "Man of Law's Tale" in many respects.

Don'et, the first grammar put into the hands of scholars. It was that of Dona'tus the grammarian, who taught in Rome in the Fourth Century, and was the preceptor of St. Jerome.

Don Giovan'ni. Mozart's best opera.

Don Ju'an is a legendary and mythical personage like Dr. Faustus. Don Juan is presented in the life of a profligate who gives himself up so entirely to the gratification of sense, especially to the most powerful of all the impulses, that of love, that he acknowledges no higher consideration, and proceeds to murder the man that stands between him and his wish, fancying that in so doing he had annihilated his very existence. He then defies that Spirit to prove to his senses his existence. The Spirit returns and compels Don Juan to acknowledge the supremacy of spirit, and the worthlessness of a merely sensuous existence. The traditions concerning Don Juan have been dramatized by Tirso de Mo'lina; thence passed into Italy and France. Glück has a musical ballet of Don Juan, and Mozart has immortalized the character in his opera of "Don Giovanni." His adventures form the subject of a half-finished poem by Byron.

Don Quix'ote. The hero of a celebrated Spanish romance of the same name by Cervantes. Don Quixote is represented as "a gaunt country gentleman of La Mancha, full of genuine Castilian honor and enthusiasm, gentle and dignified in his character, trusted by his friends, and loved by his dependents," but "so completely crazed by long reading the most famous books of chivalry, that he believes them to be true, and feels himself called on to become the impossible knight-errant they describe, and actually goes forth into the world to defend the oppressed and avenge the injured, like the heroes of his romances." The fame of Cervantes will always rest upon this incomparable satire upon the foolish and extravagant romances of chivalry.

Doorm. Idylls of the King; Enid, Tennyson. An earl called "the Bull," who tried to make Enid his handmaid; but, when she would neither eat, drink, nor array herself in bravery at his bidding, "he smote her on the cheek"; whereupon Geraint slew the "ruset-bearded earl" in his own hall.

Do'ra. David Copperfield, Dickens. The child-wife to David, affectionate and tender-hearted. She was always playing with her poodle and saying simple things to her "Dody." She could never be his helper but she looked on her husband with idolatrous love. When quite young she died.

Do-ras'tus. The hero of an old popular "history" or romance, upon which Shakespere founded his "Winter's Tale." It was written by Robert Greene, and was first published in 1588, under the title of "Pandosto, the Triumph of Time."

Dorothea. The heroine of Goethe's celebrated poem of "Hermann und Dorothea."

Dorrit, Edward, and "Little." Little Dorrit, Dickens. The father of the Marshalsea prison and his interesting daughter. It is a fine picture of innocent, affectionate, child-life in the midst of the trying circumstances of a debtor's prison.

Dory, John. A character in "Wild Oats" or "The Strolling Gentleman," a comedy by John O'Keefe.

Do-the-Boys' Hall. Nicholas Nickleby, Dickens. A school for boys kept by a Mr. Squeers a puffing, ignorant, over-bearing brute, whose system of education consisted of alternately beating and starving.

Doubting Castle. The castle of the giant Despair, in which Christian and Hopeful were incarcerated, but from which they escaped by means of the key called "Promise," which was able to open any lock in the castle.

Dous'ter-swiv'el. A German schemer, in Sir Walter Scott's novel of "The Antiquary."

Drac. A sort of fairy in human form, whose abode is the caverns of rivers. "Faire le drac," same as "Faire le diable." Irish, "Play the Puck"; English, "Play the deuce."

Dragon, A. The device on the royal banner of the old British kings. The leader was called the pendragon. Geoffrey of Monmouth says, "When Aurelius was king, there appeared a star at Winchester of wonderful magnitude and brightness, darting forth a ray, at the end of which was a flame in form of a dragon.

Drama of Exile, A. A poem by Elizabeth Barrett Browning (1844). The exile is Eve, driven out of paradise into the wilderness. Lucifer, Gabriel, and Christ are introduced into the poem, as well as Adam and Eve.

Dramatic Unities, The Three. One catastrophe, one locality, one day. These are Aristotle's unities of time, place, and action. To these the French have added a fourth, the unity of uniformity, i. e., in tragedy all the "dramatis personæ" should be tragic in style, in comedy comic, and in farce farcical.

Drap. Drayton. One of Queen Mab's maids of honor.

Draw'can-sir. The name of a blustering, bullying fellow in the celebrated mock-heroic play of "The Rehearsal," written by George Villiers, Duke of Buckingham, assisted by Sprat and others. He is represented as taking part in a battle, where, after killing all the combatants on both sides, he makes an extravagantly boastful speech. From the popularity of the character, the name became a synonym for a braggart.

Dri'ver. Guy Mannering, Scott. Clerk to Mr. Pleydell, advocate, Edinburgh.

Dro'mio. The Brothers Dromio. The brothers exactly alike, who serve two brothers exactly alike, in Shakespere's "Comedy of Errors," based on the "Menæch'mi of Plautus."

Dry-as Dust, The Rev. An imaginary personage who serves to introduce Scott's novels to the public.

Dudu, one of the three beauties of the harem, into which Juan, by the sultana's order, had been admitted in female attire.

Du-es'sa. A foul witch, in Spenser's "Faëry Queen," who under the assumed name of Fidessa, and the assumed character of a distressed and lovely woman, entices the Redcross Knight into the House of Pride. The knight having left the palace, is overtaken by Duessa, and drinks of an enchanted fountain, which paralyses him, in which state he is attacked, defeated, and imprisoned by the giant Orgoglio. Duessa becomes the paramour of Orgoglio, who decks her out in gorgeous ornaments, gives her a gold and purple robe to wear, puts a triple crown on her head, and sets her upon a monstrous beast with seven heads. Prince Arthur slays Orgoglio and rescues the knight. Duessa is stripped of her gorgeous disguise and is found to be a hideous hag.

Duff, Jamie. Guy Mannering, Scott. The idiot boy attending Mrs. Bertram's funeral.

Dulcine'a-del Toboso. A country girl whom Don Quixote courts as his lady love.

Du-maine'. A lord attending on the King of Navarre, in Shakespere's "Love's Labor's Lost."

Dun'can. (1) A king of Scotland immortalized in Shakespere's tragedy of "Macbeth." Shakespere represents him as murdered by Macbeth, who succeeds to the Scottish throne, but according to history he fell in battle. (2) A highland hero in Scott's "Lady of the Lake."

Dunder, Sir David, of Dunder Hall. A conceited, whimsical old gentleman, who forever interrupts a speaker with "Yes, yes, I know it," or "Be quiet, I know it." "Ways and Means," by Colman.

Dun-drear'y, Lord. A grotesque character in Taylor's comedy, "Our American Cousin"; noted for his aristocratic haughtiness of manner. The character is said to have been created by the actor Sothern.

Du'ran'dal', written also **Durandart, Durindana, and Durlindana.** The name of the marvelous sword of Orlando, the renowned hero of romance. It is said to have been the workmanship of the fairies, who endued it with such wonderful properties that its owner was able to cleave the Pyrenees with it at a blow.

Du-ran-dar'te. A fabulous hero of Spain, celebrated in the ancient ballads of that country and in the romances of chivalry. Cervantes has introduced him, in "Don Quixote," in the celebrated adventure of the knight in the cave of Montesinos.

Dur'den, Dame. (1) The heroine of a popular English song. She is described as a notable housewife, and the mistress of five serving-girls and five laboring men. The five men loved the five maids. (2) A sobriquet playfully applied to Esther Summerson, the heroine of Dickens's "Bleak House."

Dur'ward, Quen'tin. The hero of Scott's novel of the same name; a young archer of the Scottish guard in the service of Louis XI. of France. When Liège is assaulted, Quentin Durward and the Countess Isabelle, who has been put into his charge, escape on horseback. The countess publicly refuses to marry the Duc d'Orléans, to whom she has been promised, and ultimately marries the young Scotchman.

Dwarf, The Black. A novel by Sir Walter Scott. The black dwarf is a fairy of the most malignant character; a genuine northern Duergar, and once held by the dalesmen of the border as the author of all the mischief that befell their flocks and herds. In Scott's novel the "Black Dwarf" is introduced under the "aliases" of Sir Edward Mauley; Elshander, the recluse; Cannie Elshie; and the Wise Wight of Mucklestane Moor.

Dwarf, Alberich. In the "Nibelungen Lied" the dwarf "Alberich" is the guardian of the famous "hoard" won by Siegfried from the Nibelungs. The dwarf is twice vanquished by the hero, who gets possession of his "Tarn-kappë" (cloak of invisibility).

Dwarf, Peter. An allegorical romance by Ludwig Tieck. The dwarf is a castle specter that advises and aids the family; but all his advice turns out evil, and all his aid productive of trouble.

Earnscliffe, Patrick. Black Dwarf, Scott. The young laird of Earnscliff.

Eb'lis. The name given by the Arabians to the prince of the apostate angels, whom they represent as exiled to the infernal regions for refusing to worship Adam at the command of the Supreme. Eblis alleged, in justification of his refusal, that he himself had been formed of ethereal fire, while Adam was only a creature of clay.

Eck'hardt, The Faithful. A legendary hero of Germany, represented as an old man with a white staff, who, in Eisleben, appears on the evening of Maundy Thursday, and drives all the people into their houses, to save them from being harmed by a terrible procession of dead men, headless bodies, and two-legged horses, which immediately after passes by. Other traditions represent him as the companion of the knight, Tannhäuser and as warning travelers from the Venusberg, the mountain of fatal delights in the old mythology of Germany. Tieck has founded a story upon this legend, which has been translated into English by Carlyle, in which Eckhardt is described as the good servant who perishes to save his master's children from the seducing fiends of the mountain. The German proverb, "Thou art the faithful Eckhardt; thou warnest everyone," is founded upon this tradition.

Eclecta, the "Elect" personified in "The Purple Island," by Phineas Fletcher. She is the daughter of Intellect and Voletta (free-will).

Ector, Sir. The foster-father of King Arthur, and lord of many parts of England and Wales. Father of Sir Kay, seneschal to King Arthur.

Edda. There are two religious codes, so called, containing the ancient Scandinavian mythology. One is in verse, composed in Iceland in the Eleventh Century, by Sæmund Sigfusson, "the Sage"; and the other in prose, compiled a century later by Snorro Sturleson, who wrote a commentary on the first edda.

E'den-hall, The Luck of. A painted goblet in the possession of the Musgrave family of Eden-hall, Cumberland, said to have been left by the fairies on St. Cuthbert's Well. The tradition runs, that the luck of the family is dependent on the safe keeping of this goblet. The German poet Uhland embodied the legend in a ballad, translated into English by Longfellow.

Edgar. Son to Gloucester, in Shakespere's tragedy of "Lear." He was disinherited for his half-brother, Edmund.

Edgar or Edgar'do. Master of Ravenswood, in love with Lucy Ashton in Scott's "Bride of Lammermoor."

E'dith. The "Maid of Lorn" in Scott's "Lord of the Isles," who married Ronald when peace was restored after the battle of Bannockburn.

Edith, The Lady. Ivanhoe, Scott. Mother of Athelstane "the Unready" (thane of Coningsburgh).

Edith Granger. Daughter of the Hon. Mrs. Skewton, married to Colonel Granger of "Ours," who died within two years. Edith became Mr. Dombey's second wife, but the marriage was altogether unhappy.

Edith Plantagenet, The Lady. The Talisman, Scott. Called "The Fair Maid of Anjou," a kinswoman of Richard I., and attendant on Queen Berenga'ria.

Ed'mund. A bastard son of Gloucester in Shakespere's tradegy of "King Lear."

Edward, Sir. The Iron Chest, Coleman. He commits a murder, and keeps a narrative of the transaction in an iron chest. Later, he trusts the secret to his secretary, Wilfred, and the whole transaction now became public.

Edward. Count Robert of Paris, Scott. Brother of Hereward, the Varangian guard. He was slain in battle.

Ed'win. (1) The hero of Goldsmith's ballad entitled "The Hermit." (2) The hero of Mallet's ballad "Edwin and Emma." (3) The hero of Beattie's "Minstrel."

Ed'yrn. Idylls of the King (Enid), Tennyson. Son of Nudd. A suitor for the hand of Enid and an evil genius of her father, who opposed him. Later, Edyrn went to the court of King Arthur and became quite a changed man — from a malicious "sparrow-hawk" he was converted into a courteous gentleman.

E'geus. Father of Hermia in Shakespere's "Midsummer Night's Dream."

E'gil, Brother of Weland, a great archer. The story related is similar to the William Tell story. There are many such stories. One day, King Nidung commanded him to shoot at an apple placed on the head of his own son. Egil selected two arrows, and being asked why he wanted two, replied, "One to shoot thee with, O tyrant, if I fail." Such stories, though probably not true to fact, are true to the spirit of patriotism, and are worth repeating.

Eg'lan-tine, Madame. The prioress in Chaucer's "Canterbury Tales," who was "full pleasant and amiable of port." She was distinguished for the ladylike delicacy of her manners at table, and for her partiality to "small hounds," and a peculiar mixture in her manner and dress of feminine vanity and slight worldliness, together with an ignorance of the world. She is noted for her partiality to lap-dogs, her delicate oath, "by Seint Eloy," her "entuning the service swetely in her nose," and her speaking French "after the scole of Stratford atte Bowe."

Eg'la-mour. (1) A character in Shakespere's "Two Gentlemen of Verona," who is an agent of Silvia in her escape. (2) **(Sir.)** A valiant knight of the Round Table, celebrated in the romances of chivalry, and in an old ballad. [Written also "Eglamore."]

Egyptian Thief. A personage alluded to by the Duke in Shakespere's "Twelfth Night." The reference is to the story of Thyamis, a robber-chief and native of Memphis.

Elvir. Harold the Dauntless, Scott. A Danish maid, who assumes boy's clothing, and waits on Harold "the Dauntless," as his page.

E-laine'. A mythic lady in the romances of King Arthur's court. She is called "the lily maid of Astolat" in Tennyson's "Idylls of the King." For love of Sir Launcelot she died, and then at her request was borne on a barge to the castle of King Arthur, holding a lily in one hand and a letter to Launcelot in the other. According to Sir Thomas Malory, Elaine was sister of King Arthur by the same mother. She married Sir Nentres of Carlot, and was by King Arthur the mother of Mordred.

El'ber-ich. In German hero legends, a dwarf who aided the Lombard Emperor Otnit to win the daughter of the Soldan of Syria. He is identical with the Oberon of French and English fairy mythology.

Elbow. A constable, in Shakespere's "Measure for Measure," modest and well-meaning, though of simple mind and the object of wit among those who are wiser but not better.

El Do-ra'do. A name given by the Spaniards to an imaginary country, supposed, in the Sixteenth Century, to be situated in the interior of South America, between the rivers Orinoco and Amazon, and abounding in gold and all manner of precious stones. Expeditions were fitted out for the purpose of discovering this fabulous region; and, though all such attempts proved abortive, the rumors of its existence continued to be believed down to the beginning of the Eighteenth Century.

E-lec'tra. The daughter of Agamemnon and Clytemnestra, and the heroine of a tragedy by Sophocles and of another by Euripides. She saved the life of her brother, Orestes, and afterwards assisted him to avenge their father's death. (See Agamemnon, Clytemnestra, and Orestes.)

Elf-land. The realm ruled over by Oberon, King of Faëry.

El'githa. Ivanhoe, Scott. A female attendant at Rotherwood on the Lady Rowe'na.

El'i-dure. A legendary King of Britain, fabled to have been advanced to the throne in place of his brother, Artegal, or Arthgallo. Returning to the country after a long exile, Artegal accidentally encountered his brother, who received him with open arms, took him home to the palace, and reinstated him in his old position, abdicating the throne himself. Wordsworth has taken the story of these two brothers for the subject of a poem.

E'lim. The Messiah, Klopstock. The guardian angel of Libbeus the Apostle. Libbeus, the tenderest and most gentle of the apostles, at the death of Jesus also died from grief.

Elliott, Hobbie. There are seven by this name in the "Black Dwarf," by Sir Walter Scott. The farmer Elliott himself and his bride-elect, Grace Armstrong, Mrs. Elliott, Hobbie's grandmother; John and Harry, Hobbie's brothers; Lilias, Jean, and Arnot, Hobbie's sisters.

El'ope. Milton gives this name to the dumb serpent which gives no warning of its approach.

El'speth. (1) A character in Sir Walter Scott's "Antiquary." (2) An old servant to Dandie Dinmont, in Scott's "Guy Mannering."

Elsie. The daughter of Gottlieb, a farm tenant of Prince Henry of Hoheneck, who offered her life as a substitute for the prince. She was rescued as she was about to make the sacrifice. Longfellow has told this story in "The Golden Legend."

Elzevier, or Elzevir. The name of a celebrated family of printers at Amsterdam, Leyden, and other places in Holland, whose beautiful editions were chiefly published between the years 1583 and 1680. These editions are unrivaled both for beauty and correctness. It is said that the Elzeviers generally employed women to correct the press, under the conviction that they would be less likely than men, on their own responsibility, to introduce alterations into the text. They printed in all about two thousand books, of which nine hundred sixty-eight were in Latin, forty-four in Greek, one hundred twenty-six in French, thirty-two in Flemish, eleven in German, ten in Italian, and twenty-two in Oriental languages. Rare editions of the Elzeviers are highly valued by collectors.

Em'elye. The sister-in-law of "Duke Theseus," beloved by the two knights, Pal'amon and Ar'cyte.

E-mile'. The hero of Jean Jacques Rousseau's novel of the same name, in which he has depicted his ideal of a perfectly educated young man.

E-mil'i-a. (1) A lady attending Hermione in Shakespere's "Winter's Tale." (2) Wife to Iago, and waiting woman to Desdemona, in the tragedy of "Othello," a woman of thorough vulgarity and loose principles, united to a high degree of spirit, energetic feeling, strong sense, and low cunning. (3) The sweetheart of Peregrine Pickle in Smollett's novel "The Adventures of Peregrine Pickle."

Em'ly, Little. David Copperfield, Dickens. Daughter of Tom, the brother-in-law of Dan'el Peggotty, a Yarmouth fisherman, by whom the orphan child was brought up. David Copperfield and Em'ly were at one time playfellows. While engaged to Ham Peggotty (Dan'el's nephew), Little Em'ly runs away with Steerforth, a friend of David's, who was a handsome but unprincipled gentleman. Being subsequently reclaimed, she emigrates to Australia with Dan'el Peggotty and old Mrs. Gummidge.

Empyre'an. According to Ptolemy, there are five heavens, the last of which is pure elemental fire and the seat of Deity: this fifth heaven is called the empyrean (from the Greek "en-pur," in fire).

Endell, Martha. David Copperfield, Dickens. A poor girl, to whom Em'ly goes when Steerforth deserts her.

En-dym'i-on. A beautiful shepherd boy whom Diana kissed while he lay asleep on Mount Latmus. The story was made the subject of an English poem by Keats, in memory of his much-loved friend, the poet Shelley.

E'nid. A mythical lady mentioned in a Welsh triad as one of the three celebrated ladies of Arthur's court — a beautiful picture of conjugal patience and affection. Her story is told in the "Mabinogion," and in Tennyson's "Idylls of the King." In the midst of an impure court she is the personification of purity.

Enigma. The origin of the enigma is doubtful. Gale thinks that the Jews borrowed their enigmatical

forms of speech from the Egyptians. The philosophy of the Druids was altogether enigmatical. In Nero's time the Romans were often obliged to have recourse to this method of concealing truth under obscure language.

Eolian Harp. Baruch. There is a Rabbinical story of the aërial harmony of the harp of David, which, when hung up at night, was played upon by the north wind.

Epigram. A short pointed or antithetical poem: or any short composition happily or antithetically expressed.

Epitaphs. Boileau. They were used by the ancient Jews, by the Athenians, the Romans, and most of the nations of antiquity: their date is referred in England to the earliest times. In the epitaphs of the ancients arose the epigram.

Epithala'mium was a species of poem which it was the custom among the Greeks and Romans to sing in chorus near the bridal-chamber of a newly married couple. Anacreon, Stesichorus, and Pindar composed poems of this kind, but only scanty fragments have been preserved. Spenser's "Epithalamium," written on the occasion of his marriage, is one of the finest specimens of this kind of verse.

Eppie. St. Ronan's Well, Scott. One of the servants of the Rev. Josiah Cargill. In the same novel is Eppie Anderson, one of the servants at the Mowbray Arms, Old St. Ronan's, held by Meg Dods.

Eppie. In George Eliot's "Silas Marner" the child of Godfrey Cass, brought up and adopted by Silas Marner, whose love transformed him from a miser into a tender, loving father.

Ep'i-men'i-des. A philosopher and poet of Crete, who probably lived in the Sixth or Seventh Century, B. C. He is said to have fallen asleep in a cave, when a boy, and to have remained in that state for fifty-seven years. On waking and going out into the broad daylight, he was greatly perplexed and astonished to find everything around him altered. But what was more wonderful still, during his long period of slumber, his soul, released from its fleshly prison, had been busily engaged in the study of medicine and natural philosophy: and when it again became incarnated, Epimenides found himself a man of great knowledge and wisdom. Goethe has written a poem on the subject, "Des Epimenides Erwachen." (See Klaus, Peter, and Winkle, Rip Van.)

Erl-king. King of the elves, who prepares mischief for children, and even deceives men with his seductions. He is said to haunt the Black Forest. Goethe has a ballad called "The Erl King."

Ermangarde of Baldringham, Lady. The Betrothed, Scott. Aunt of the Lady Eveline Berenger, "the betrothed."

Er'meline. The wife of Reynard, in the tale of "Reynard the Fox."

Ermina. The heroine of Tasso's "Jerusalem Delivered," who fell in love with Tancred. When the Christian army besieged Jerusalem, she dressed herself in Clorinda's armor to go to Tancred, but, being discovered, fled, and lived awhile with some shepherds on the banks of the Jordan. Meeting with Vafri'no, sent as a secret spy by the crusaders, she revealed to him the design against the life of Godfrey, and, returning with him to the Christian camp, found Tancred wounded. She cured his wounds, so that he was able to take part in the last great day of the siege.

Ernest, Duke. A poetical romance by Henry of Veldig (Waldeck), contemporary with Frederick Barbarossa. It is a mixture of Greek and Oriental myths and hero adventures of the Crusader.

Error. Faery Queen, Spenser. A monster who lived in a den in "Wandering Wood," and with whom the Red Cross Knight had his first adventure. She had a brood of 1,000 young ones of sundry shapes, and these cubs crept into their mother's mouth when alarmed, as young kangaroos creep into their mother's pouch. The knight was nearly killed by the stench which issued from the foul fiend, but he succeeded in "rafting" her head off, whereupon the brood lapped up the blood, and burst with satiety.

Es'ca-lus. An ancient and kindhearted lord, in Shakespere's "Measure for Measure," whom Vincentio, the Duke of Vienna, joins with Angelo as his deputy during a pretended absence on a distant journey.

Es'ca-nes. A lord of Tyre, in Shakespere's "Pericles."

Esmeralda. Notre Dame de Paris, Victor Hugo. A beautiful gipsy-girl, who, with tambourine and goat, dances in the "place" before Notre Dame.

Esmond, Henry. A cavalier and fine-spirited gentleman in reign of Queen Anne. Hero of Thackeray's novel by same name.

Es-tel'la. The heroine of Dickens's novel of "Great Expectations."

Es-tot'i-land or **Es-tot'i-land'i-a.** An imaginary region in America, near the Arctic Circle, referred to by Milton as "cold Estotiland," and variously fabled to have been discovered by Frisian fisherman in the Fourteenth Century, and by a Pole named John Scalve, in 1477.

Etzel, i. e., Attila. King of the Huns a monarch ruling over three kingdoms and more than thirty principalities: being a widower, he married Kriemhild, the widow of Siegfried. In the Nibelungen-Lied, where he is introduced, he is made very insignificant.

Eu'phrasy. Paradise Lost, Milton. The herb eye-bright: so called because it was once supposed to be efficacious in clearing the organs of sight. Hence, the archangel Michael purged the eyes of Adam with it, to enable him to see into the distant future.

Eu'phu-es. The principal character in Lyly's two famous works, entitled "Euphues, or the Anatomy of Wit," and "Euphues and His England." These works are remarkable for their pedantic and fantastical style, and for the monstrous and overstrained conceits with which they abound. Euphues is represented as an Athenian gentleman, distinguished for the elegance of his person and the beauty of his wit, and for his amorous temperament and roving disposition. He gained a bosom friend, Philautus, and then robbed him of his lover, Lucilla. The lady is false to both, the friends are reconciled, and Euphues returns to Athens and philosophy. The peculiarities of Lyly's style are a perpetual striving after alliteration and antithesis, and a most ingenious stringing together of similes. This book immediately became the rage in the court circles, and for many years was the court standard. From this book we get our words; euphuistia, euphuism, meaning an affected, bombastic style of language.

Eu'lalie, St. In the calendar of saints there is a virgin martyr called Eulalie. She was martyred by torture February 12, 308. Longfellow calls Evangeline the "Sunshine of St. Eulalie."

Eulen-spie'gel. The hero of a German tale, which relates the pranks and drolleries of a wandering cottager of Brunswick.

Evan Dhu M'Combich. Waverley, Scott. The foster-brother of M'Ivor.

Evan Dhu of Lochiel. Legend of Montrose, Scott. A Highland chief in the army of Montrose.

Evan'geline. The heroine of Longfellow's poem. The subject of the tale is the expulsion of the inhabitants of Aca'dia (Nova Scotia) from their homes by order of George II., and the life-long wanderings of Evangeline in search of her lover, Gabriel. It is a story of a woman's love and devotion.

Evan'gelist, in Bunyan's "Pilgrim's Progress," represents the effectual preacher of the Gospel, who opens the gate of life to Christian.

Every Man in His Humor. A comedy by Ben Jonson. Every person in the play is liable to be duped by his special humor; Captain Bobadil's humor is bragging: Kitelly's is jealousy: Stephen's is stupidity: Knowell's is suspicion: Dame Kitelly's, like her husband's, is jealousy.

Evir-Allen. Fingal, Ossian. The white-armed daughter of Branno, an Irishman. "A thousand heroes sought the maid: she refused her love to a thousand. The sons of the sword were despised, for graceful in her eyes was Ossian."

Evelina. The heroine in a novel by the same name, by Miss Burney.

Excal'ibur. Meaning of the words: "liberated from the stone." The name of Arthur's far-famed sword, which he unfixed from a miraculous stone, though previously two hundred and one of the most puissant barons in the realm had singly been unable to extract it. In consequence of this remarkable feat, Arthur was chosen and proclaimed king by general acclamation. When about to die, he sent an attendant to throw the weapon into a lake hard by. Twice eluding the request, the squire at last complied. A hand and arm arose from the water, and caught the sword by the hilt, flourished it thrice, and then sank into the lake, and was seen no more. [Written also "Excalibor," "Escalibar," "Escalibor," and "Caliburn."]

Ez'zelin, Sir. Lara, Byron (1814). The gentleman who recognizes Lara at the table of Lord Otho, and charges him with being Conrad the Corsair. A duel ensues, and Ezzelin is never heard of more. A serf used to say that he saw a huntsman one evening cast a dead body into the river which divided the lands of Otho and Lara, and that there was a star of knighthood on the breast of the corpse.

Eyre, Jane. The heroine of Charlotte Brontë's novel of the same name, a governess in the family of a Mr. Rochester, to whom she is finally married.

Faa, Gabriel. Guy Mannering, Scott. Nephew of Meg Merrilies. One of the huntsmen at Liddesdale.

Fab'liaux. The metrical fables of the Trouvères, or early poets north of the Loire, in the Twelfth and Thirteenth Centuries. The word fable, in this case, is used very widely, for it includes not only such tales as "Reynard the Fox," but all sorts of familiar incidents of knavery and intrigue, all sorts of legends and family traditions. The fabliau of "Aucassin and Nicolette" is full of interesting incidents, and contains much true pathos and beautiful poetry.

Fadla Deen. The hypercritical Grand Chamberlain in Thomas Moore's poem "Lalla Rookh." Fadladeen's criticism upon the several tales which make up the romance are very racy and full of humor; and his crestfallen conceit when he finds out that the poet was the prince in disguise is well conceived.

Faery or Feerie Land. The land of the fays or fairies. The chief fay realms are Av'alon, an island somewhere in the ocean. Oberon's dominions, situate "in wilderness among the holtis hairy"; and a realm somewhere in the middle of the earth, where was Pari Banou's palace.

Faery Queen. A metrical romance, in six books, of twelve cantos each, by Edmund Spenser. The hero, Prince Arthur, arriving at the court of Glouana, the Faëry Queen, in Fairyland, finds her holding a solemn festival during twelve days. At the court there is a beautiful lady, for whose hand twelve most distinguished knights are rivals, and in order to settle their pretensions these twelve heroes undertake twelve separate adventures. The first book contains the legend of the Red Cross Knight, who is the allegorical representative of "Holiness," while his mistress Una represents true "Religion"; and the action of the knight's exploit shadows forth the triumph of Holiness over the enchantments and deceptions of Heresy. The second book is the legend of Sir Guyon. The third book is the legend of Britomartis — a female champion — or "Chastity." Britomartis is Diana, or Queen Elizabeth the Britoness. The fourth book is the legend of Cambel and Tri'amond (fidelity). The fifth book is the legend of Ar'tegal (justice). The sixth book is the legend of Sir Cal'idore (courtesy). The remaining books were never completed. The plan of the "Faëry Queen" is borrowed from the Orlando Furioso, but the creative power of Spenser is more original, and his imagery more striking, than Ariosto's.

Fag. A lying servant to Captain Absolute in Sheridan's "Rivals."

Fa'gin. An old Jew in Dickens's "Oliver Twist," who employs young persons of both sexes to carry on a systematic trade of robbery.

Fain'all, Mr. and Mrs. Noted characters in Congreve's Comedy "The Way of the World."

Faineant, Le Noir (the Black Idler). In Sir Walter Scott's "Ivanhoe," a name applied to Richard Cœur de Lion, in disguise, by the spectators of a tournament, on account of his indifference during a great part of the action, in which, however, he was finally victorious.

Falkland. In Godwin's novel called "Caleb Williams." He commits murder, and keeps a narrative of the transaction in an iron chest. Williams, a lad in his employ, opens the chest, and is caught in the act by Falkland. The lad runs away, but is hunted down. This tale, dramatized by Colman, is entitled "The Iron Chest."

Fairy. Fairy-lore of the nursery grows out of belief in Providence, the Good and the Bad. Good fairies are called fairies, elves, elle-folks, and fays; the evil ones are urchins, ouphes, ell-maids, and ell-women.

Fairy of the Mine. A malevolent being supposed to live in mines, busying itself with cutting ore, turning the windlass, etc., and yet effecting nothing.

Fair Maid of Perth. The title of a novel by Sir Walter Scott, and the name of the heroine.

Fairservice, Andrew. A shrewd Scotch gardener at Osbaldistone Hall in "Rob Roy," Sir Walter Scott.

Faithful. One of the allegorical personages in Bunyan's "Pilgrim's Progress," who dies a martyr before completing his journey.

Faithful, Jacob. The title and hero of a sea tale, by Captain Marryat (1835).

Fa'kenham Ghost. A ballad by Robert Bloomfield, author of "The Farmer's Boy." The ghost was a donkey.

Fakreddin's Valley. Over the several portals of bronze were these inscriptions: (1) "The Asylum of Pilgrims"; (2) "The Traveler's Refuge"; (3) "The Depository of the Secrets of All the World."

Fal'staff, Sir John. A famous character in Shakespere's comedy of the "Merry Wives of Windsor," and in the first and second parts of his historical drama of "Henry IV." He is as perfect a comic portrait as was ever sketched. In the former play, he is represented as in love with Mrs. Ford and Mrs. Page, who make a butt and a dupe of him; in the latter, he figures as a soldier and a wit; in both he is exhibited as a monster of fat, sensual, mendacious, boastful, and cowardly. In Henry V. his death is described by Mrs. Quickly.

Fang. A sheriff's officer, in the second part of Shakespere's "King Henry IV."

Fang, Charles Dickens's "Oliver Twist." A bullying insolent magistrate, who would have sent Oliver Twist to prison, on suspicion of theft, if Mr. Brownlow had not interposed.

Fa'ta Morgana. The name of a potent fairy, celebrated in the tales of chivalry, and in the romantic poems of Italy. She was a pupil of the enchanter Merlin, and the sister of Arthur, to whom she discovered the intrigue of his queen, Geneura, or Guinever, with Lancelot of the Lake. In the "Orlando Innamorato" of Bojardo, she appears at first as a personification of Fortune, inhabiting a splendid residence at the bottom of a lake, and dispensing all the treasures of the earth, but she is afterward found in her proper station subject to the all potent Demogorgon. Also, as sister to King Arthur and pupil of Merlin. She lived at the bottom of the lake and dispensed good fortune as she liked.

Fata Alci'na. Bojardo Orlando Innamorato (1495). Sister of Fata Morgana. She carried off Astolfo on the back of a whale to her isle, but turned him into a myrtle tree when she tired of him.

Fat Boy, The. A laughable character in Dickens's "Pickwick Papers"; a youth of astonishing obesity, whose employment consists in alternate eating and sleeping.

Fathom, Ferdinand, Count. The title of a novel by Smollett, and the name of its principal character, a complete villain, who proceeds step by step to rob his benefactors and finally dies in misery and despair.

Fat'i-ma. (1) A female worker, in the story of "Aladdin," in the "Arabian Nights' Entertainments." (2) The last of the wives of Blue-Beard, and the only one who escaped being murdered by him.

Faust. The hero and title of a celebrated tragedy by Goethe, the materials of which are drawn in part from the popular legends of Dr. Faustus, a famous magician of the Sixteenth Century. Faust is a student who is toiling after knowledge beyond his reach, and who afterwards deserts his studies, and makes a pact with the Devil (Mephistopheles), in pursuance of which he gives himself up to the full enjoyment of the senses, until the hour of his doom arrives, when Mephistopheles reappears upon the scene, and carries off his victim as a condemned soul. This mystical personage dates back to the time of the Reformation.

Faus'tus. The hero of Marlowe's tragedy of the same name; represented as a vulgar sorcerer tempted to sell his soul to the Devil (Mephistopheles), on condition of having a familiar spirit at his command, the possession of earthly power and glory, and unlimited gratification of his sensual appetites, for twenty-four years; at the end of which time, when the forfeit comes to be exacted, he shrinks and shudders in agony and remorse, imploring yet despairing of the mercy of heaven. This has been the theme of many writers. It is the subject of an opera by Gounod.

Faw, Tibbie. Redgauntlet, Scott. The ostler's wife, in Wandering Willie's tale.

Feast of Lemuria. The festival called "Lemuria" was held on the 9th, 11th, and 13th of May, and was accompanied with ceremonies of washing hands, throwing black beans over the head, etc., and the pronunciation nine times of these words: "Begone, you specters of the house!" which deprived the Lemuriæ of their power to harm. Ovid describes the Lemuriæ in the fifth book of his "Fasti."

Feast of Lights. Christmas was called the "Feast of Lights" in the Western or Latin Church, because at this feast they used more candles or lights, symbolic of Christ, The Light of all lights.

Felton, Septimius. Septimius Felton is the mystical hero in Hawthorne's novel by the same name.

Fe-nel'la. A fairy-like creature, a deaf and dumb attendant on the Countess of Derby, in Sir Walter Scott's "Peveril of the Peak."

Fen'ton. A character in Shakespere's "Merry Wives of Windsor," who wooes the rich Anne Page for her money, but soon discovers inward treasures in her which quite transform him.

Fer'Amorz. Lalla Rookh, Thomas Moore. Fer Amorz in Lalla Rookh is the young Cashmerian poet,

who relates poetical tales to Lalla Rookh, in her journey from Delhi to Lesser Buchar'ia. Lalla Rookh is going to be married to the young sultan, but falls in love with the poet. On the wedding morn she is led to her future husband, and finds that the poet is the sultan himself, who had gallantly taken this course to win the heart of his bride and beguile her journey.

Ferdinand. (1) A character in Shakespere's "Tempest." He is a son of the King of Naples, and falls in love with Miranda, the daughter of Prospero, a banished Duke of Milan. (2) King of Navarre, a character in Love's Labor's Lost."

Ferrers. Endymion. The hero of Benjamin Disraeli's novel "Endymion."

Ferrex and Porrex. Two sons of Gorboduc, a mythical British king. Porrex drove his brother from Britain, and when Ferrex returned with an army he was slain, but Porrex was shortly after put to death by his mother. One of the first, if not the very first, historical plays in the English language was "Ferrex and Porrex," by Thomas Norton and Thomas Sackville.

Fib. Nymphidia, Drayton. One of the fairy attendants to Queen Mab.

Fidel'le. Cymbeline, Shakespere. The name assumed by Imogen, when, attired in boy's clothes, she started for Milford Haven to meet her husband Posthumus.

Fidele. Subject of an elegy by Collins.

Fidessa. Faery Queen, Spenser. The companion of Sansfoy; but when the Red Cross Knight slew that "faithless Saracen," Fidessa turned out to be Duessa, the daughter of Falsehood and Shame. The sequel must be sought under the word Duessa.

Fine-Ear. Fairy Tales (Fortunio), Comtesse D'Aunoy. One of the seven attendants of Fortunio. He could hear the grass grow, and even the wool on a sheep's back. This is an old, old story. It is also found in Grimm's Fairy Tales. There the hero is "Fortunio." In the German tale "Fortunio" the fairy gave her a horse named Comrade, not only of incredible swiftness, but all-knowing, and endowed with human speech; she also gave her an inexhaustible turkey-leather trunk, full of money, jewels, and fine clothes. By the advice of Comrade, she hired seven gifted servants, named Strongback, Lightfoot, Marksman, Fine-ear, Boisterer, Trinquet, and Grugeon. Fortunio goes forth disguised as a warrior, meets her king and marries him.

Finetta, The Cinder Girl. A fairy tale by the Comtesse D'Aunoy. This is merely the old tale of Cinderella slightly altered.

Fin'gal, or **Fin-gal'.** A mythical hero, whose name occurs in Gælic ballads and traditions, and in Macpherson's "Poems of Ossian."

Fires of St. John. A representative play of the school to which Sudermann belongs. The whole group of plays of which "The Fires of St. John" is a type register a movement of revolt against the conventionalities of life in Germany as Ibsen's dramas express the revolt against the conventionalities of life in Northern Europe.

Firmin, Philip. The hero of Thackeray's novel, "The Adventures of Philip."

Fle'ance. A son of Banquo, in Shakespere's tragedy of "Macbeth." The legend relates that after the assassination of his father he escaped to Wales, where he married the daughter of the reigning prince, and had a son named Walter. This Walter afterwards became lord high steward of Scotland, and called himself Walter the Steward. From him proceeded in a direct line the Stuarts of Scotland, a royal line which gave James VI. of Scotland, James I. of England. This myth has been seriously accepted by some as fact.

Fledge'by. Our Mutual Friend, Dickens. An overreaching cowardly sneak who pretends to do a decent business under the trade name of Pubsey & Co.

Flo-ren'ti-us. A knight whose story is related in the first book of Gower's "Confessio Amantis." He bound himself to marry a deformed hag, provided she taught him the solution of a riddle on which his life depended.

Florian. The Foundling of the Forest, W. Dimond. Discovered in infancy by the Count de Valmont, and adopted as his own son. Florian is lighthearted and volatile, but with deep affection, very brave, and the delight of all who knew him.

Flor'i-mel. A female character in Spenser's "Faëry Queen," of great beauty, but so timid that she feared the "smallest monstrous mouse that creeps on floor," and was abused by everyone. She was noted for sweetness of temper amid great trials. The word Florimel signifies "honey-flower."

Flor'i-zel. A prince of Bohemia, in Shakespere's "Winter's Tale," in love with Perdita.

Flu-el'len. A Welsh captain, who is an amusing pedant, in Shakespere's "Henry V."

Flying Dutchman. A spectral ship, seen in stormy weather off the Cape of Good Hope, and considered ominous of ill-luck. Captain Marryat has taken this theme for his novel "The Phantom Ship."

Folk. Fairies, also called "people," "neighbors," "wights." The Germans have their Kleine volk (little folk), the Swiss their hill people and earth people. See Fairies.

Ford. Mr. and Mrs. Ford are characters in "The Merry Wives of Windsor." Mrs. Ford pretends to accept Sir John Falstaff's protestations of love, in order to punish him by her devices.

For'tin-bras. Prince of Norway, in Shakespere's tragedy "Hamlet."

Fortunatus. You have found Fortunatus's purse. Are in luck's way. The nursery tale of Fortunatus records that he had an inexhaustible purse. It is from the Italian fairy tales.

Fortunio's Horse. Comrade, not only possessed incredible speed, but knew all things, and was gifted with human speech. (See "Fine-ear.")

Forty Thieves. In the tale of Ali Baba (Arabian Nights' Entertainments). Represented as inhabiting a secret cave in a forest, the door of which would open and shut only at the sound of the magic word "Sesame," the name of a kind of grain. One day, Ali Baba, a woodmonger, accidentally discovered the secret, and made himself rich by carrying off gold from the stolen hoards. The captain tried several schemes to discover the thief, but always outwitted by Morgia'na, the wood-cutter's female slave.

Foxley, Squire Matthew. Redgauntlet, Sir W. Scott. A magistrate who examines Darsie Latimer (Sir Arthur Darsie Redgauntlet), after he had been attacked by the rioters.

Francesco. The "Iago" of Massinger's "Duke of Milan."

Frank'en-stein. The hero in Mrs. Shelley's romance of the same name. As a young student of physiology he constructs a monster out of the horrid remnants of the churchyard and dissecting-room, and endues it, apparently through the agency of galvanism, with a sort of spectral and convulsive life. This existence, rendered insupportable to the monster by his vain craving after human sympathy, and by his consciousness of his own deformity, is employed in inflicting the most dreadful retribution upon the guilty philosopher. It is a parody on the creature man, powerful for evil, and the instrument of dreadful retribution on the student, who usurped the prerogative of the Creator.

Freeport, Sir Andrew. The name of one of the members of the imaginary club under whose direction the "Spectator" was professedly published. He is represented as a London merchant of great eminence and experience, industrious, sensible, and generous.

Friar Lawrence. The Franciscan monk who attempted to befriend the lovers in "Romeo and Juliet."

Friar's Tale, The. In The Canterbury Tales, Chaucer. An arch-deacon employed a sumpnour as his secret spy to find out offenders, with the view of exacting fines from them. In order to accomplish this more effectually, the sumpnour entered into a compact with the Devil, disguised as a yeoman. Those who imprecated the Devil were to be dealt with by the yeoman-devil, and those who imprecated God were to be the sumpnour's share.

Friar Tuck. Chaplain and steward of Robin Hood. Introduced by Sir Walter Scott in "Ivanhoe." He is a self-indulgent, combative Falstaff, a jolly companion to the outlaws in Sherwood Forest.

Friday. Robinson Crusoe's faithful man Friday pictured by De Foe.

Frol'lo, Archdeacon Claude. A noted character in Victor Hugo's "Notre-Dame de Paris," absorbed in a bewildering search after philosopher's stone.

Front de Bœuf. Ivanhoe, Sir W. Scott. A follower of Prince John of Anjou, and one of the knight's challengers.

Froth, Master. A foolish gentleman in Shakespere's "Measure for Measure." His name explains his character.

Fudge Family. A name under which the poet Moore satirized the absurdities of his traveling countrymen, who, having been long confined at home by the wars waged by Napoleon flocked to the continent after his defeat at Waterloo. The family is composed of a hack-writer and spy, his son, a young dandy of the first water, and his daughter, a sentimental damsel, and Madame Le Roy, in love with a Parisian linen-draper, whom she has mistaken for one of the Bourbons in disguise. There is also a tutor and "poor relation" of this

egregious family, who is an ardent Bonapartist and Irish patriot.

Funk, Peter. A person employed at petty auctions to bid on articles put up for sale, in order to raise their price; probably so called from such a name having frequently been given when articles were brought in.

Fus'bos. Utopia, Sir Thomas Moore. Minister of state to Artaxaminous, King of Utopia.

Fy'rapel, Sir. The leopard, the nearest kinsman of King Lion, in the beast epic of "Reynard the Fox" (1498).

Ga'bri-el. The name of an angel described in the Scriptures as charged with the ministration of comfort and sympathy to man. In the New Testament, he is the herald of good tidings, declaring the coming of the predicted Messiah and of his forerunner. In Jewish and Christian tradition he is one of the seven archangels. Gabriel has the reputation, among the Rabbins, of being a distinguished linguist, having taught Joseph the seventy languages spoken at Babel. The Mohammedans hold him in even greater reverence than the Jews. He is called the spirit of truth, and is believed to have dictated the Koran to Mohammed. Milton posts him at "the eastern gate of paradise," as "chief of the angelic guards," keeping watch there. The Talmud describes him as the prince of fire, and as the spirit who presides over thunder.

Gads'hill. A companion of Sir John Falstaff, in the First Part of Shakespere's "King Henry IV."

Gal'ahad, Sir. A celebrated knight of the Round Table who achieved the quest of the Holy Grail. Tennyson has made him the subject of one of his idylls. In Malory he is also represented as the perfect knight clad in wonderful armor. He was the only knight who could sit in the "Siege Perilous" a seat reserved for the "knight without a flaw," who achieved the quest of the holy grail."

Gal'apas. A giant of marvelous height in the army of Lucius, King of Rome. He was slain by King Arthur.

Gal-a-te'a. A sea nymph beloved by the Cyclops Polyphemus, who in his jealous rage destroyed her lover Acis with a rock torn from the mountain side. W. S. Gilbert in his drama "Pygmalion and Galatea" represents the artist as creating a piece of sculpture so perfect that he loves it with such a passion that he awakens it into life.

Ga-laph'-ro-ne or **Gal'a-fron.** A king of Cathay and father of Angelica in Bojardo's "Orlando Innamorato" and Ariosto's "Furioso."

Gamp, Mrs. A nurse who is a prominent character in Dickens's novel of "Martin Chuzzlewit." She is celebrated for her constant reference to a certain Mrs. Harris, a purely imaginary person, for whose feigned opinions and utterances she professes the greatest respect, in order to give the more weight to her own.

Gan. Ga-ne-lo'ne, Ga'ne-lon' or **Ga'no.** A count of Mayence, and one of the Paladins of Charlemagne, whom he betrayed at the battle of Ronces valles; always represented as a traitor, engaged in intrigues for the destruction of Christianity. He figures in the romantic poems of Italy, and is placed by Dante in his "Inferno."

Gander-Cleugh, "folly-cliff," that mysterious place where a person makes a goose of himself, in "Tales of My Landlord," Sir Walter Scott.

Gan'elon. The character of Sir Ganelon was marked with spite, dissimulation, and intrigue, but he was patient, obstinate, and enduring. He loved solitude, disbelieved in the existence of moral good, and has become a by-word for a false and faithless friend. Dante has placed him in his "Inferno."

Garcia, Pedro. A mythical personage, of whom mention is made in the preface to Gil Blas, in which is related how two scholars of Salamanca discovered a tombstone with the inscription, "Here lies interred the soul of the Licentiate Pedro Garcia," and how, on digging beneath the stone, was found a leathern purse containing a hundred ducats.

Gar'eth. In Arthurian romance a knight of the Round Table, who was first a scullion in King Arthur's kitchen, but afterwards became champion of the Lady Linet, or Lynette, whose sister Lionès, or Lyonors, he delivered from Castle Perilous.

Gargamelle'. The mother of Gargantua in Rabelais' celebrated romance of this name.

Gar-gan'tu-a. The hero of Rabelais' celebrated romance of the same name, a gigantic personage, about whom many wonderful stories are related. He lived for several centuries, and at last begot a son, Pantagruel, as wonderful as himself. The "Pleasant Story of the Giant Gargantua and of his Son Pantagruel," so satirized the monastic orders of his time that it was denounced by the spiritual authorities. Francis I., however, protected the author, and allowed him to print the third part of it in 1545.

Gargan'tuan. Enormous, inordinate, great beyond all limits. The word refers to the hero of the romance Gargantua.

Gar'gery, Mrs. Joe. Great Expectations, Dickens. Pip's sister. A virago, who kept her husband and Pip in constant awe. Joe Gargery, a blacksmith, married to Pip's sister. A noble-hearted, simple-minded young man, who loved Pip sincerely. Joe Gargery was one of nature's gentlemen.

Gaspar or **Caspar** (the white one), one of the three Magi or kings of Cologne. His offering to the infant Jesus was frankincense, in token of divinity.

Gaunt, Griffith. Hero of a novel by Charles Reade, of same title.

Gavotte'. Name given to a certain dance common among people in the upper Alps.

Ga'wain, Sir. A nephew of King Arthur, and one of the most celebrated knights of the Round Table; noted for his sagacity and wonderful strength. He was surnamed "the courteous." His brothers were Agravaine, Gaheris, and Gareth.

Ge'bir. A legendary Eastern prince, said to have invaded Africa and to have given his name to Gibraltar. He is the subject of a poem of the same name by Walter Savage Landor.

Gael'lat-ley, Da'vie. The name of a poor fool in Sir Walter Scott's novel of "Waverley."

Gen'e-vieve'. (1) The heroine of a ballad by Coleridge. (2) Under the form "Genoveva," the name occurs in a German myth as that of the wife of the Count Palatine Siegfried, in the time of Charles Martel. Upon false accusations her husband gave orders to put her to death, but the servant intrusted with the commission suffered her to escape into the forest of Ardennes, where she lay concealed, until by accident her husband discovered her retreat, and recognized her innocence. This legend is often repeated in the folk tales of Germany. Tieck and Miller have given in modern versions and Raupach has made it the subject of a drama.

Genev'ra. A lady in Ariosto's "Orlando Furioso." Her honor is impeached, and she is condemned to die unless a champion appears to do combat for her. Her lover, Ariodantes, answers the challenge, kills the false accuser, and weds the dame. Spenser has a similar story in the "Faëry Queen," and Shakespere availed himself of the main incident in his comedy of "Much Ado About Nothing." From Italian romances "Genevra" has been taken as subject of "The Mistletoe Bough," by T. Haynes Bayley, and as both title and subject of a metrical tale by Samuel Rogers, in which he tells of a young Italian, who, upon her wedding-day, secreted herself, from motives of frolic, in a self-locking oaken chest, the lid of which shut down and held her captive. Many years afterward the chest was opened and revealed the skeleton.

Ge'nii. Protecting spirits or tutelar deities analagous to the guardian angels of the Christian faith. The Persian and Indian genii had a corporeal form, which they could change at pleasure. They were not attendant spirits, but fallen angels. They were naturally hostile to man, though compelled sometimes to serve them as slaves. The Roman genii were guardian spirits, unseen but helpful.

Georg'ics. A bucolic poetical composition, treating of farm-husbandry and the tillage of the soil. The most famous example of the kind is that by Virgil, 31 B. C., in four books.

Ge-raint', Sir. One of the knights of the Round Table. His story is told in Tennyson's "Idylls of the King" under "Geraint and Enid."

Ger'aldine. A name frequently found in romantic poetry. The name is said to have been adopted from the heroine, connected with Surrey, whose praises he celebrates in a famous sonnet, and who has been the occasion of much controversy among his biographers and critics. There is no doubt that the lady called Geraldine was an Irish lady named Elizabeth Fitzgerald, the daughter of Gerald Fitzgerald. This sonnet led to the adoption of the name into the class of romantic names.

Gertrude of Wyoming. Heroine of a poem by Thomas Campbell.

Giaour. Byron's tale called "The Giaour" is represented as told by a fisherman, a Turk, who had committed a crime which haunted him all his life. See Hassan.

Ges'ta Romano'rum. Compiled by Pierre Bercheur, prior of the Benedictine Convent of St. Eloi, Paris. A collection of old romances which has been the storehouse for our best story writers. Shakespere, Spenser, Gower, and many later writers have gone to this source. It took its present form in England about the beginning of the Fourteenth Century, the foundation

coming from Roman writers to which were added moralizing paragraphs and sometimes other religious and mystical tales.

Gib'ble, Goose. A half-witted boy in Scott's "Old Mortality."

Gib'ble, Sir. A simple-hearted, fine character in George Macdonald's novel by the same name.

Giant Despair. Pilgrim's Progress, Bunyan. A giant who is the owner of Doubting Castle, and who, finding Christian and Hopeful asleep upon his grounds, takes them prisoners, and thrusts them into a dungeon.

Giant Grim. A giant who seeks to stop the march of the pilgrims to the Celestial City, but is slain in a duel by Mr. Great-heart, their guide. **Giant Slay-good.** A giant slain in a duel by Mr. Great-heart.

Gil Blas. The title of a famous romance by LeSage, and the name of its hero. The tale is full of adventures and Gil Blas is represented as squire to a lady and brought up by his uncle, canon Gil Peres. Gil Blas went to Dr. Godinez's school at Oviedo and gained the name of being a great scholar. He had fair abilities and good impressions, but was easily led astray by his vanity, full of wit and humor, but lax in his morals. Duped at first, he afterwards played the same devices on others. As he grew in years, his conduct improved, and when his fortune was made he became an honest man.

Gil'pin, John. A citizen of London, and "a train-band captain," whose adventures are related in Cowper's humorous poem, "John Gilpin's Ride." After being married twenty years his wife proposed a holiday, they agreed to make a family party, and dine at the Bell at Edmonton. Mrs. Gilpin, her sister and four children went in the chaise and Gilpin ventured to go on horseback. The horse being fresh, began to trot, and then to gallop, and John a bad rider grasped the mane with both his hands. On went the horse, off flew John Gilpin's cloak, together with his hat and wig. He flew through Edmonton, and never stopped till he reached Ware, when his friend the calender, furnished him with another hat and wig, and Gilpin galloped back again, till the horse stopped at his house in London.

Glaucus. A fisherman of Boeo'tia who has become the fisherman's patron deity.

Glaucus, son of Hippolytus. Being smothered in a tub of honey he was restored to life by Esculapius.

Glo'ri-a'na. In Spenser's "Faëry Queen," the "greatest glorious queen of Faëry land."

Gloss. In Biblical criticism an explanation of purely verbal difficulties of the text, to the exclusion of those which arise from doctrinal, historical, ritual, or ceremonial sources. From an early period, these verbal difficulties were the object of attention, and the writers who devoted themselves to the elucidation were called "glossatores," and their works "glossaria."

Glumdal'ca. Tom Thumb, Fielding. Queen of the giants, captive in the court of King Arthur.

Glum-dal'clitch. Gulliver's Travels, Swift. A girl nine years old "and only forty feet high." Being such a "little thing," the charge of Gulliver was committed to her during his sojourn in Brobdingnag.

Glumms. Peter Wilkins, Robert Pullock. The male population of the imaginary country Nosmnbdsgrstt, visited by Peter Wilkins. Both males and females had wings which served both for flying and for clothes.

Gnome. (1) A pithy and sententious saying commonly in verse, embodying some moral sentiment or precept. The gnome belongs to the same generic class with the proverb, but it differs from a proverb in wanting the common and popular acceptance. The use of gnomes prevailed among all the early nations, especially the Orientals, and the literatures of most countries abound with them. In the Bible, the book of Proverbs, part of Ecclesiastes, and still more the apocryphal books of Ecclesiasticus present numberless illustrations of the highest form of this composition. (2) In ancient times the name given to one of the classes of imaginary beings which are supposed to be the presiding spirits in the mysterious operations of nature in the mineral and vegetable world.

Gob'bo. Launcelot. A clown in Shakespere's "Merchant of Venice." He left the service of Shylock the Jew for that of Bassa'nio a Christian. Launcelot Gobbo is one of the famous clowns of Shakespere.

Gob'bo, Old. Father to Launcelot Gobbo in "Merchant of Venice." He was stone blind.

Goblins and Bogies. Familiar terms of popular superstition, a spirit which lurks about houses. It is also called hobgoblin. Goblin is used in a serious sense by Shakespere in "Hamlet" where the ghost is supposed to be a "spirit of health or goblin damned."

God Save the King. The national anthem of Great Britain, and by adoption that of Prussia and the German states. Its words are apparently imitated from the Domine Salvum of the Catholic Church service.

Gold Bug, The. Found in Poe's most successful tale, by same name. Scene laid on Sullivan's Island, near Charleston, S. C., and the cipher made to concern Captain Kidd's buried treasure.

Golden Legend, The. The title of an ecclesiastical work in 177 sections, dating from the Thirteenth Century, written by one James de Voragine, a Dominican monk, and descriptive of the various saints' days in the Roman Calendar. It is deserving of study as a literary monument of the period, and as illustrating the religious habits and views of the Christians of that time.

Gold of Nibelungen, The. Unlucky wealth. "To have the gold of Nibelungen" is to have a possession which seems to bring a curse with it. Icelandic Edda.

Gon'eril. The oldest of the three daughters to King Lear, in Shakespere's tragedy. Having received her moiety of Lear's kingdom, the unnatural daughter first abridged the old man's retinue, then gave him to understand that his company was not wanted and sent him out a despairing old man to seek refuge where he could find it. Her name is proverbial for filial ingratitude.

Gon-za'lo. An honest old counselor in Shakespere's "Tempest," a true friend to Prospero.

Goody Blake. A character in Wordsworth's poem entitled "Goody Blake and Harry Gill." A farmer forbids old Goody Blake to carry home a few sticks, which she had picked up from his land, and in revenge she invokes upon him the curse that he may "never more be warm": and ever after "his teeth they chatter, chatter still."

Goody Two-Shoes. The name of a well-known character in a nursery tale by Oliver Goldsmith. Goody Two-Shoes was a very poor child, whose delight at having a pair of shoes was unbounded. She called constant attention to her "two shoes" which gave her the name.

Gordian Knot. A great difficulty. Gordius, a peasant, chosen King of Phrygia, dedicated his wagon to Jupiter, and fastened the yoke with a rope so ingeniously that no one could untie it. Alexander was told that "whoever undid the knot would become king" and he cut the knot with his sword.

Gra'ci-o'sa. A princess in an old and popular fairy tale — the object of the ill-will of a step-mother named Grognon, whose malicious designs are perpetually thwarted by Percinet, a fairy prince, who is in love with Graciosa.

Graal, Gral, or **Greal** (a word derived probably from the old French, perhaps Celtic, "gréal"). In the legends and poetry of the Middle Ages, we find accounts of the Holy Graal — San Gréal — a miraculous chalice, made of a single precious stone, sometimes said to be an emerald, which possessed the power of preserving chastity, prolonging life, and other wonderful properties. It is fabled to have been preserved and carried to England by Joseph of Arimathea. It remained there many years, an object of pilgrimage and devotion, but at length it disappeared, one of its keepers having violated the condition of strict virtue in thought, word, and deed, which was imposed upon those who had charge of it. The quest of this cup forms the most fertile source of adventures to the knights of the Round Table. The story of the Sangreal or Sangraal was first written in verse by Troyes (end of the Tenth Century), thence into Latin, and finally turned into French prose by order of Henry III. It commences with the genealogy of our Saviour, and details the whole Gospel history: but the prose romance begins with Joseph of Arimathea. Its quest is continued in Percival, a romance of the Fifteenth Century. The legend of the graal was introduced into German poetry in the Thirteenth Century by Wolfram von Eschenbach, who took Guiot's tales of Parcival and Titurel as the foundation of his poem, but filled it with deep allegorical meanings.

Grad'grind. A hardware merchant in Dickens's "Hard Times." He is a man of hard facts and cultivates the practical. His constant demand in conversation is for "facts." He allows nothing for the weakness of human nature, and deals with men and women as a mathematician with his figures.

Grad'grind, Mrs. Wife of Thomas Gradgrind. A little thin woman, always taking physic, without receiving from it any benefit.

Grad'grind, Tom. Son of the above, a sullen young man, much loved by his sister.

Grad'grind, Louise. A faithful daughter and sister.

Gran'di-son, Sir Charles. The hero of Richardson's novel "The History of Sir Charles Grandison." Designed to represent his ideal of a perfect hero—a union of the good Christian and the perfect English gentleman.

Gratia'no'. A friend to Antonio and Bassino in Shakespere's "Merchant of Venice." He "talks an infinite deal of nothing, more than any man in Venice." (2) Brother to Brabantio, in Shakespere's tragedy of "Othello." (3) A character in the Italian popular theater called "Commedia dell' Arte." He is represented as a Bolognese doctor, and has a mask with a black nose and forehead and red cheeks.

Gray, Auld Rob'in. The title of a popular Scotch ballad written by Lady Anne Lindsay, and name of its hero. Auld Robin Gray was a good old man married to a poor young girl whose lover was thought to have been lost at sea, but who returns to claim her hand a month after her marriage.

Great'-heart, Mr. In Bunyan's "Pilgrim's Progress," the guide of Christian's wife and children upon their journey to the Celestial City.

Gre'mio. In Shakespere's "Taming of the Shrew," an old man who wishes to wed Bianca.

Gren'del. Beowulf. An Anglo-Saxon epic. The half-brute, half-man monster from which Beowulf delivered Hrothgar, King of Denmark. Night after night Grendel crept stealthily into the palace called Heorot, and slew sometimes as many as thirty of the inmates. At length Beowulf, at the head of a mixed band of warriors, went against it and slew it.

Gri'ffin. A chimerical creature, which the fancy of the modern has adopted from that of the ancient world. The Griffin is variously described and represented, but the shape in which it most frequently appears is that of an animal having the body and legs of the lion with the beak and wings of the eagle. Like all other monsters, griffins abound in the legendary tales of the Teutonic nations. (Same as Gryphon.)

Griffin-feet. Fairy Tales, Comtesse D'Aunoy. The mark by which the Desert Fairy was known in all her metamorphoses.

Grimalkin. A cat, the spirit of a witch. Any witch was permitted to assume the body of a cat nine times.

Grimwig. Oliver Twist, Dickens. An irascible old gentleman, who hid a very kind heart under a rough exterior. He was always declaring himself ready to "eat his head" if he was mistaken on any point on which he passed an opinion.

Gri-sel'da, The Patient. A lady in Chaucer's "Clerk of Oxenford's Tales" immortalized by her virtue and her patience. The model of womanly and wifely obedience, she comes victoriously out of cruel and repeated ordeals The story of Griselda is first told in the Decameron. Boccaccio derived the incidents from Petrarch, who seems to have communicated them also to Chaucer, as the latter refers to Petrarch as his authority.

Grub Street, London, is thus described in Dr. Johnson's Dictionary; "Originally the name of a street near Moorfields, in London, much inhabited by writers of small histories, dictionaries, and temporary poems, whence any production is called Grub Street." The name in its appropriate sense, was freely used by Pope, Swift, and others.

Grundy. "What will Mrs. Grundy say?" What will our rivals or neighbors say? The phrase is from Tom Morton's "Speed the Plough," but "Mrs. Grundy" is not introduced into the comedy as one of the "dramatis personæ." The solicitude of Dame Ashfield, in this play, as to "what will Mrs. Grundy say," has given the latter great celebrity, the interrogatory having acquired a proverbial currency.

Gu'drun. Edda, Samund Sigfusson. A lady married to Sigurd by the magical arts of her mother: and on the death of Sigurd to Atli (Attila), whom she hated for his cruelty, and murdered. She then cast herself into the sea, and the waves bore her to the castle of King Jonakun, who became her third husband.

Gu'drun. North-Saxon poem. A model of heroic fortitude and pious resignation. She was the daughter of King Hettel (Attila), and the betrothed of Herwig, King of Heligoland.

Guen'dolen. A fairy whose mother was a human being.

Guil'den-stern. The name of a courtier in Shakespere's tragedy, Hamlet.

Gul'li-ver, Lemuel. The imaginary hero of Swift's celebrated satirical romance known as "Gulliver's Travels." He is represented as being first a surgeon in London, and then a captain of several ships. After having followed the sea for some years he makes in succession four extraordinary voyages.

Gup'py, Mr. Bleak House, Dickens. A weak, commonplace youth, who has the conceit to propose to Esther Summerson, the ward in Chancery.

Gurth. Ivanhoe, Sir Walter Scott. The swineherd of Rotherwood.

Gur'ton, Gammer. The heroine of an old English comedy, long supposed to be the earliest in the language, but now ranked as the second in point of time.

Guy'on. The impersonation of Temperance or Self-government in Spenser's "Faëry Queen." He destroyed the witch Acra'sia, and her bower, called the "Bower of Bliss." His companion was Prudence. "Sir Guyon represents the quality of Temperance in the largest sense: meaning the virtuous self-government which holds in check not only the inferior sensual appetites but also the impulses of passion and revenge."

Guy, Sir, Earl of Warwick. The hero of a famous English legend, which celebrates the wonderful achievements by which he obtained the hand of his lady-love, the Fair Felice, as well as the adventures he subsequently met with in a pilgrimage to the Holy Land. He is reputed to have lived in the reign of the Saxon King Athelstan. The romance of Sir Guy, mentioned by Chaucer in the "Canterbury Tales," cannot be traced further back than the earlier part of the Fourteenth Century. His existence at any period is very doubtful.

Guy Mannering. The second of Scott's historical novels. It contains the excellent characters, Dandy Dinmont, the shrewd and witty counselor Pleydell, the desperate seabeaten villainy of Hatteraick, the uncouth devotion of that gentlest of all pedants poor Domine Sampson, and the savage crazed superstition of the gypsy-dweller in Derncleugh.

Ha'dad. One of the six Wise Men led by the guiding star to Jesus.

Ha'gen. The murderer of Siegfried, in the German epic, the "Nibelungenlied." He is a pale-faced dwarf, who knows everything and whose sole desire is mischief. After the death of Siegfried he seized the "Nibelung hoard," and buried it in the Rhine, intending to appropriate it. Kriemhild invited him to the court and had him slain.

Hai-dee'. A beautiful young Greek girl in Byron's poem, "Don Juan." She is called the "beauty of the Cyclades."

Ha'kim. The Talisman, Scott. Saladin, in the disguise of a physician, visited Richard Cœur de Lion in sickness: gave him a medicine in which the "talisman" had been dipped, and the sick king recovered.

Ham'let. In Shakespere's tragedy of the same name, son to the former, and nephew to the reigning King of Denmark. The ghost of his father appears to him, and urges him to avenge his murder upon his uncle. But the prince feigns madness, and puts off his revenge from day to day by "thinking too precisely on the event." Hamlet's mother had married Claudius, King of Denmark, after the death of her former husband. Claudius prepared poisoned wine, which he intended for Hamlet: but the queen, not knowing it was poisoned, drank it and died. Hamlet, seeing his mother fall dead, rushed on the king and killed him almost by accident, and is killed himself by a poisoned rapier in the hands of Laertes. (See "Ophelia.")

Hans von Rip'pach. A fictitious personage, to ask for whom was a joke among German students.

Hans'wurst. A pantomimic character formerly introduced into German comedies. It corresponds to the Italian "Macaroni," the French "Jean Potage," and the English "Jack Pudding."

Hard'cas'tle, Mr. A character in Goldsmith's comedy of "She Stoops to Conquer," represented as prosy and hospitable.

Hardcastle, Mrs. A very "genteel" lady indeed. Tony Lumpkin is her son by a former husband.

Hard Times. A novel by Dickens, dramatized under the title of "Under the Earth" or "The Sons of Toil." Bounderby, a street Arab, raised himself to banker and cotton prince. When past fifty years of age, he married Louisa, daughter of Thomas Gradgrind. The bank was robbed, and Bounderby believed Stephen Blackpool to be the thief, because he had dismissed him from his employ. The culprit was Tom Gradgrind, the banker's brother-in-law, who escaped out of the country. In the dramatized version, the bank was not robbed, but Tom removed the money to another drawer for safety.

Har'le-quin. The name of a well-known character in the popular extemporized Italian comedy.

Har'lowe, Cla-ris'sa. The heroine of Richardson's novel entitled "The History of Clarissa Harlowe." In order to avoid a marriage urged upon her by her parents, she casts herself on the protection of Lovelace, who grossly abuses the confidence thus reposed in him. He subsequently proposes to marry her, but Clarissa rejects the offer.

Har'old, Childe. Childe Harold's Pilgrimage, Byron. A man of gentle birth and peerless intellect, who exhausted all the pleasures of youth and early

Har-pa-gon'. The hero of Molière's comedy of "L'Avare," represented as a wretched miser.

Har-pi-er or Har-py. Some evil supernatural personages referred to by the witches in Shakespeare's tragedy.

Has-san. The Giaour. Byron. Caleigh of the Christian maiden, raised from the waves and restored to her lover, was a beautiful young Greek girl, whom Hassan, the Turkish pirate, had carried off. Hassan, a renegade Christian, was killed by the Giaour. Caleigh Hassan has become the subject of popular

Hassan, Al. The hero of Thomas Hood's poem of "Hassan, a Tale of Jerusalem."

Hat'to. Archbishop of Mentz

Hav'e-lock the Dane. A Scandinavian known as Grim rescued an infant named Havelock, whom he adopted. This infant was the son of the King of Denmark, and while the boy was restored to his [illegible] Grim was [illegible] with gifts. He built the town of Grimsby called after his own name. This is one [illegible] of the medieval tales about "Havelock the Dane."

Hay'wood, Sir Robert. The one baronet of [illegible]

Hazlewood, Charles. Guy Mannering, Scott. [illegible] with Lucy Bertram, [illegible]

Head of Mid-dle-ham. The bishop, or chief [illegible] Richard III. was the son [illegible] Walter Scott's novel

Heep, Uriah. David Copperfield, Dickens. A [illegible] who, under the guise of the most [illegible] humbleness, conceals a malignity. Mrs. [illegible] a brother was a character equally to be [illegible] for [illegible] and [illegible]

Hel'en of Hel'ly's Kingdom. Prominent actress in [illegible] Helen was engaged at the same time [illegible] Marry [illegible] Helen's [illegible] from which [illegible] [illegible] [illegible] [illegible] [illegible]

Hel-e-na. 1) A lady in Shakespeare's "Midsummer [illegible] 2) The name of Shakespeare's "All's Well that Ends Well," in love with Bertram, who [illegible] her husband. His will and [illegible] her [illegible] to him [illegible] [illegible] [illegible] [illegible]

Hel-e-nus and Dor-e-a. Two lovers and heroine [illegible] the same legend.

Hel-ving, Canterbury Tales, Chaucer. The [illegible] [illegible] [illegible] [illegible]

Hu'bert, Saint. The legend of Saint Hubert makes him a patron saint of huntsmen.

Hu'di-bras. The title and hero of a celebrated satirical poem by Samuel Butler. Hudibras is a Presbyterian justice of the time of the Commonwealth.

Hugh of Lincoln. A legendary personage who forms the subject of Chaucer's "Prioress's Tale," and also of an ancient English ballad. Wordsworth has given a modernized version of this tale.

Hu'go Hug'onet. Castle Dangerous, Scott. Minstrel of the Earl of Douglas.

Hum'phrey. The imaginary collector of the tales in "Master Humphrey's Clock," by Charles Dickens.

Hump'ty Dump'ty. The hero of a well-known nursery rhyme. The name signifies humped and dumpy, and is the riddle for an egg.

Hu'on of Bordeaux, Sir. A hero of one of the romances of chivalry bearing this name.

Hur'al Oyun'. In the fairy tales found in the Koran, these are the black-eyed daughters of paradise. They are created from muck and are free from all physical weakness and are always young. It is held out to every male believer that he will have seventy-two of these girls as his household companions in paradise.—From the Koran.

Hy'las. A beautiful boy, beloved by Hercules, who was drawn into a spring by the enamored nymphs. The story has been treated by Bayard Taylor, and by William Morris in his "Life and Death of Jason."

Hypatia. Of this romance its author, Charles Kingsley, said; "My idea in the romance is to set forth Christianity as the only really democratic creed and philosophy: above all, spiritualism as the most exclusively aristocratic creed."

Hypapanti. The Feast of Purification is called Festum Hypapanti.

Hyperion. This myth has formed a favorite theme for various English poets. In Keats's "Hyperion" descriptions of nature and classic imagery are combined with exquisite delicacy.

Hypocrites' Isle. An island described by Rabelais in one of his satires. He pictures this island of "Hypocrites" as wholly inhabited by people of low and defiled natures, as, by sham saints, spiritual comedians, seducers, and "such-like sorry rogues who live on the alms of passengers like the hermit of Lamont."

Ia'go. Othello, Shakespere. Othello's ensign and the villain of the play. Iago is said to be a character next to a devil, yet not quite a devil, which Shakespere alone could execute without scandal.

Idleness, The Lake of. Faëry Queen, Spenser. Whoever drank thereof grew instantly "faint and weary." The Red Cross Knight drank of it, and was readily made captive by Orgoglio.

Idylls of the King. Tennyson has told the purpose and the meaning of these Idylls. Taken together they form a parable of the life of man. Each Idyll taken as a separate picture represents the war between Sense and Soul. In Lancelot and Guinevere the lower nature leads them astray and there is intense struggle before the higher nature prevails. In Vivien, Ettarre, Tristam, and Modred the base and sensual triumph. In Arthur, Sir Galahad and Percival, it is the victory of the spiritual.

Igna'ro. Faery Queen, Spenser. Foster-father of Orgoglio. Spenser says this old man walks one way and looks another, because ignorance is always "wrong-headed."

Il'iad. The tale of the siege of Troy, an epic poem in twenty-four books. It is written in Greek hexameters, and commemorates the deeds of Achilles and other Greek heroes at the siege of Troy. The date of its composition may, with much probability, be assigned to the Ninth Century B. C., and the poem is so deficient in continuity, and contains so much that is inconsistent and irrelevant with the main topic, that it has been thought by many critics to have been the performance of several persons, although its authorship is still nominally accredited to Homer. Books one, two, and three are introductory to the war. Paris proposes to decide the contest by single combat, and Menelaus accepts the challenge. Paris, being overthrown, is carried off by Venus, and Agamemnon demands that the Trojans should give up Troy in fulfillment of the compact, and the siege follows. The gods take part and frightful slaughter ensues. At length Achilles slays Hector and the battle is at an end. Old Priam, going to the tent of Achilles, craves the body of his son Hector; Achilles gives it up, and the poem concludes with the funeral rites of the Trojan hero. Virgil continues the tale from this point, shows how the city was taken and burnt, and then continues with the adventures of Æneas, who escapes from the burning city, and makes his way to Italy.

Illuminating. The art of adorning manuscripts and books with ornamented letters and paintings, which was practiced in the Middle Ages, prior to the introduction of printing, by artists, generally monks, called "illuminators." Manuscripts, containing portraits, pictures, and emblematic figures, form a valuable part of the riches preserved in the principal libraries in Europe.

Im'o-gen. The wife of Posthumus, and the daughter of Cymbeline in the play of Shakespere's under title Cymbeline. "Of all Shakespere's women," says Hazlitt, "she is, perhaps, the most tender and the most artless."

Improvvisato're. Poets who utter verses without previous preparation on a given theme. Among the ancients, Greece was the land of improvisation. In modern times, it has been almost entirely confined to Italy, where Petrarch introduced the practice of singing improvised verses to the lute.

Incanta'tion. Is derived from a Latin root meaning simply "to sing." It is the term in use to denote one of the most powerful and awe-inspiring modes of magic, resting on a belief in the mysterious power of words solemnly conceived and passionately uttered.

Inchcape Rock. It is dangerous for navigators, and therefore the abbot of Aberbrothok fixed a bell on a float, which gave notice to sailors. Southey says that Ralph the Rover, in a mischievous joke, cut the bell from the buoy, and it fell into the sea, but on his return voyage his boat ran on the rock, and Ralph was drowned. Precisely the same tale is told of St. Goven's bell.

Infer'no, The. Divine Comedy, Dante. Epic poem in thirty-four cantos. Inferno is the place of the souls who are wholly given up to sin. The ascent is through Purgatorio to Paradiso.

Innocents Abroad. Twain. Travelers seeing Europe without any illusions. The fun consists in an irreverent application of modern common sense to historic associations, ridiculing sentimental humbug. An air of innocence and surprise adds to the drolleries of their adventures.

Interludes, The. Springing from the Moralities and bearing some resemblance to them, though nearer the regular drama, are The Interludes, a class of compositions in dialogue, much shorter and more merry and farcical. They were generally played in the intervals of a festival.

Invocation. An address at the commencement of a poem, in which the author calls for the aid of some divinity, particularly of his muse.

Iphigeni'a. The heroine of Euripides' tragedy "Iphigenia in Aulis," and of Goethe's tragedy "Iphigenie auf Tauris." She was placed on the altar in a rash vow by her father. Artemis at the last moment snatched her from the altar and carried her to heaven, substituting a hind in her place. The similarity of this legend to the Scripture stories of Jephthah's vow and Abraham's offering of his son Isaac is noticeable.

I'ras. A strongly delineated character in "Ben Hur, a Tale of The Christ," by Lew Wallace.

Iras. A female attendant on Cleopatra in Shakespere's play, "Antony and Cleopatra."

I'saac of York. A wealthy Jew, the father of Rebecca, in Sir Walter Scott's novel, "Ivanhoe."

Isabel'la. The heroine in Shakespere's comedy, "Measure for Measure."

Is'lands of the Blest. Imaginary islands in the west. Hither the favorites of the gods were conveyed without dying, and dwelt in never-ending joy. The name first occurs in Hesiod's "Works and Days." This phrase is often used in modern literature.

I'sland of Lanterns. In the celebrated satire of Rabelais, an imaginary country inhabited by false pretenders to knowledge. The name was probably suggested by the "City of Lanterns," in the Greek romance of Lucian. Swift has copied this same idea in his Island of Laputa.

Is'land of St. Bran'dan. A marvelous flying island, the subject of an old and widely-spread legend of the Middle Ages. Though the Island of St. Brandan has been a disappointment to voyagers it has been a favorite theme with poets.

I-thu'ri-el. In Milton's "Paradise Lost," an angel commissioned by Gabriel to search through paradise, in company with Zephon, to find Satan, who had eluded the vigilance of the angelic guard, and effected an entrance into the garden. It is related that Ithuriel found Satan "squat like a toad, close at the ear of Eve," and transformed him by a touch of his spear to his proper shape.

I'van-hoe. The hero of Sir Walter Scott's novel of the same name. He figures as Cedric of Rotherwood's disinherited son, the favorite of King Richard I., and the lover of the Lady Rowena, whom, in the end, he marries. The scene is laid in England in the reign of Richard I., and we are introduced to Robin Hood in Sherwood Forest, banquets in Saxon halls, tournaments, and all the pomp of ancient chivalry. Rowena, the

heroine, is quite thrown into the shade by the gentle, meek, yet high-souled Rebecca.

Iva'novitch, Ivan. An imaginary personage, who is the embodiment of the peculiarities of the Russian people, in the same way as John Bull represents the English, and Jean Crapaud the French character, and Brother Jonathan the American character.

Ivory Gate of Dreams. Dreams which delude pass through the ivory gate, but those which come true through the horn gate.

Jack and the Bean-Stalk. A nursery legend said to be an allegory of the Teutonic Al-fader: the "red hen" representing the all-producing sun, the "money-bags" the fertilizing rain, and the "harp" the winds.

Jack-in-the-Green. A prominent character in May-pole dances.

Jack Robinson. A famous comic song by Hudson.

Jack Sprat. The hero of a nursery rhyme. Jack and his wife form a fine combination in domestic economy.

Jack, the Giant-killer. The name of a famous hero in the literature of the nursery, the subject of one of the Teutonic or Indo-European legends, which have become nationalized in England and America.

Jaques. A lord attending upon the exiled duke, in Shakespere's "As You Like It." A contemplative character who thinks and does — nothing. He is called the "melancholy Jaques," and affects a cynical philosophy. He could "suck melancholy out of a song, as a weasel sucks eggs."

Jaquenet'ta. Love's Labor's Lost, Shakespere. A country wench courted by Don Adriano de Armado.

Jar'ley, Mrs. The proprietor of a waxwork show in Dickens's "Old Curiosity Shop." She has lent her name to a popular game of parlor tableaux.

Jarn'dyce. A prominent figure in Dickens's "Bleak House," distinguished for his philanthropy, easy good-nature and good sense, and for always saying, "The wind is in the east," when anything went wrong with him. The famous suit of "Jarndyce vs. Jarndyce," in this novel, is a satire upon the Court of Chancery.

Jar'vie, Baillie Nic'ol. A prominent character in Sir Walter Scott's novel "Rob Roy." He is a magistrate of Glasgow.

Jek'yll, Doctor, and Mr. Hyde. The duplex hero of Robert Louis Stevenson's singular romance of the same name. Doctor Jekyll is a benevolent and upright physician, who by means of a potion is able to transform himself for a time into a second personality, Mr. Hyde, of a brutal and animal nature.

Jel'ly-by, Mrs. A character in Dickens's novel "Bleak House," a type of sham philanthropy. She spends her time and energy on foreign missions to the neglect of her family. Mrs. Jellyby is quite overwhelmed with business correspondence relative to the affairs of Borrioboola Gha.

Jen'kins, Win'i-fred. The name of Miss Tabitha Bramble's maid in Smollett's "Expedition of Humphry Clinker." She makes ridiculous blunders in speaking and writing.

Jenkinson, Ephraim. A green old swindler, whom Dr. Primrose met in a public tavern. Dr. Primrose sold the swindler his horse, Old Blackberry, for a draft upon Farmer Flamborough.

Jeroboam Sermon. One of Dr. Emmons's sermons which made a great noise at the time. It was known as his Jeroboam Sermon. It was written on the occasion of Jefferson's inauguration as president, and although Jefferson is not named, the delineation of the character of Jeroboam is such that no one can doubt the personal application intended.

Jerusalem Delivered. An epic in twenty books, by Torquato Tasso (1544–1595). The crusaders, encamped on the plains of Torto'sa, chose Godfrey for their chief, and Alandine, King of Jerusalem, made preparations of defense. The Christian army having reached Jerusalem, the King of Damascus sent Armi'da to beguile the Christians. It was found that Jerusalem could never be taken without the aid of Rinaldo. Godfrey, being informed that the hero was dallying with Armi'da in the enchanted island, sent to invite him back to the army; he returned, and Jerusalem was taken. Armi'da fled into Egypt, and offered to marry any knight who slew Rinaldo. The love of Rinaldo returned, he pursued her and she relented. The poem concludes with the triumphant entry of the Christian army into the Holy City, and their devotions at the tomb of the Redeemer. The two chief episodes are the loves of Olindo and Sophro'nia, and of Tancred and Corinda.

Jes'sa-my Bride. A by-name given to Miss Mary Horneck, afterward Mrs. Gwyn. She was a contemporary and friend of Goldsmith. Also title of a novel by F. F. Moore.

Jes'si-ca. The beautiful daughter of Shylock, in Shakespere's "Merchant of Venice."

Jew, The Wandering. An imaginary person in a legend connected with the history of Christ's passion. As the Saviour was on the way to the place of execution, overcome with the weight of the cross, he wished to rest on a stone before the house of a Jew, who drove him away with curses. Driven by fear and remorse, he has since wandered, according to the command of the Lord, from place to place, and has never yet been able to find a grave. Romances have been founded on this character ranking among the best in literature.

Jones, Tom. The hero of Fielding's novel entitled "The History of a Foundling," represented as a model of generosity, openness, and manly spirit, though thoughtless and dissipated.

Joy'euse, La. The sword of Charlemagne as mentioned in romances of chivalry.

Joyeuse' Garde, La. The residence of the famous Lancelot du Lac.

Juan, Don. A legendary personage made the hero of many dramatic romances and poems. (See Don Juan.)

Judith. The heroine in the book by the same name in the Apocrapha. She was a beautiful Jewess of Bethulia, who, when her town was besieged by Holofernes, the general of Nebuchadnezzar, attended him in his tent, and, when he was drunk, killed him, whereupon her townsmen fell upon the Assyrians and defeated them with great slaughter. The tale is not mentioned by Josephus, and has, from an early period, been held to be an allegory. It has frequently furnished poets and painters with subjects.

Kadr, Al. The night on which the "Korân" was sent down to Mahommed. Al Kadr is supposed to be the seventh of the last ten nights of Ramadân, or the night between the twenty-third and twenty-fourth days of the month.

Kay. A foster-brother of King Arthur, and a rude and boastful knight of the Round Table. He was the butt of King Arthur's court. Called also "Sir Queux." He appears in the "Boy and the Mantle," in Percy's "Reliques." Sir Kay is represented as the type of rude boastfulness, Sir Gaw'ain of courtesy, Sir Launcelot of chivalry, Sir Mordred of treachery, Sir Galahad of chastity, Sir Mark of cowardice.

Ke-ha'ma. A Hindoo rajah, who obtains and sports with supernatural power. His adventures are related in Southey's poem entitled "The Curse of Kehama."

Kent, Earl of. A rough, plain-spoken, but faithful nobleman in Shakespere's "King Lear," who follows the fallen fortunes of the king, disguised as a servant, under the assumed name of Caius.

Ken'wigs. A family in Dickens's novel "Nicholas Nickleby," including a number of little girls who differed from one another only in the length of their frilled pantalettes and of their flaxen pigtails tied with bows of blue ribbon.

Kil-ken'ny Cats. Two cats, in an Irish story, which fought till nothing was left but their tails. It is probably a parable of a local contest between Kilkenny and Irishtown, which impoverished both boroughs.

King Cam-by'ses. The hero of "A Lamentable Tragedy" of the same name, by Thomas Preston, contemporary of Shakespere. A ranting character known to modern readers by Falstaff's allusion to him in Shakespere's first "Henry IV."

King Es'ter-mere. The hero of an ancient and beautiful legend, which, according to Bishop Percy, should seem to have been written while a great part of Spain was in the hands of the Saracens or Moors, whose empire was not fully extinguished before the year 1491.

King Horn. A metrical romance which was very popular in the Thirteenth Century. King Horn is a beautiful young prince who is carried away by pirates; but his life is spared, and after many wonderful adventures he weds a princess, and regains his father's kingdom.

King Log and King Stork. Characters in a celebrated fable of Æsop, which relates that the frogs, grown weary of living without government, petitioned Jupiter for a king. Jupiter accordingly threw down a log among them, which made a satisfactory ruler till the frogs recovered from their fright and discovered his real nature. They, therefore, entreated Jupiter for another king, whereupon he sent them a stork, who immediately began to devour them.

Klaus, Peter. The hero of an old popular tradition of Germany — the prototype of Rip Van Winkle — represented as a goatherd.

Knick'er-bock'er, Die'drich. The imaginary author of a humorous fictitious "History of New York," written by Washington Irving.

Knights of the Round Table. A name given to King Arthur's knights. They were so called because they sat with him at a round table made by Merlin for King Leodegraunce. This king gave it to Arthur on his marriage with Guinevere, his daughter.

Knight's Tale, The. Canterbury Tales, Chaucer. Two Theban knights, Palamon and Arcite, captives of Duke Theseus, used to see from their dungeon window the duke's sister-in-law, Emily, and fell in love with her. Both captives having gained their liberty contended for the lady by single combat. Arcite was victor, but being thrown from his horse was killed, and Emily became the bride of Palamon.

Koppenberg. The mountain of Westphalia to which the pied piper (Bunting) led the children, when the people of Hamelin refused to pay him for killing their rats. Browning's poem, "The Pied Piper," tells the tale.

Kriem'hild. A beautiful Burgundian lady, daughter of Dancrat and sister of Gunther. She first marries Siegfried, King of the Netherlands, and next Etzel, King of the Huns. In the first part of the "Nibelungenlied," Kriemhild brings ruin on herself by a tattling tongue. In the second part of the great epic she is represented as bent on vengeance, and, after a most terrible slaughter both of friends and foes, she is killed by Hildebrand.

Kubla Khan. A poem by Coleridge. Coleridge says that he composed the poem in a dream immediately after reading a description of the Khan Kubla's palace, and he wrote it down on awaking.

Lacedæmonian Letter. The smallest of all letters in the Greek alphabet.

Laconic. Very concise and pithy. The name came from the Spartan manner of curt speech. A Spartan was called a Lacon from name of his country, Laconia.

Lady-day. The twenty-fifth day of March, anniversary of the Annunciation.

Lady of Lyons, The. Pauline Deschappelles, daughter of a Lyonese merchant. She rejected the suits of Beauseant, Glavis, and Claude Melnotte, who therefore combined on vengeance. Claude, who was a gardener's son, aided by the other two, passed himself off as Prince Como, married Pauline, and brought her home to his mother's cottage. The proud beauty was very indignant, and Claude left her to join the French army. He became a colonel, and returned to Lyons. He found his father-in-law on the eve of bankruptcy, and that Beauseant had promised to satisfy the creditors if Pauline would consent to marry him. Pauline was heartbroken; Claude revealed himself, paid the money required, and carried home the bride.

Lady of the Lake and Arthur's Sword. The heroine who gave to King Arthur the sword "Excalibur." She ordered King Arthur to sail out into the lake and take the sword as they could see it rising in the water. He sailed out with the knight and Merlin, came to the sword that a hand held up, and took it by the handles, and the arm and hand went under the lake again. This Lady of the Lake asked in recompense the head of Sir Balin, because he had slain her brother; but the king refused the request. Balin, who was present, exclaimed: "Evil be ye found! Ye would have my head; therefore ye shall lose thine own." With his sword he smote off her head in the presence of King Arthur.

Lady of the Lake, The. The heroine in the poem of Sir Walter Scott. She was Ellen Douglas, once a favorite of King James; when her father fell into disgrace, she retired with him into the vicinity of Loch Katrine.

Laer'tes. The son of Polonius, Lord-chamberlain of Denmark, and brother of Hamlet's beloved Ophelia. The king persuades him to challenge Hamlet, after Ophelia wanders in mind, and he calls him out in "friendly" duel, but poisons his own rapier. He wounds Hamlet and, in the scuffle which ensues, the combatants change swords, and Hamlet wounds Laertes, so that both die.

Lagado. Gulliver's Travels, Swift. The name of a city belonging to the King of Laputa. Lagado is celebrated for its grand academy of projectors, who try to extract sunbeams from cucumbers, and to convert ice into gunpowder. In the description of this fancied academy, Swift ridicules the pretenders in philosophy and science.

Lake of the Cat. Name given to Lake Erie until the last of the Seventeenth Century.

Lake Poets, The. Wordsworth, Southey, and Coleridge, who lived about the lakes of Cumberland.

Lame Dog's Diary. A clever diary in which the provincial life of a little English village is reflected. It is supposed to be kept by an invalid officer who returned crippled from the Boer War. The suggestion of the diary came from a winning, tantalizing young widow, who cheered the invalid by her amusing, paradoxical talk. The diarist and his sister Palestrina are true English types — quiet gentlefolk.

Lampoon. A personal satire, often bitter and malignant. These libels, carried to excess in the reign of Charles II., acquired the name of lampoons from the burden sung to them: "Lampone, lampone, camerada lampone."

Lamps of Sleep. Magic lamps. A wonderful knight of a mythical land had an equally wonderful Black Castle. In the mansion of the Knight of the Black Castle were seven lamps, which could be quenched only with water from an enchanted fountain. So long as these lamps kept burning, every one within the room fell into a deep sleep, from which nothing could rouse them.

Land of Beulah. The paradise in which souls wait before the resurrection. In "Pilgrim's Progress" the land from which the pilgrims enter the Celestial City. The name is found in Isaiah lxii, 4.

Land of Bondage. Name given to Egypt in the Bible.

Land of Cakes. A name sometimes given to Scotland, because oatmeal cakes are a common national article of food, particularly among the poorer classes.

Land of Nod. In common speech sleepy-land or land of dreams.

Land of Promise. The land promised to Abraham — Canaan.

Land of Shadows. A place of unreality, sometimes meaning land of ghosts.

Land o' the Leal. An unknown land of happiness, loyalty, and virtue. Carolina Oliphant, Baroness Nairne, meant heaven in her song and this is now its accepted meaning. (Leal means faithful, and "Land of the leal" means the land of the faithful.)

Land of Veda. Name often given to India.

Land of Wisdom. A name given to Normandy, in France, because of the wise customs which have prevailed there, and also because of the skill and judgment of the people in making laws.

Landlady's Daughter. She rowed Flemming "over the Rhine-stream, rapid and roaring wide," and told to him the story of the Liebenstein.

Lantern-Land. The land of literary charlatans, whose inhabitants, graduates in arts, doctors, professors, and artists of all grades, waste time in displaying their wonderful learning. The home of egotists.

Lantern of Demosthenes. An edifice in Athens. It stood in the street of the tripods, so called from the circumstance that in it were erected numerous tripods, which had been obtained as prizes in the musical or theatrical contests.

Laodice'an. One indifferent to religion, like the Christians of that Church mentioned in the Book of Revelation.

Laputa. The name of a flying island described by Swift in "Gulliver's Travels." It is said to be "exactly circular, its diameter 7,837 yards, or about four miles and a half, and consequently contains ten thousand acres." The inhabitants are chiefly speculative philosophers, devoted to mathematics and music; and such is their habitual absent-mindedness, that they are compelled to employ attendants — called "flappers" — to rouse them from their profound meditations. This is done by striking them gently on the mouth and ears with a peculiar instrument consisting of a blown bladder with a few pebbles in it, fastened on the end of a stick.

Last of the Mo-hi'cans. The Indian chief, Uncas. He is so called by Cooper, in his novel of that title.

Latitudina'rians. Persons who hold very loose views of Divine inspiration and of what are called orthodox doctrines.

Laughing Philosopher, The. Democritus of Abdera, a celebrated philosopher of antiquity, contemporary with Socrates. He was so called because he made a jest of man's follies, sorrows, and struggles. He is contrasted with Heraclitus, "The Weeping Philosopher."

Launfal, Sir. Steward of King Arthur. Detesting Queen Guinevere, he retired to Carlyoun, and fell in love with a lady named Tryamour. She gave him an unfailing purse, and told him if he wished to see her, he was to retire into a private room, and she would be with him. Sir Launfal now returned to court, and excited much attention by his great wealth. Guinevere made advances to him; he would not turn from the lady to whom he was devoted but lauded her praises. At this repulse, the angry queen complained to the king, and declared to him that she had been insulted by his steward. Arthur bade Sir Launfal produce this paragon of women. On her arrival, Sir Launfal was allowed to accompany her to the isle of Ole'ron; and no one ever saw him afterwards. *** James Russell Lowell has written a poem entitled "The Vision of Sir Launfal."

Lau'reate, Poet. An officer appointed by the crown to compose odes, etc., in honor of grand state occasions.

The appellation seems to have originated in a custom of the English universities of presenting a laurel wreath to graduates; the new graduate being then styled "Poeta Laureatus." The king's laureate was simply a graduated rhetorician in the service of the king. R. Whittington, in 1512, seems to have been the last man who received a rhetorical degree at Oxford. The earliest mention of a poet-laureate in England occurs in the reign of Edward IV., when John Key received the appointment. In 1630, the first patent of the office was granted. The salary was fixed at £100 per annum, with a tierce of canary, which latter emolument was in Southey's time, commuted into an annual payment of £27. It used to be the duty of the laureate to write an ode on the birthday of the sovereign, and on the occasion of a national victory; but this custom was abolished towards the end of the reign of George III. The poets who have held this office are Edmund Spenser, 1591-1599; Samuel Daniel, 1599-1619; Ben Jonson, 1619-1637. Interregnum. William Davenant, Knight, 1660-1668; John Dryden, 1670-1689; Thomas Shadwell, 1689-1692; Nahum Tate, 1692-1715; Nicholas Rowe, 1715-1718; Lawrence Eusden, 1718-1730; Colley Cibber, 1730-1757; William Whitehead, 1757-1785; Thomas Warton, 1785-1790; Henry James Pye, 1790-1813; Robert Southey, 1813-1843; William Wordsworth, 1843-1850; Alfred Tennyson, 1850-1892; Alfred Austin, 1896-1913; Robert Bridges, 1913.

Laus Deo. A poem by Whittier. Called forth by the passing of the constitutional amendment abolishing slavery; suggested to the poet as he sat in the Friends' meeting-house in Amesbury, and listened to the bells proclaiming the fact.

Lavinia and Pale'mon. Lavinia was the daughter of Acasto, patron of Palemon. Through Acasto Palemon gained a fortune and wandered away from his friend. Acasto lost his property, and dying, left a widow and daughter in poverty. Palemon often sought them, but could never find them. One day, a lovely modest maiden came to glean in Palemon's fields. The young squire was greatly struck with her exceeding beauty and modesty, but she was known as a pauper and he dared not give her more than passing glance. Upon inquiry, he found that the beautiful gleaner was the daughter of Acasto; he proposed marriage, and Lavinia was restored to her rightful place.

Lavaine. Son of the Lord of As'tolat, who accompanied Sir Lancelot when he went to tilt for the ninth diamond. Lavaine is described as young, brave, and a true knight. He was brother to Elaine.

Lawyer's Alcove. Name given to a volume of poems selected from the best poems by lawyers, for lawyers, and about lawyers. Included in this volume are Shakespere's "Sonnet CXXXIV"; Blackstone's "A Lawyer's Farewell to his Muse"; "Justice," by John Quincy Adams; Landor's "At the Buckingham Sessions"; "The Judicial Court of Venus," by Jonathan Swift; Saxe's "Briefless Barrister" and his "The Lawyer's Valentine"; "General Average," by William Allen Butler; "The Festival of Injustice" by Carlton, and Riley's "Lawyer and Child."

Lay of the Last Minstrel. Ladye Margaret (Scott) of Branksome Hall, the flower of Teviot," was beloved by Baron Henry of Cranstown, but a deadly feud existed between the two families. A goblin lured Ladye Margaret's brother into a wood, where he fell into the hands of the Southerners. At the same time an army of 3,000 English marched to Branksome Hall to take it, but hearing that Douglas was on the march against them, the two chiefs agreed to decide the contest by single combat. Victory fell to the Scotch, when it was discovered that "Sir William Deloraine," the Scotch champion, was in reality Lord Cranstown, who then claimed and received the hand of Ladye Margaret as his reward. This united the two houses.

Lazarre. This hero's relation to history is so shadowy as to be no burden, and yet sufficiently well-defined to serve as a lure to the imagination. He is the supposed Dauphin of France, the son of Louis XVI. and Marie Antoinette, who, according to the full chronicles of his time, died in prison, but whose removal to America is hinted in certain footnotes to history. However this may have been, one Eleazar Williams, the reputed son of a half-breed Indian who lived in northern New York in the early years of the last century, was not without reason for believing himself the lost Dauphin. Mrs. Catherwood has written a romance under this name taking this character as her hero.

Lazy Lawrence. One of the dwellers in Lubberland in the story of which he is pictured. It tells of his birth and breeding, how he served the school-master, his wife, the squire's cook, and the farmer, which, by the laws of Lubberland, was accounted high treason; his arraignment and trial, and happy deliverance from the many treasons laid to his charge.

Leander. The story of Hero and Leander is so old and so well known as nearly to belong to mythology. A young man of Abydos, who swam nightly across the Hellespont to visit his lady-love, Hero, a priestess of Sestos. One night he was drowned in his attempt, and Hero leaped into the Hellespont also.

Lear. A fabulous or legendary King of Britain, and the hero of Shakespere's tragedy of the same name. He had three daughters, and when four score years old, wishing to retire from the active duties of sovereignty, resolved to divide his kingdom between them. By elaborate but false professions of love and duty on the part of two daughters (Goneril and Regan), King Lear was persuaded to disinherit the third (Cordelia), who had before been deservedly more dear to him, and to divide his kingdom between her sisters. The tragedy is wrought out in the ungrateful conduct of the older sisters and the suffering of Lear. The beauty of the play is the exquisite character Cordelia, who is in every respect a "perfect woman."

Leather-Stocking Tales. Five stories or romances written by James Fenimore Cooper. The same hero, Leather-Stocking, or Natty Bumpo, figures in all in his life among the Indians. Natty had learned wood-lore as the young Indian learned it. He knew the calls of the wild animals far across the wilderness. He could follow the deer and bear to their haunts. He could trace the path of the wolf by the broken cobwebs glistening in the sunlight; and the cry of the panther was a speech as familiar as his own tongue. When he was thirsty he made a cup of leaves, and drank in the Indian fashion. He lay down to rest with that sense of security that comes only to the forester. These tales take Leather-Stocking from young manhood to old age following the fortunes of the American Indian tribes. The order in which his story is told in these volumes is "The Deerslayer," "The Last of the Mohicans," "The Pathfinder," "The Pioneers" and "The Prairie." He is also known by the name of Hawkeye in one part of his story. The best writers on the American Indian are thus quoted in our literatures: James F. Cooper, the romancer of the Indian; Henry W. Longfellow, the poet of the Indian; Francis Parkman, the historian of the Indian; Helen Hunt Jackson, the novelist of the Indian.

Legend. Anciently, a kind of rubric containing the prayers appointed to be read in Roman Catholic churches. In later times, the word was employed to denote a chronicle or register of the lives of saints, because they were to be read on the festivals of the saints. The way in which a credulous love of the wonderful, exaggeration of fancy, and ecclesiastical enthusiasm, at times even pious fraud, mixed themselves up in these narratives with true history, caused stories of a religious or ecclesiastical nature generally to be designated as "legends," to distinguish them from real history. The word has been much used in connection with the wild tales of ancient times, especially those known among the peasantry of Europe. Among the mediæval collections of legends, that drawn up by the Genoese archbishop, Jacobus de Voragine, in the second half of the Thirteenth Century, under the title of "Legenda Aurea" (the Golden Legends), or "Historia Lombardica," is the most celebrated.

Legion of Hon'or, The. An order conferred in recognition of military and civil merit, instituted by Napoleon I., while First Consul, May 19, 1802. It consists of different grades, as grand-crosses (of whom there are eighty), grand-officers (500), officers (4,000), and legionaries (whose number is not limited). The highest functionary is the "chancellor." The splendid edifice erected in Paris during the first empire, and known as the "Palace of the Legion of Honor," after having been partially destroyed during the Communist outbreak has been rebuilt.

Le'onine Verses. These fancies were common in the Twelfth Century, and were so called from Leoninus, a canon of the Church of St. Victor, in Paris, the inventor. In English verse, any meter which rhymes middle and end is called a Leonine verse.

Le'the. A personification of oblivion often referred to in literature. The tradition is that the soul, at the death of the body, drank of the River Lêthê that it might carry into the world of shadows no remembrance of earth and its concerns.

Letterpress. Printed matter. The word is often used to distinguish printed words from engraving.

Lexicon. A vocabulary, or book containing an alphabetical arrangement of the words of a language, with an explanation of the meaning or sense of each. The term is chiefly used with reference to dictionaries or word-books of the Greek and Hebrew languages.

Libations. With the prayers among all ancient peoples were usually joined the libations, or drink offerings. These consisted generally of wine, part of which was poured out in honor of the gods, and part of it drunk by the worshiper. The wine must be pure, and offered in a full cup. Sometimes there were libations of water, of honey, of milk, and of oil.

Light of the Harem. Name given to the bride of Selim in the poem Lalla Rookh. She was the Sultana Nour'mahal', afterwards called Nourjeham ("light of the world").

Ligeia. Written by Poe. Suggested by a dream in which the eyes of the heroine produced the wonderful effect described in the story. Its theme is the conquest of death through the power of will.

Liguo'rians. A congregation of missionary priests, called also Redemptorists, founded in 1732, by St. Alphonsus.

Lilli-Burle'ro. A song with the refrain of "Lilliburlero, bullen-a-la!" was written by Lord Wharton, and contributed much to the great revolution of 1688. The whole army, and at last the people, both in city and country, sang it perpetually. The words are also said to have been used as a sort of war-cry during the persecution of the Protestants by the Irish Papists in 1641.

Lilliput. An imaginary country described in "Gulliver's Travels," where an ordinary man becomes a great giant beside the small people of the land. Lilliputian used to designate small ways of expressing malice or jealousy. Among amusing characters in Lilliput land were the Little-Endians and Big-Endians who made up two religious factions, which waged incessant war on the subject of the right interpretation of the fifty-fourth chapter of the "Blun'decral": "All true believers break their eggs at the convenient end." The godfather of Calin, the reigning Emperor of Lilliput, happened to cut his finger while breaking his egg at the big end, and therefore commanded all faithful Lilliputians to break their eggs in future at the small end. The Blefuscudians called this decree rank heresy, and determined to exterminate the believers of such an abominable practice from the face of the earth. Hundreds of treatises were published on both sides, but each empire put all those books opposed to its own views into the "Index Expurgatorius," and not a few of the more zealous sort died as martyrs for daring to follow their private judgment in the matter.

Limbo. A place where the souls of good men not admitted into heaven wait the general resurrection. A similar place exists for the souls of unbaptized children. Still another Limbo is a Fool's Paradise, a place for all nonsense. This old superstitious belief has been used by Dante and Milton in their poems.

Literati. Men of letters, scholars of note.

Lithgow's Bower. A favorite residence of the kings and queens of Scotland, especially of Mary of Guise; and here the unfortunate Mary Queen of Scots was born in 1542.

Little Brother. An appellation made popular through the tale bearing the name. Josiah Flynt ran away from home when he was three years old and had been doing it frequently ever after. His first piece of fiction was naturally based on trampdom. His hero is a boy-tramp, a little fellow whose irresistible impulse to view the great world around him causes him to become a "Prushun" to an old inhabitant of Hoboland. He wished people to see where a number of stray boys land, for he had found out that a great many of the so-called "kidnapped" youngsters are in reality simple runaways with romantic temperaments.

Little Citizens. Characters in a New York school teacher's stories of her East Side Jewish charges. Human nature and American Yiddish dialect are alike faithfully rendered.

Little Dorrit. The heroine and title of a novel by Dickens. Little Dorrit was born and brought up in the Marshalsea prison, where her father was confined for debt.

Little John. A big, stalwart fellow, named John Little, who encountered Robin Hood, and gave him a sound thrashing, after which he was rechristened, and Robin stood godfather. Little John is introduced by Sir Walter Scott in "The Talisman."

Little Masters. A name applied to certain designers belonging in the Sixteenth and Seventeenth Centuries. Called little because their designs were on a small scale, fit for copper or wood. The most famous are Jost Amman, for the minuteness of his work; Hans Burgmair, who made drawings in wood illustrative of the triumph of the Emperor Maximilian; Hans Sebald Beham; Albert Altdorfer, and Henrich Aldegraver. Albert Dürer and Lucas van Leyden brought the art into notice and it became popular.

Little Nell. Old Curiosity Shop, Dickens. The prominent character of the story, pure and true, though living in the midst of selfishness and crime. She was brought up by her grandfather, who was in his dotage, and who tried to eke out a narrow living by selling curiosities. At length, through terror of Quilp, the old man and his grandchild stole away, and led a vagrant life.

Llewel'lyn. A legendary Welsh prince who, on returning from hunting, found his baby boy missing and his favorite greyhound, Gelert, covered with blood. Thinking that the hound had eaten him, he killed it. But, on searching more carefully, the child was found alive under the cradle clothes, and near him the body of a huge wolf which had been killed by the faithful hound.

Lochiel. Is the title of the head of the clan Cameron.

Lochinvar'. A young Highlander, in the poem of Marmion, was much in love with a lady whose fate was decreed, that she should marry a "laggard." Young Lochinvar persuaded the too-willing lassie to be his partner in a dance; and while the guests were intent on their amusements, swung her into his saddle and made off with her before the bridegroom could recover from his amazement.

Locksley. So Robin Hood is sometimes called, from the village in which he was born.

Locksley Hall. A poem by Tennyson, in which the hero, the lord of Locksley Hall, having been jilted by his cousin Amy for a rich boor, pours forth his feelings in a flood of scorn and indignation. The poem is understood to have been occasioned by a similar incident in the poet's own life, but this has been questioned.

Locrin, or Locrine. Father of Sabri'na, and eldest son of the mythical Brutus, King of ancient Britain. On the death of his father he became King of Loe'gria.

Loegria or Lo'gres. England is so called by Geoffrey of Monmouth, from Logrine, eldest son of the mythical King Brute.

Logogriph. Among the French, a kind of riddle, which consists in some elision or mutilation of words; it may be defined as being between an enigma and a rebus.

Logos. This word, as occurring at the beginning of the gospel of St. John, was early taken to refer to the "second person of the Trinity, i. e., Christ." Yet the precise meaning of the Apostle, who alone makes use of the term in this manner, and only in the introductory part of his gospel; whether he adopted the symbolizing usage in which it was employed by the various schools of his day; which of their differing significations he had in view, or whether he intended to convey a meaning quite peculiar to himself;—these are some of the innumerable questions to which the word has given rise, and which, though most fiercely discussed ever since the first days of Christianity, are far from having found a satisfactory solution.

Lo'hen-grin. The Knight of the Swan: the hero of a romance by Wolfram von Eschenbach, a German minnesinger of the Thirteenth Century, and also of a modern music drama by Richard Wagner. He was the son of Parsival, and came to Brabant in a ship drawn by a white swan, which took him away again when his bride, disobeying his injunction, pressed him to discover his name and parentage.

Lord Linlithgow. A character growing into favor and while it does not prove that the end justifies the means, certainly suggests that the "means" may be excused if sufficiently prominent men sanction them. In his desire to serve his party, and incidentally himself, this Lord blackmails a man, but, when the party chief rewards the blackmailer by a seat in parliament, it seemed reasonable, that the Lord should once more hold up his head in society as one who had quite regained a possibly lost self-esteem. To the perplexed lady-love such a hope as this is offered: "If it is not easy to be quite good, it is impossible to be wholly bad." "Lord Linlithgow" has value in giving an up-to-date glimpse of political life in England. When an indignant moralist recently ventured to point out Mr. Cecil Rhodes's deficiencies, Mr. Kipling rejoined: "Why, man, but he is building an empire!" (Morley Roberts.)

Lotos-Eaters. Tennyson has a poem called "The Lotos-Eaters," a set of islanders who live in a dreamy idleness, weary of life, and regardless of all its stirring events.

Love Doctor, The. L'Amour Medecin. A comedy by Molière written about the year 1665. Lucinde, the daughter of Sganarelle, is in love, and the father calls in four doctors to consult upon the nature of her malady. They see the patient, and retire to consult together, but talk about Paris, about their visits, about the topics of the day; and when the father enters to know what opinion they have formed, they all prescribe different remedies, and pronounce different opinions. Lisette

then calls in a "quack" doctor (Clitandre, the lover), who says that he must act on the imagination, and proposes a seeming marriage, to which Sganarelle assents. The assistant being a notary, Clitandre and Lucinde are married.

Love's Labor's Lost. Ferdinand, King of Navarre, with three lords named Biron, Dumain, and Longaville, agree to spend three years in study, during which time no woman was to approach the court. The compact signed all went well until the princess of France, attended by Rosaline, Maria, and Katharine, besought an interview respecting certain debts said to be due from the King of France to the King of Navarre. The four gentlemen fell in love with the four ladies. The love of the king sought the princess, by right, Biron loved Rosaline, Longaville admired Maria, and Dumain adored Katharine. In order to carry their suits, the four gentlemen, disguised as Muscovites, presented themselves before the ladies; but the ladies being warned of the masquerade, disguised themselves also, so that the gentlemen in every case addressed the wrong lady. A mutual arrangement was made that the suits should be deferred for twelve months and a day; and if, at the expiration of that time, they remained of the same mind, the matter should be taken into serious consideration. (Shakespere.)

Loves of the Angels. A rhymed story written by Thomas Moore. It may be called the stories of three angels, and was founded on the Eastern tale of "Harût and Marût, and the rabbinical fictions of the loves of" "Uzziel and Shamchazai." (1) The first angel fell in love with Lea, whom he saw bathing. She returned love for love, but his love was carnal, hers heavenly. He loved the woman she loved the angel. At last the angel gave to her the pass-word which should open the gates of heaven. She pronounced it, and rose through the air into paradise. The angel degenerated and became no longer an angel of light, but "of the earth, earthy." (2) The second angel was Rubi, one of the seraphs. He loved Liris, who asked him to come in all his celestial glory. He did so; and she, rushing into his arms, was burnt to death; but the kiss she gave him became a brand on his face forever. (3) The third angel was Zaraph, who loved Nama. It was Nama's desire to love without control, and to love holily; but as she fixed her love on a creature, and not on the Creator, both she and Zaraph were doomed to live among the things that perish. When the end of all shall come, Nama and Zaraph will be admitted into the realms of everlasting love.

Lover's Vows. Altered from Kotzebue's. Baron Wildenhaim, in his youth, seduced Agatha Friburg, and then forsook her. She had a son Frederick, who became a soldier. While on furlough, he came to spend his time with his mother, and found her in abject poverty and almost starved. A poor cottager took her in, while Frederick, who had no money, went to beg charity. Count Wildenhaim was out with his gun, and Frederick asked alms of him. The count gave him a shilling; Frederick demanded more, and, being refused, seized the baron by the throat. The keepers arrived and put him in the castle dungeon. Here he was visited by the chaplain, and it came out that the count was his father. The chaplain being appealed to, told the count the only reparation he could make would be to marry Agatha and acknowledge the young soldier to be his son. This advice he followed, and Agatha Friburg, the beggar, became the baroness Wildenhaim of Wildenhaim Castle.

Loving Cup. A large cup passed round from guest to guest at state banquets and city feasts. On the introduction of Christianity, the custom of wassailing was not abolished, but it assumed a religious aspect. The monks called the wassail bowl the loving cup. In the universities the term "Grace Cup" is more general. Immediately after grace the silver cup, filled with wine, is passed round. The master and wardens drink welcome to their guests; the cup is then passed to all the guests. A loving or grace cup should have two handles, and some have four. This ceremony, of drinking from one cup and passing it round, was observed in the Jewish paschal supper, and our Lord refers to the custom in the words, "Drink ye all of it."

Lubberland. An imaginary country of idleness and luxury. The name has been applied to certain cities in burlesque.

Lugg-nagg. An imaginary island whose inhabitants have the gift of eternal life lacking with it the gift of immortal health and strength.

Lumbercourt, Lord. A voluptuary, greatly in debt, who consented, for a good money consideration, to give his daughter to Egerton McSycophant. Egerton, however, had no fancy for the lady, but married Constantia, the girl of his choice. His lordship was in alarm lest this should be his ruin; but Sir Pertinax told him the bargain should still remain good if Egerton's younger brother, Sandy, were accepted by his lordship instead. To this his lordship readily agreed.

Lumbercourt, Lady Rudolpha, daughter of Lord Lumbercourt, who, for a consideration, consented to marry Egerton McSycophant; but as Egerton had no fancy for the lady, she agreed to marry Egerton's brother Sandy on the same terms.

Lure of the Labrador Wild, The. A recital of the ill-fated expedition to Labrador undertaken by Leonidas Hubbard, Jr., during the summer of 1903. The party consisted of Mr. Hubbard, Mr. Wallace, and a half-breed Cree Indian named Elson, who proved himself a veritable hero. As is generally known, the object of the party was to reach the interior of Labrador over a portion of that country unexplored, or at least unmapped by white men. This purpose was only partially carried out. The winter came on long before Hubbard was ready to turn back, the provisions were exhausted, game was scarce, and the fish failed to rise to the fly. On the return journey toward the coast Hubbard gave out and had to be left behind until aid could be brought. Wallace succeeded in finding some provisions which had been thrown aside on the inland trip and had returned within a few hundred feet of Hubbard's tent, but without finding it. Elson, the half-breed, managed to reach a trapper's camp and sent back a relief expedition, which picked up Wallace, and later found the body of Hubbard, who had died of starvation.

Lusiad, The. The only Portuguese poem that has gained a world-wide celebrity. It was written by Luiz de Camoëns, appeared in 1572, and was entitled "Os Lusiadas," the "Lusitanians," i. e., the Portuguese — the subject being the conquests of that nation in India. It is divided into ten cantos, containing 1,102 stanzas. It has been translated into English, but it has never been popular out of Portugal. The Lusiad celebrates the chief events in the history of Portugal, and is remarkable as the only modern epic poem which is pervaded by anything approaching the national and popular spirit of ancient epic poems. Bacchus was the guardian power of the Mohammedans, and Venus or Divine Love of the Lusians. The fleet first sailed to Mozambique, then to Melinda (in Africa), where the adventurers were hospitably received and provided with a pilot to conduct them to India. In the Indian Ocean, Bacchus tried to destroy the fleet; Venus, however, calmed the sea, and Gama arrived at India in safety. Having accomplished his object, he returned to Lisbon. Among the most famous passages are the tragical story of Inez de Castro, and the apparition of the giant Adamastor, who appears as the Spirit of the Storm to Vasco de Gama, when crossing the Cape. The versification of "The Lusiad" is extremely charming. The best edition of "The Lusiad" was published in Paris (1817), reprinted in 1819, and again, in 1823. "The Lusiad" has been translated into Spanish, French, Italian, English, Polish, and German.

Lusitania. The ancient name of Portugal; so called from Lusus, the companion of Bacchus in his travels. He colonized the country, and called it "Lusitania," and the colonists "Lusians."

Lustrum. The solemn offering made for expiation and purification by one of the censors in the name of the Roman people at the conclusion of the Census. The animals offered in sacrifice were a boar, sheep, and bull. They were led round the assembled people on the Campus Martius before being sacrificed. As the census was quinquennial, the word "lustrum" came to signify a period of five years.

Luther's Postil Gospels. Advent, Christmas, and Epiphany sermons, first published in Latin in 1521, and dedicated to his protector, the Elector Frederick. Translated immediately into German, Luther's postils, i. e., homilies, on the Gospels are esteemed the best of his sermons.

Lybius, Sir. A very young knight who undertook to rescue the lady of Sinadone. After many adventures with knights, giants, and enchanters, he entered the palace. Presently the whole edifice fell to pieces and a horrible serpent coiled round his neck. The spell being broken, the serpent turned into the lady of Sinadone herself, rejoicing in her rescue she wed the young knight. (Liblaux, a romance.)

Lycidas. The name under which Milton celebrates the untimely death of Edward King, who was drowned in the passage from Chester to Ireland, August 10, 1637. He was the son of Sir John King, secretary for Ireland.

Lydia. Daughter of the King of Lydia, was sought in marriage by Alcestes, a Tracian knight; his suit was refused, and he repaired to the King of Armenia, who gave him an army, with which he laid siege to Lydia.

He was persuaded by the king's daughter to raise the siege. The King of Armenia would not give up the project, and Alcestes slew him. Lydia now sets him all sorts of dangerous tasks to "prove his love," all of which he surmounted. Lastly, she induced him to kill all his allies, and when this was done she mocked him. Alcestes pined and died, and Lydia was doomed to endless torment in hell, where Astolpho saw her, to whom she told her story. (Orlando Furioso, bk. XVII.)

Lyd'i-a Lan'guish. The heroine of Sheridan's comedy of "The Rivals," distinguished for the extravagance of her romantic notions.

Lyre. The name of the earliest known of all stringed instruments of music, invented, according to Egyptian tradition, by the god Mercury, and regarded among poets, painters, and statuaries as an emblem of Apollo and the Muses. It is supposed to have had, originally, only three strings; afterwards it had eleven. The lyre of Terpander and Olympus had only three strings; the Scythian lyre had five; that of Simonides had eight. It was played with a plectrum, or stick of ivory or polished wood, and sometimes with the fingers. It is said to have been primarily constructed of tortoise-shell. Amphion built Thebes with the music of his lyre. The very stones moved of their own accord into walls and houses. Ari'on charmed the dolphins by the music of his lyre, and when the bard was thrown overboard one of them carried him safely to Tæ'narus. Hercules was taught music by Linus. One day, being reproved, the strong man broke the head of his master with his own lyre. Orpheus charmed savage beasts, and even the infernal gods, with the music of his lyre.

Lyric. Literally, pertaining to the lyre. In poetry a name originally applied to what was sung or recited with an accompaniment to the lyre, but it is now applied to odes, ballads, and other verses, such as may be set to music. Lyrics were originally employed in celebrating the praises of gods and heroes, and its characteristic was melodiousness. The Greeks cultivated it with effect, particularly Anacreon and Sappho, but among the Romans, Horace was the first and principal lyric poet. It has been said that all poets are singers and these singers are divided into three classes. First, the lyric poet, who can sing but one tune with his one voice. Second, the epic poet, who with his one voice can sing several tunes. Third, the true dramatist, who has many tongues and can sing all tunes.

Mab, Queen. Romeo and Juliet, Shakespere. The origin of the name is obscure. By some it is derived from the Midgard of the Eddas. The name is given by the English poets of the Fifteenth and succeeding centuries to the imaginary queen of the fairies.

Mabinogion. A series of Welsh tales, chiefly relating to Arthur and the Round Table. A MS. volume of some 700 pages is preserved in the library of Jesus College, Oxford.

Macbeth. The tale of Macbeth and Banquo was borrowed from the legendary history of Scotland, but the interest of the play is not historical. It is a tragedy of human life, intensely real, the soul, with all its powers for good or evil, deliberately choosing evil. The three witches in the desert place, in thunder, lightning, storm, strike the keynote of evil suggestion. The awfulness of soul destruction is felt in Macbeth and Lady Macbeth as in no other of Shakespere's dramas.

Mac-heath', Captain. A highwayman who is the hero of Gay's "Beggar's Opera."

Machiavel'ism. The name came from a writing by Machiavelli, under the title "De Principatibus" (the Prince), a famous treatise, written probably to gratify the Medici, and in which are expounded those principles of political cunning and artifice, intended to promote arbitrary power, ever since designated "machiavelism."

Mac-I'vor. Waverley, Scott. Fergas Mac-Ivor is a prominent character in the novel, and his sister, Flora Mac-Ivor, the heroine. They are of the family of a Scottish chieftain.

Mac'reons, The Island of. Pantag'ruel, Rabelais. The title is given to Great Britain, derived from a Greek word, meaning long-lived, "because no one is put to death there for his religious opinions." Rabelais says the island "is full of antique ruins and relics of popery and ancient superstitions."

McFin'gal. The hero of Trumbull's political poem of the same name; represented as a burly New England squire, enlisted on the side of the Tory party of the American Revolution, and constantly engaged in controversy with Honorius, the champion of the Whigs.

Madasi'ma, Queen. An important character in the old romance called "Am'adis de Gaul"; her constant attendant was Elis'abat, a famous surgeon, with whom she roamed in solitary retreats.

Madge Wildfire. The insane daughter of old Meg Murdochson, the gipsy thief. Madge was a beautiful but giddy girl, whose brain was crazed by her own downfall and the murder of her infant.

Madoc. A poem by Southey; is founded on one of the legends connected with the early history of America. Madoc, a Welsh prince of the Twelfth Century, is represented as making the discovery of the Western world. His contests with the Mexicans form the subject.

Madrigal. Is a short lyric poem, generally on the subject of love, and characterized by some epigrammatic terseness or quaintness, and composed of a number of free and unequal verses, confined neither to the regularity of the sonnet, nor to the subtlety of the epigram. The madrigals of Tasso are noted in Italian poetry.

Magi. The three "Wise Men" who followed the star to Bethlehem. The traditional names of the three Magi are Melchior, represented as an old man with a long beard, offering gold; Jasper, a beardless youth who offers frankincense; Balthazar, a black, or Moor, who tenders myrrh.

Magic Rings. These are mentioned by Plato, Cicero, and other writers and supposed to make the wearer invisible.

Magic Staff. The story of the magic staff belongs to the days of legends and seems to be of French origin, but has found its way into other lands. This staff would guarantee the bearer from all the perils and mishaps incidental to travelers. According to earliest traditions the staff was a willow branch cut on the eve of All Saints' Day.

Magic Wands. These are found in many old tales or writings. In Tasso's "Jerusalem Delivered" the hermit gave to Charles the Dane and Ubaldo a wand, which, being shaken, infused terror into all who saw it, and in Spenser's Faëry Queen the palmer who accompanied Sir Guyon had a wand of like virtue. It was made of the same wood as Mercury's caduceus.

Magna'lia. The best-known in the long list of Cotton Mather's works was his "Magnalia Christi Americana," purporting to be an ecclesiastical history of New England, from its first planting in 1620 to the year 1698, but including also civil history, an account of Harvard College, of the Indian Wars, and the witchcraft troubles, and a large number of biographies.

Magna'no. Hudibras, Butler. One of the leaders of the rabble that attacked Hudibras at a bear-baiting.

Magnificat. In the ritual of the Roman Catholic Church, the name given to the "Song of the Virgin Mary," derived from the opening invocation in the Latin Vulgate.

Maidens' Castle. An allegorical castle mentioned in Malory's "History of Prince Arthur." It was taken from a duke by seven knights, and held by them till Sir Galahad expelled them. It was called "The Maidens' Castle," because these knights made a vow that every maiden who passed it should be made a captive.

Maid Marian. A half mythical character, but the name is said to have been assumed by Matilda, daughter of Robert Lord Fitzwalter, while Robin Hood remained in a state of outlawry. The name is considered the foundation of the word marionettes, from Maid Marian's connection with the Morris dance, or May-day dance, at which she was said to appear.

Maid of Athens. Made famous by Lord Byron's song of this title. Twenty-four years after this song was written, an Englishman sought out "the Athenian maid," and found a beggar without a vestige of beauty.

Maid of Saragossa. Childe Harold, Byron. A young Spanish woman distinguished for her heroism during the defense of Saragossa in 1808-09. She first attracted notice by mounting a battery where her lover had fallen, and working a gun in his room.

Mal'aprop, Mrs. A character in Sheridan's "Rivals," noted for her blundering use of words.

Mal-bec'co. "Faery Queen," Spenser. The husband of a young wife, Helinore, and himself a crabbed, jealous old fellow.

Malen'grin. A character in Spenser's "Faëry Queen," who carried a net on his back "to catch fools with." The name has grown to mean the personification of guile or flattery.

Malepar'dus. The castle of Master Reynard the Fox, in the beast epic of "Reynard the Fox."

Malvoi'sin. Ivanhoe, Scott. One of the challenging knights at the tournament (Sir Philip de Malvoisin). Sir Albert de Malvoisin was a preceptor of the Knights Templar.

Mambri'no. Poems, Ariosto, etc. A king of the Moors, who was the possessor of an enchanted golden helmet, which rendered the wearer invulnerable, and which was the object of eager quest to the Paladins of Charlemagne. This helmet was borne away by the

knight Rinaldo. In "Don Quixote" we are told of a barber who was caught in a shower of rain, and who, to protect his hat, clapped his brazen basin on his head. Don Quixote insisted that this basin was the helmet of the Moorish king: and, taking possession of it, wore it as such.

Man'agarm. Prose Edda. The largest and most formidable of the race of giants. He dwells in the Ironwood, Jamvid. Managarm will first fill himself with the blood of man, and then will he swallow up the moon. This giant symbolizes war, and the "Iron wood" in which he dwells is the wood of spears.

Manfred. Subject of a poem by Byron, written under this title. Manfred sold himself to the prince of darkness, and received from him seven spirits to do his bidding. They were the spirits of "earth, ocean, air, night, mountains, winds, and the star of his own destiny." Wholly without human sympathies, the count dwelt in splendid solitude among the Alpine Mountains. He loved Astarte, and was visited by her spirit after her death. In spirit form she told Manfred that he would die the following day: and when asked if she loved him, she sighed "Manfred," and vanished.

Mantali'ni. Nicholas Nickleby, Dickens. The husband of madame; he is a man-doll, noted for his white teeth, his oaths, and his gorgeous morning gown. This "exquisite" lives on his wife's earnings, and thinks he confers a favor on her by spending. Madame Mantalini is represented as a fashionable milliner near Cavendish Square, London.

Marcel'lus. Hamlet, Shakespere. An officer of Denmark, to whom the ghost of the murdered king appeared before it presented itself to Prince Hamlet.

Marchioness, The. Old Curiosity Shop, Dickens. A half-starved maid of-all-work, in the service of Sampson Brass and his sister Sally. She was so lonesome and dull, that it afforded her relief to peep at Mr. Swiveller even through the keyhole of his door. Mr. Swiveller called her the "marchioness," when she played cards with him, "because it seemed more real and pleasant" to play with a marchioness than with a domestic. While enjoying these games they made the well-known "orange-peel wine."

Mariana in the Moated Grange. In Tennyson's poem by this name, a young damsel who sits in the moated grange, looking out for her lover, who never comes. (2) In Shakespere's "Measure for Measure" Mariana is a lovely and lovable lady, betrothed to Angelo, who, during the absence of Vincentio, the Duke of Vienna, acted as his lord deputy. Her pleadings to the duke for Angelo are wholly unrivaled.

Marplot. "The busy body." A blundering, good-natured, meddlesome young man, very inquisitive, too officious by half, and always bungling whatever he interferes in. Character found in comedies written by Mrs. Centlivre.

Martin's Summer, St. Halcyon days: a time of prosperity: fine weather. Mentioned by Shakespere in Henry VI., etc.

Masora. A critical work or canon, whereby is fixed and ascertained the reading of the text of the Hebrew version of the Bible.

Masques. Dramatic representations made for a festive occasion, with a reference to the persons present and the occasion. Their personages were allegorical. They admitted of dialogue, music, singing, and dancing, combined by the use of some ingenious fable into a whole. They were made and performed for the court and the houses of the nobles, and the scenery was gorgeous and varied. According to Holinshed's Chronicle, the first masque performed in England was at Greenwich, in 1512. Shakespere, as well as Beaumont and Fletcher, have frequently introduced masques into their plays. Milton himself made them worthier by writing "Comus." H. W. Longfellow wrote the "Masque of Pandora," taking the story from Hawthorne's "Wonder Book."

Mauth Dog. Lay of the Last Minstrel, Scott. A black specter spaniel that haunted the guard-room of Peeltown in the Isle of Man. A drunken trooper entered the guard-room while the dog was there, but lost his speech, and died within three days.

Mavournin. Irish for "darling."

May'eux. The name of a hunchback, who figures prominently in numberless French caricatures and romances.

Mazep'pa. Poem, Byron. Mazeppa in poem under same title was a Cossack of noble family who became a page in the court of the King of Poland, and while in this capacity intrigued with Theresia, the young wife of a count, who discovered the amour, and had the young page lashed to a wild horse, and turned adrift.

Measure for Measure. Shakespere. There was a law in Vienna that made it death for a man to live with a woman not his wife; but the law was so little enforced that the mothers of Vienna complained to the duke of its neglect. So the duke deputed Angelo to enforce it: and, assuming the dress of a friar, absented himself awhile, to watch the result. Scarcely was the duke gone, when Claudio was sentenced to death for violating the law. His sister Isabel went to intercede on his behalf, and Angelo told her he would spare her brother if she would become his Phrynê. Isabel told her brother he must prepare to die, as the conditions proposed by Angelo were out of the question. The duke, disguised as a friar, heard the whole story, and persuaded Isabel to "assent in words," but to send Mariana (the divorced wife of Angelo) to take her place. This was done: but Angelo sent the provost to behead Claudio, a crime which "the friar" contrived to avert. Next day, the duke returned to the city, and Isabel told her tale. The end was, the duke married Isabel, Angelo took back his wife, and Claudio married Juliet.

Meeting of the Waters. Title of a poem by Moore, better known under the name "Sweet Vale of Avoca." "The Meeting of the Waters" forms a part of that beautiful scenery which lies between Rathdrum and Arklow, in the county of Wicklow, Ireland: and these lines were suggested by a visit to this romantic spot in the summer of 1807.

Meg Mer'rilies. A prominent character in Scott's "Guy Mannering," a half-crazy gypsy or sibyl.

Meis'tersingers. In Germany an association of master tradesmen, to revive the national minstrelsy, which had fallen into decay with the decline of the minnesingers or love-minstrels (1350–1523). Their subjects were chiefly moral or religious, and constructed according to rigid rules.

Meis'ter, Wilhelm. Hero and title of a philosophic novel by Goethe. The object is to show that man, despite his errors and shortcomings, is led by a guiding hand, and reaches some higher aim at last. This is considered to be the first true German novel.

Melis'sa. Orlando Furioso, Ariosto. The prophetess who lived in Merlin's cave. Brad'amant gave her the enchanted ring to take to Roge'ro: so, assuming the form of Atlantes, she not only delivered Roge'ro, but disenchanted all the forms metamorphosed in the island, where he was captive.

Mel'notte, Claude. Lady of Lyons, Bulwer. The son of a gardener in love with Pauline, "the Beauty of Lyons," but treated by her with contempt. Beauseant and Glavis, two other rejected suitors, conspired with him to humble her.

Melyhalt. A powerful female subject of King Arthur's court. Sir Galiot invaded her domain, but she forgave his trespass and chose him for her knight and chevalier.

Menard. The Road to Frontenac, Merwin. The hero of the novel, a leader among Indians and white men during the making of New France. From Quebec he goes west, holding control of affairs in spite of treachery in both races. His companions are chiefly French, amid whom figure a Jesuit and two Indians, and the story contains much of that romantic charm peculiar to early French pioneer life, whence Longfellow and other poets and story-tellers have drawn inspiration.

Mengtse. The fourth of the sacred books of China, so called from its author, Mengtse, Latinized into Mencius. This great work was written in the Fourth Century B. C., and contains the wisdom of the age. These are some of its teachings: "Humanity, righteousness, propriety, knowledge, are as natural to man as his four limbs." "Humanity is internal, righteousness is external." In this same book Mencius taught that government is from God, but for the people whose welfare is the supreme good. The phrase "mother of Meng," which has been borrowed from the Chinese, signifies "a great teacher."

Menteur', Le (Fr. The Liar). Comedy by Corneille. The propensities of the leading character give the play its name and lead to the complications of the plot. This is generally considered Corneille's best comedy and the most important before the time of Molière.

Merchant's Tale, The. Chaucer. Is substantially the same as the first Latin metrical tale of Adolphus, and is not unlike a Latin prose tale given in the appendix of Wright's edition of Æsop's Fables. It is the story of the betrayal of an old husband by a young wife. The story is evidently of Oriental origin and very old. Boccaccio and Chaucer may have borrowed it from the "Commedia Lydiæ." The well-known incident of the pear tree is found in all these sources. An interesting account of these sources has been given by the Chaucer Society Publications under "Origins and Analogues of the Tales." Pope used this story as his basis for "January and May."

Merchant of Venice. Antonio, the merchant, in Shakespere's play, signs a bond in order to borrow money from Shylock, a Jew, for Bassino, the lover of Portia. If the loan was repaid within three months, only the principal would be required: if not, the Jew should be at liberty to claim a pound of flesh from Antonio's body. The ships of Antonio being delayed by contrary winds, the merchant was unable to meet his bill, and the Jew claimed the forfeiture. Portia, in the dress of a law doctor, conducted the defense, and saved Antonio by reminding the Jew that a pound of flesh gave him no drop of blood.

Merlin. The name of an ancient Welsh prophet and enchanter. He is often alluded to by the older poets, especially Spenser, in his "Faëry Queen," and also figures in Tennyson's "Idylls of the King." In the "History of Prince Arthur" by Malory, Merlin is the prince of enchanters and of a supernatural origin. He is said to have built the Round Table and to have brought from Ireland the stones of Stonehenge on Salisbury Plain.

Merlin's Cave. In Dynevor, near Carmarthen, noted for its ghastly noises of rattling iron chains, groans, and strokes of hammers. The cause is this: Merlin set his spirits to fabricate a brazen wall to encompass the city of Carmarthen, and, as he had to call on the Lady of the Lake, bade them not slacken their labor till he returned; but he never did return, for Vivian held him prisoner by her wiles.

Messiah, The. An epic poem in fifteen books, by F. G. Klopstock. The subject is the last days of Jesus, His crucifixion and resurrection.

Midsummer Night's Dream. Egeus promised his daughter, Hermia, to Demetrius. She loved Lysander and fled from Athens with her lover. Demetrius went in pursuit of her, followed by Helena, who doted on him. All four came to a forest and fell asleep. Oberon and Tita'nia had quarreled, and Oberon, by way of punishment, dropped on Titania's eyes during sleep some love-juice, or "Love in Idleness," the effect of which is to make the sleeper fall in love with the first thing seen when waking. The first thing seen by Titania was Bottom the weaver, wearing an ass's head. In the meantime King Oberon dispatched Puck to the lovers and with the juice Puck changed their vision and made all content. It has been suggested that in this play Shakespere may have borrowed hints from Chaucer. "The Tempest" and "Midsummer Night's Dream" are called Shakespere's fairy plays.

Milden'do. Gulliver's Travels, Swift. The metropolis of Lilliput, the wall of which was two feet and a half in height, and at least eleven inches thick. The emperor's palace, called Belfab'orac, was in the center of the city.

Miles Standish. In "Courtship of Miles Standish," a poem by H. W. Longfellow. From this poem the robust figures of the Puritan captain, in his haps and mishaps, and of John Alden and Priscilla, are now part of our national treasures.

Miller, Daisy. Name of heroine and title of the story by Henry James. An American girl traveling in Europe, where her innocence, ignorance, and disregard of European customs and standards of propriety, put her in compromising situations and frequently expose her conduct to misconstruction.

Minneha'ha, Hiawatha, H. W. Longfellow. The daughter of the arrow-maker of Daco'tah, and wife of Hiawatha. She was called Minnehaha from the waterfall of that name.

Minnesangers, or **Minnesingers.** A name given to the German lyric poets of the Middle Ages, on account of love being the principal theme of their lays, the German word "minne" being used to denote a pure and faithful love.

Miracle Plays. See "Mysteries."

Miranda. The Tempest, Shakespere. The daughter of Prospero the exiled Duke of Milan, and niece of Antonio, the usurping duke. She is brought up on a desert island, with Ariel, the fairy spirit, and Cal'iban, the monster, as her only companions.

Mir'i-am. A beautiful and mysterious woman in Hawthorne's romance "The Marble Faun," for love of whom Donatello commits murder, thus becoming her partner in crime.

Miserere. A title given in the Roman Catholic Church to the fifty-first Psalm, usually called the "psalm of mercy."

Morality, The. An old play in which the characters were the Vices and Virtues, with the addition afterwards of allegorical personages, such as Riches, Good Deeds, Confession, Death, and any human condition or quality needed for the play. These characters were brought together in a rough story at the end of which Virtue triumphed.

Morris Dance. Or the Moorish dance, was introduced into England in the reign of Edward III. It was a prominent feature of the May Day and other outdoor festivities.

Moriturі Salutamis. A "hymn to age," written by H. W. Longfellow, for the jubilee reunion of Bowdoin's Class of 1825. It contains a number of classic allusions, and an entire tale from the "Gesta Romanorum."

Mortality, Old. Old Mortality, Scott. A religious itinerant, who frequented country churchyards and the graves of the covenanters. He was first discovered at Gandercleugh, clearing the moss from the grey tombstones, renewing with his chisel the half-defaced inscriptions, and repairing the decorations of the tombs.

Mu'alox. The Fair God, Lew Wallace. The old paba or prophet who assured Nenetzin that she was to be the future queen in her father's palace.

Muck'lebacket. The Antiquary, Scott. Name of a conspicuous family, consisting of Saunders Mucklebacket, the old fisherman of Musselcrag; Old Elspeth, mother of Saunders; Maggie, wife of Saunders; Steenie, the eldest son, who was drowned; Little Jennie, Saunders' child.

Munchau'sen, The Baron. A hero of most marvelous adventures, and the fictitious author of a book of travels filled with most extravagant tales. The name is said to refer to Hieronymus Karl Friedrich von Münchausen, a German officer in the Russian Army, noted for his marvelous stories.

Mussel Slough Affair. Octopus, Norris. The basis of plot for the novel and name given to an actual piece of history almost unknown in the East when the wheat-growers of the San Joaquin Valley came into conflict with the railroad which they believed was trying to defraud them of their land.

My'steries and Miracle-plays. Were dramas founded on the historical parts of the Old and New Testaments, and the lives of the saints, performed during the Middle Ages, first in churches, and afterwards in the streets on fixed or movable stages. The mystery was a representation of any portion of the New Testament history concerned with a mysterious subject, such as the Incarnation, the Atonement, or the Resurrection. Miracles and mysteries were popular in France, Germany, Spain, Italy, and England. The fathers of the Reformation showed no unfriendly feeling towards them. Luther is reported to have said that they often did more good and produced more impression than sermons. In the alpine districts of Germany, miracle-plays were composed and acted by the peasants. They at last began to partake to a limited extent of the burlesque, which had brought miracle-plays into disrepute elsewhere. In England, the greatest check they received was from the rise of the secular drama. The first miracle-plays were an expedient employed by the clergy for giving religious instruction to the people, and for extending and strengthening the influence of the Church. The earliest "Miracle" on record is the "Play of St. Catherine," which was written about 1119, in French, and was a rude picture of the miracles and martyrdom of that saint. Some of the titles of these old plays are the "Creation of the World," the "Fall of Man," the story of "Cain and Abel," the "Crucifixion of Our Lord," the "Massacre of the Innocents," "The Play of the Blessed Sacrament," the "Deluge." They were generally written in mixed prose and verse. It was necessary to introduce some comic enlivenment, and this was done by representing the wicked personages of the drama as placed in ludicrous situations. The devil generally played the part of the clown or jester.

Na'la. A legendary King of India, whose love for Damayanti and subsequent misfortunes have supplied subjects for numerous poems.

Natty Bumppo. Called "Leather-stockings." He appears in five of Cooper's novels: (1) "The Deerslayer"; (2) "The Pathfinder"; (3) "The Hawkeye," in "The Last of the Mohicans"; (4) "Natty Bumppo," in "The Pioneers"; and (5) as "The Trapper," in "The Prairie," in which he dies.

Neæ'ra. The name of a girl mentioned by the Latin poets, Horace, Virgil, and Tibullus; sometimes also introduced into modern pastoral poetry as the name of a mistress or sweetheart.

Nepen'the. A care-dispelling drug, which Polydamna, wife of Tho'nis, King of Egypt, gave to Helen. A drink containing this drug "changed grief to mirth, melancholy to joyfulness, and hatred to love." The water of Ardenne had the opposite effects. Homer mentions this drug nepenthê in his "Odyssey." It is also mentioned in Poe's "Raven."

Nest of Linnets. Title given to a story by F. F Moore, a sequel to his "Jessamy Bride," and noted for the group of people collected. Richard Brinsley Sheri-

dan may be called its hero, inasmuch as he is the lover of its heroine, Miss Linley, the famous singer, who became Sheridan's first wife. The whole remarkable group to which she belonged gave title to the book — Garrick, Goldsmith, Sir Joshua Reynolds, Mrs. Thrale, Dr. Johnson, Burke, Thomas Sheridan, elocutionist and lexicographer, and father of Richard, and others.

Nestor. The name dates to ancient Grecian legend. Homer makes him the great counselor of the Grecian chiefs, and extols his eloquence as superior even to that of Ulysses. His authority was even considered equal to that of the immortal gods. Hence the name is often found in literature as an appellation denoting wisdom. Bryant has been called "The Nestor of Our Poets."

New Atlantis, The. An imaginary island in the middle of the Atlantic. Bacon, in his allegorical fiction so called, supposes himself wrecked on this island, where he finds an association for the cultivation of natural science and the promotion of arts. Called the "New" Atlantis to distinguish it from Plato's Atlantis, an imaginary island of fabulous charms.

Newcome, Colonel. A gallant, simple-hearted gentleman, a retired East Indian officer, in Thackeray's novel "The Newcomes." His unworldliness leads to the loss of his fortune, and he finally dies, poor and broken-hearted, in the Charter House hospital.

New England Primer. A book quoted as a specimen of literature for children in early American days. A copy of the New England Primer, published in Walpole, N. H., in 1814, contains an illustrated alphabet. The letter "L" is illustrated by a lion with one of its paws resting upon a lamb which is lying down, and the following lines:

"The Lion bold
The Lamb doth hold."

New England Tragedies. Among the poems of H. W. Longfellow are the "New England Tragedies," and the "Divine Tragedy." These, it is said, are to be taken in connection with "The Golden Legend," the whole forming one connected work of art, somewhat as do the successive Arthurian legends of Tennyson.

New Jerusalem. The name by which in the Christian faith, heaven, or the abode of the redeemed, is symbolized. The allusion is to the description in the twenty-first chapter of the Book of Revelation.

New Pastoral. A poem by T. B. Read, truly American in character like its companion poem, "The Wagoner of the Alleghanies."

Nibelung, King. A king of the Nibelungen, a mythical Burgundian tribe, who gives name to the great mediæval epic of Germany, the "Nibelungen Lied." He bequeathed to his two sons a hoard or treasure beyond all price and incapable of diminution, which was won by Siegfried, who made war upon the Nibelungen and conquered them.

Nibelungen Lied. A historic poem generally called the German "Iliad." It is the only great national epic that European writers have produced since antiquity, and belongs to every country that has been peopled by Germanic tribes, as it includes the hero traditions of the Franks, the Burgundians and the Goths, with memorials of the ancient myths carried with them from Asia. The poem is divided into two parts, and thirty-two lieds or cantos. The first part ends with the death of Siegfried, and the second part with the death of Kriemhild. The death of Siegfried and the revenge of Kriemhild have been celebrated in popular songs dating back to the lyric chants now a thousand years old. These are the foundation of the great poem.

Nickleby, Mrs. Nicholas Nickleby, Dickens. The mother of the hero, Nicholas, a widow fond of talking and of telling long stories with no connection. She imagined her neighbor, a mildly insane man, was in love with her because he tossed cabbages and other articles over the garden wall. She had a habit of introducing, in conversation, topics wholly irrelevant to the subject under consideration, and of always declaring, when anything unanticipated occurred, that she had expected it all along, and had prophesied to that precise effect on divers (unknown) occasions. Nicholas Nickleby has to make his own way in the world. He first goes as usher to Mr. Squeers, schoolmaster at Dotheboys Hall; but leaves in disgust with the tyranny of Squeers and his wife, especially to a poor boy named Smike. Smike runs away from the school to follow Nicholas, and remains his humble follower till death. At Portsmouth, Nicholas joins the theatrical company of Mr. Crummles, but leaves the profession for other adventures. He falls in with the brothers Cherryble, who make him their clerk; and in this post he rises to become a merchant, and ultimately marries Madeline Bray.

Nicknames by States. Names given to the inhabitants of the different states by popular use: Alabama, lizards; Arkansas, toothpicks; California, gold hunters; Colorado, rovers; Connecticut, wooden nutmegs; Delaware, blue hens and muskrats; Florida, fly-up-the-creeks; Georgia, crackers; Illinois, suckers; Indiana, hoosiers; Iowa, hawkeyes; Kansas, jayhawkers; Kentucky, corncrackers; Louisiana, creoles; Maine, foxes; Maryland, crawthumpers; Massachusetts, beaneaters; Michigan, wolverines; Minnesota, gophers; Mississippi, tadpoles; Missouri, pukes; Montana, bug-eaters; Nevada, sage hens; New Hampshire, granite boys; New Jersey, Jersey blues and clamcatchers; New York, knickerbockers; North Carolina, tar heels; North Dakota, tuckoes; Ohio, buckeyes; Oregon, web-feet; Pennsylvania, pennanites and leather-heads; Rhode Island, gun-flints; South Carolina, weasels; Tennessee, butternuts and whelps; Texas, beefheads; Vermont, Green Mountain boys; Virginia, beadies; West Virginia, panhandlers; Wisconsin, badgers.

Nine Worthies, The. Famous personages often alluded to, and classed together, rather in an arbitrary manner, like the Seven Wonders of the World, the Seven Wise Men of Greece, etc. They have been counted up in the following manner:

Three Gentiles.	1. Hector, son of Priam. 2. Alexander the Great. 3. Julius Cæsar.
Three Jews.	4. Joshua, Conqueror of Canaan. 5. David, King of Israel. 6. Judas Maccabæus.
Three Christians.	7. Arthur, King of Britain. 8. Charlemagne. 9. Godfrey of Bouillon.

Noctes Ambrosianæ (Ambrosial Nights), the name of a famous series of literary and political disquisitions which appeared in Blackwood's Magazine from 1822 to 1835. These articles, consisting of supposed conversations, purported to be a verbatim report of convivial gatherings held at Ambrose's tavern, Edinburgh, by several literary celebrities of the time. At first these brilliant dialogues were the work of several writers, among them J. G. Lockhart and William Maginn. Those appearing after 1825 were nearly all contributed by John Wilson, under the pen-name "Christopher North." Of the seventy-one "Noctes" forty-nine were afterward published separately as being entirely Wilson's work. By reason of their inexhaustible humor and trenchant wit, these imaginary discussions enjoyed an immense vogue and were largely responsible for the success of Blackwood's Magazine. Their great permanent literary creation is Wilson's delineation of the character of the Ettrick Shepherd, an idealized portrait of James Hogg who is described as one of the frequenters of the "Ambrosian" feasts.

North Americans of Yesterday. Name given to the Indians of North America by recent writers, among them F. S. Dellenbaugh in a work under same title. This work, a comparative study of North American Indian life and customs, is written on the theory that the races are of ethnic unity.

Nourmahal. Lalla Rookh, Moore. "Light of the Harem." She was for a season estranged from the sultan, till he gave a grand banquet, at which she appeared in disguise as a lute-player and singer. The sultan was so enchanted with her performance, that he exclaimed, "If Nourmahal had so played and sung, I could forgive her all"; whereupon the sultana threw off her mask.

Novum Organum. The noted work of Francis Bacon, showing his system of philosophy. It was published in the year 1620.

Nucta. Paradise and the Peri, Moore. The name given to the miraculous drop which falls from heaven, in Egypt, on St. John's Day, and is supposed to stop the plague.

Nun of Nidaros. Tales of a Wayside Inn, Longfellow. The abbess of the Drontheim convent, who heard the voice of St. John while she was kneeling at her midnight devotions.

Nut-Brown Maid. Reliques, Percy. The maid who was wooed by the "banished man." The "banished man" describes to her the hardships she would have to undergo if she married him; but finding that she accounted these hardships as nothing compared with his love, he revealed himself to be an earl's son, with large hereditary estates, and married her.

Oberon. King of the Fairies, whose wife was Titania. Shakespere introduces both Oberon and Titania in his "Midsummer Night's Dream." Oberon and Titania, his queen, are fabled to have lived in India, and to have crossed the seas to Northern Europe to dance by the light of the moon.

Oberon the Fay. A humpty dwarf only three feet high, but of angelic face, lord and king of Mommur.

Odyssey. Homer's epic, recording the adventures of Odysseus ("Ulysses") in his voyage home from Troy. The poem opens in the island of Calypso, with a complaint against Neptune and Calypso for preventing the return of Odysseus to Ithaca. Telemachos, the son of Odysseus, starts in search of his father, accompanied by Pallas in the guise of Mentor. He goes to Pylos, to consult old Nestor, and is sent by him to Sparta, where he is told by Menelaus that Odysseus is detained in the island of Calypso. In the meantime, Odysseus leaves the island, and, being shipwrecked, is cast on the shore of Phæacia. After twenty years' absence Odysseus returns to his home. Penelopê is tormented by suitors. To excuse herself, Penelopê tells her suitors he only shall be her husband who can bend Odysseus's bow. None can do so but the stranger, who bends it with ease. Odysseus is recognized by his wife, and the false suitors are all slain and peace is restored to Ithaca.

Offertory. In the Roman Catholic Church a form of words, in the first part of the Mass, by which the priest offers the elements previous to their consecration. In the English communion service, the sentences read by the officiating clergyman, while the people are making their offerings.

O'gier the Dane. One of the paladins of the Charlemagne epoch. Also made the hero of an ancient French romance, and the subject of a ballad, whose story is probably a contribution from the stores of Norman tradition, Holger, or Olger Danske, being the national hero of Denmark. He figures in Ariosto's "Orlando Furioso."

O'Groat'. A name often alluded to in early English parables or sayings coming from the legend of "John O'Groat's House." This ancient building was supposed to stand on the most northerly point in Great Britain. John of Groat and his brothers were originally from Holland. According to tradition, the house was of an octagonal shape, being one room with eight windows and eight doors, to admit eight members of the family, the heads of eight different branches of it, to prevent their quarrels for precedence at table, which, on a previous occasion, had well-nigh proved fatal.

Oldbuck, Jonathan. Antiquary, Scott. The character whose whimsies gave name to the novel. He is represented as devoted to the study and accumulation of old coins, medals, and relics. He is irritable, sarcastic, and cynical from an early disappointment in love, but full of humor and a faithful friend.

Old Man of the Sea. In the "Arabian Nights," a monster encountered by Sindbad the sailor in his fifth voyage. After carrying him upon his shoulders a long time, Sindbad at last succeeds in intoxicating him, and effects his escape. The "Old Man of the Sea" was also made the title of a humorous and well-known poem by O. W. Holmes.

Old Red Sandstone. One of the most noted of Hugh Miller's famous writings on geological subjects. It revealed his discovery of fossils in a formation which, up to that time, had been deemed almost destitute of them.

Oliver. As You Like It, Shakespere. Son and heir to Sir Rowland de Bois, who hated his youngest brother, Orlando, and whom he planned to murder by indirect methods. Orlando, finding it impossible to live in his brother's house, fled to the forest of Arden, where he joined the society of the banished duke. Oliver pursued him, and as he slept in the forest, a snake and a lioness lurked near to make him their prey. Orlando chanced to be passing, slew the two monsters and then found that the sleeper was his brother Oliver. Oliver's feelings underwent a change, and he loved his brother as much as he had before hated him. In the forest, the two brothers met Rosalind and Celia. The former, who was the daughter of the banished duke, married Orlando; and the latter, who was the daughter of the usurping duke, married Oliver.

Oliv'ia. Twelfth Night, Shakespere. A rich countess, whose love was sought by Orsino, Duke of Illyria; but having lost her brother, Olivia lived for a time in entire seclusion, and in no wise reciprocated the duke's love. Olivia fell in love with Viola, who was dressed as the duke's page, and sent her a ring. Mistaking Sebastian (Viola's brother) for Viola, she married him out of hand.

Ophelia. Hamlet, Shakespere. Daughter of Polo'nius, the chamberlain. Hamlet fell in love with her, but after his interview with the Ghost, finds that his plans must lead away from her. During his real or assumed madness, he treats her with undeserved and angry rudeness, and afterward, in a fit of inconsiderate rashness, kills her father, the old Polonius. The terrible shock given to her mind by these events completely shatters her intellect, and leads to her accidental death by drowning.

Organon. The name given to the first work on logic by Aristotle. He is said to have created the science of logic. The "Organon" has been enlarged and recast by some modern authors, especially by Mr. John Stuart Mill in his "System of Logic," into a structure commensurate with the vast increase of knowledge and extension of positive method belonging to the present day.

Orlando Furioso. An epic poem in forty-six cantos, by Ariosto, which occupied his leisure for eleven years, and was published in 1516. This poem, which celebrates the semi-mythical achievements of the paladins of Charlemagne, in the wars between the Christians and the Moors, became immediately popular, and has since been translated into all European languages, and passed through innumerable editions.

Ormulum. The "Ormulum" is a collection of metrical homilies, one for each day of the year, but the single existing copy gives the homilies for thirty-two days only. There are very few French words in the poem, but Scandinavian words and constructions abound. The writer, Orm, or Ormin, belonged to the East of England, and he and his brother Walter were Augustinian monks. He makes no use of rhyme, but his verses are smooth and regular.

Osbald'i-stone. Rob Roy, Scott. A family name in the story which tells of nine of the members: (1) the London merchant and Sir Hildebrand, the heads of two families; (2) the son of the merchant is Francis; (3) the offspring of the brother are Percival, the sot; Thorncliffe, the bully; John, the gamekeeper; Richard, the horse-jockey; Wilfred, the fool; and Rashleigh, the scholar, by far the worst of all. This last worthy is slain by Rob Roy, and dies cursing his cousin Frank, whom he had injured.

O'Shanter. See "Tam O'Shanter."

Osman. Sultan of the East, conqueror of the Christians, a magnanimous man. He loved Yara, a young Christian captive. This forms the subject of a once-famous ballad.

Osrick. A court fop in Shakespere's "Hamlet." He is made umpire by Claudius in the combat between Hamlet and Laertes.

Osse'o. Hiawatha, Longfellow. Son of the Evening Star. When broken with age, he married Oweenee, one of ten daughters of a North hunter. She loved him in spite of his ugliness and decrepitude, because "all was beautiful within him." As he was walking with his nine sisters-in-law and their husbands, he leaped into the hollow of an oak tree and came out strong and handsome; but Oweenee at the same moment was changed into a weak old woman. But the love of Osseo was not weakened. The nine brothers and sisters-in-law were transformed into birds. Oweenee, recovering her beauty, had a son, whose delight was to shoot the birds that mocked his father and mother. An Algonquin legend gave the foundation of the story.

Othel'lo. A Moor of Venice, in Shakespere's play of the same name. He marries Desdemona, the daughter of a Venetian senator, and is led by his ensign, Iago, a consummate villian, to distrust her fidelity and virtue. Iago hated the Moor both because Cassio, a Florentine, was preferred to the lieutenancy instead of himself, and also from a suspicion that the Moor had tampered with his wife; but he concealed his hatred so well that Othello wholly trusted him. Iago persuaded Othello that Desdemona intrigued with Cassio, and urged him on till he murdered his bride.

Othello's Occupation's Gone. A phrase much quoted from the play "Othello," meaning "the task is ended," or that one has retired from active work.

Outre-Mer. A "Pilgrimage Beyond the Sea." This title was given to the work by H. W. Longfellow, published in 1835, and written before European travel was much known to Americans. It is a poetical prose work, not unlike the "Sketch-Book" of Washington Irving.

Pac'olet. In "Valentine and Orson," an old romance, a character who owned an enchanted steed, often alluded to by early writers. The name of Pacolet was borrowed by Steele for his familiar spirit in the "Tatler." The French have a proverb, "It is the horse of Pacolet," that is, it is one that goes very fast.

Page. Merry Wives of Windsor, Shakespere. Name of a family of Windsor, conspicuous in the play. When Sir John Falstaff made love to Mrs. Page, Page himself assumed the name of Brook. Sir John told the supposed Brook his whole "course of wooing."

Page, Mrs. Wife of Mr. Page, of Windsor. When Sir John Falstaff made love to her, she joined with Mrs. Ford to dupe him and punish him.

Page, Anne. Daughter of the above, in love with Fenton. Slender calls her "the sweet Anne Page."

Page, William. Anne's brother, a schoolboy.

Pale'mon. The Seasons, Thomson. The hero of an episode in Thomson's "Seasons," represented as the owner of harvest fields in which the lovely young Lavinia coming to glean, Palemon falls in love with her, and wooes and wins her. (2) A character in Falconer's "Shipwreck," in love with the daughter of Albert, the commander.

Pa'limpsest. A parchment on which the original writing has been effaced, and something else has been written. The monks and others used to wash or rub out the writing in a parchment and use it again. As they did not efface it entirely, many works have been recovered by modern ingenuity. Thus Cicero's "De Republica" has been restored from an ancient manuscript which had been partly erased. They are relics of ancient learning of which even the mutilated members have an independent value, and this is especially true of Biblical manuscripts for criticism, and in a still broader sense, of all the remains of the ancient historians.

Palinu'rus. The pilot of Æneas, in Virgil's "Æneid" who fell asleep at the helm, and tumbled into the sea. The name is employed as a generic word for a steersman or pilot, and sometimes for a chief minister. Thus, Prince Bismarck was called the palinurus of William, Emperor of Germany.

Palla'dium. Something that affords effectual protection and safety. The Palla'dium was a colossal wooden statue of Pallas in the city of Troy, said to have fallen from heaven. The statue was carried away by the Greeks, and the city burned. The Scotch had a similar tradition attached to the great stone of Scone, near Perth. Edward I. removed it to Westminster, and it is still framed in the Coronation Chair of England. Stories connected with the palladium of a nation or a family are common in literature, as "Luck of Edenhall," a poem by Longfellow.

Pallet. A painter in Smollett's novel of "Peregrine Pickle." The absurdities of Pallet are painted an inch thick.

Pame'la. Name of heroine and title of novel by Richardson. She is a simple country girl, and maid-servant of a rich young squire. She resists every temptation, and at length marries the young squire and reforms him. Pamela is very modest, bears her afflictions with much meekness, and is a model of maidenhood. The story is told in a series of letters which Pamela sends to her parents.

Pan'darus. A son of Lycaon, and leader of the Lycians in the Trojan War, celebrated by Homer in the "Iliad." In mediæval romances, and by Shakespere in "Troilus and Cressida," he is represented as procuring for Troilus the love and good graces of Chryseis — hence the word "pander."

Panegyric. An eulogistic harangue or oration, written or uttered in praise of a person or body of persons.

Pan-jan'drum, The Grand. A sort of mythical nonentity invented by Foote, the comic dramatist. The word occurs in Foote's farrago of nonsense, which he composed to test the memory of a person who said he had brought his memory to such perfection that he could remember anything by reading it over once.

Pantag'ruel. A character in a famous romance by Rabelais. The name is said to have been given him because he was born during the drought which lasted thirty and six months, three weeks, four days, thirteen hours, and a little more, in that year of grace noted for having "three Thursdays in one week." His father was Gargantua, the giant, who was four hundred fourscore and forty-four years old at the time. He was chained in his cradle with four great iron chains, like those used in ships of the largest size. Being angry at this, he stamped out the bottom of his bassanet, which was made of weavers' beams. When he grew to manhood he knew all languages, all sciences, and all knowledge of every sort.

Pantag'ruleon Law Case. Pantagruel, Rabelais. This case, having nonplussed all the judges in Paris, was referred to Lord Pantagruel for decision. After much "statement" the bench declared, "We have not understood one single circumstance of the defense." Then Pantagruel gave sentence, but his judgment was as unintelligible as the case itself. So, as no one understood a single sentence of the whole affair, all were perfectly satisfied.

Pan-urge'. A celebrated character in Rabelais' "Pantagruel," and the real hero of the story; represented as an arrant rogue, a drunkard, a coward, and a libertine, but learned in the tongues, an ingenious practical joker, and a boon companion. He was the favorite of Pantagruel, who made him governor of Salmygondin, and finally set out with him in quest of the oracle of the Holy Bottle.

Paradise and the Pe'ri. The second tale in Moore's poetical romance of "Lalla Rookh." The Peri laments her expulsion from heaven, and is told she will be readmitted if she will bring to the gate of heaven the "gift most dear to the Almighty." After several failures the Peri offered the "Repentant Tear," and the gates flew open to receive the gift.

Paradise Lost. The poem by Milton under this name opens with the awaking of the rebel angels in hell after their fall from heaven, the consultation of their chiefs how best to carry on the war with God, and the resolve of Satan to go forth and tempt newly created man to fall. Satan reaches Eden, and finds Adam and Eve in their innocence. This is told in the first four books. The next four books contain the Archangel Raphael's story of the war in heaven, the fall of Satan, and the creation of the world. The last four books describe the temptation and the fall of man, and tell of the redemption of man by Christ, and the expulsion from paradise.

Paradise Regained. In this poem Milton tells of the journey of Christ into the wilderness after his baptism, and its four books describe the temptation of Christ by Satan.

Pardoner's Tale. Canterbury Tales, Chaucer. Three rioters agreed to kill Death, and were directed to a tree under which he was to be found. At the foot of the tree they came upon a treasure, which all coveted. The younger of the three went to buy wine and the other two conspired to kill him on his return. He poisoned the wine and was slain by his brothers, who soon died from effect of the poison. Thus all found Death under the tree.

Pa'rian Chronicle. A chronological register of the chief events in the mythology and history of ancient Greece, found engraved on Parian marble.

Pa'rian Verse. Ill-natured satire; so called from Archil'ochos, a native of Paros.

Par'i-zade. A princess whose adventures in search of the Talking Bird, the Singing Tree, and the Yellow Water, are related in the "Story of the Sisters" in the "Arabian Nights' Entertainments."

Parley, Peter. Name assumed by Samuel Griswold Goodrich, an American. Above seven millions of his books were in circulation in 1859. Several piracies of this popular name have appeared.

Parody. A kind of writing in which the words of an author or his thoughts are, by some slight alterations, adapted to a different purpose.

Parthen'ope. One of the three syrens. She was buried at Naples. Naples itself was anciently called Parthenope, which name was changed to "Neap'olis" ("the new city") by a colony of Cumæans.

Par'ting-ton, Mrs. An imaginary old lady whose laughable sayings have been recorded by an American humorist, B. P. Shillaber.

Partlet. The hen in "The Nun's Priest's Tale," and in the famous beast-epic of "Reynard the Fox."

Par'zi-val or **Par'si-fal.** The German name of Perceval, the hero and title of a metrical romance of the Twelfth Century, by Wolfram Von Eschenbach, and of a modern music drama by Richard Wagner. Parzival was brought up by a widowed mother in solitude, but when grown to manhood, two wandering knights persuaded him to go to the court of King Arthur. His mother consented to his going if he would wear the dress of a common jester. This he did, but soon achieved such noble deeds that Arthur made him a knight of the Round Table. Sir Parzival went in quest of the Holy Graal, which was kept in a castle called Graalburg, in Spain. He reached the castle, but having neglected certain conditions, was shut out, and, on his return to court, the priestess of Graalburg insisted on his being degraded from knighthood. Parzival then led a new life, and a wise hermit became his instructor. At length he reached such a state of purity and sanctity that the priestess of Graalburg declared him worthy to become lord of the castle. Lohengrin, "Knight of the Swan," was the son of Parzival.

Pastoral. Something descriptive of a shepherd's life; or a poem in which any action or passion is represented by its effects on a country life. The characteristics of this poem are simplicity, brevity, and delicacy.

Patient Griselda. A character in "Canterbury Tales," by Chaucer. She was robbed of children, reduced to poverty, and made to serve a rival, but bore all without complaint.

Pat'tieson, Peter. An imaginary assistant teacher at Gandercleuch, and the feigned author of Scott's "Tales of My Landlord," which were represented as

having been published posthumously by his pedagogue superior, Jedediah Cleishbotham.

Pau-line'. The "Lady of Lyons" in Bulwer-Lytton's play of this name. She was married to Claude Melnotte, a gardener's son, who pretended to be a count.

Paul and Virginia, Bernardin de St. Pierre. A pastoral romance. The scene of the story is the island of Port Louis in the Mauritius. Virginia, daughter of a French widow disowned by her family, and Paul, son of a woman betrayed by a lover, were brought up in complete ignorance of the outside world. An aunt of Virginia has the girl taken to France to be educated, but, on her refusal to marry according to dictation, sends her back to the island. Within sight of the eager Paul the ship is wrecked and Virginia is drowned. Paul soon dies, broken-hearted.

Paul Pry. Paul Pry, John Poole. An idle, inquisitive, meddlesome fellow, who has no occupation of his own, and is forever poking his nose into other people's affairs. He always comes in with the apology, "I hope I don't intrude."

Peeping Tom of Coventry. A tailor of Coventry, the only soul in the town mean enough to peep at the Lady Godiva as she rode naked through the streets to relieve the people from oppression.

Peg-got'ty, Clara. The nurse of David Copperfield in Dickens' novel of this name. Being very plump, whenever she makes an exertion some of the buttons on the back of her dress fly off.

Peggotty, Dan'el. Brother of David Copperfield's nurse. Dan'el was a Yarmouth fisherman. His nephew, Ham Peggotty, and his brother-in-law's child, "little Em'ly," lived with him.

Peggotty, Em'ly. She was engaged to Ham Peggotty; but being fascinated with Steerforth she eloped. She was afterwards reclaimed, and emigrated to Australia.

Peggotty, Ham. Represented as the very beau-ideal of an uneducated, simple-minded, honest, and warm-hearted fisherman. He was drowned in his attempt to rescue Steerforth from the sea.

Pendennis. Name of title and hero of a novel by Thackeray, published in 1849 and 1850, was the immediate successor of "Vanity Fair." Literary life is described in the history of Pen, a hero of no very great worth.

Pendennis, Arthur. A young man of ardent feelings and lively intellect, but self-conceited and selfish.

Pendennis, Laura. His sister has been considered one of the best of Thackeray's characters.

Pendennis, Major. A tuft-hunter, who fawns on his patrons for the sake of wedging himself into their society.

Pendrag'on. A title conferred on several British chiefs in times of great danger, when they were invested with dictatorial power; thus Uter and Arthur were each appointed to the office to repel the Saxon invaders. The word means "chief of the kings."

Pennsylvania Farmer. A surname given to John Dickinson, a citizen of Pennsylvania. In the year 1768, he published his "Letters from a Pennsylvania Farmer to the Inhabitants of the British Colonies." These were republished in London, with a preface by Dr. Franklin, and were subsequently translated into French.

Penny-a-liner. A contributor to the local newspapers, but not on the staff. At one time these collectors of news used to be paid a penny a line on English newspapers, and the appellation is still in use.

Penny Dreadfuls. Penny sensational papers.

Pen'tateuch. A name given by Greek translators to the five books of the Old Testament ascribed to Moses. The chief aim of the Pentateuch is to give a description of the origin and history of the Hebrew people up to the conquest of Canaan, and the theocracy founded among them. Tradition, as preserved in the earliest historical records, mentions Moses as the writer of the complete Pentateuch, such as it is now, with the exception of a few verses describing the last moments of the lawgiver, which have been ascribed to Joshua.

Pepys' Diary. A writing which brought fame to Pepys, the author, was written in short-hand, and deciphered and published in 1825. It extends over the nine years from 1660 to 1669, and is the gossipy chronicle of that gay and profligate time. We have no other book which gives so life-like a picture of that extraordinary state of society.

Peregrine Pickle. The hero and title of a novel by Smollett (1751). Peregrine Pickle is a savage, ungrateful spendthrift, fond of practical jokes, and suffering with evil temper the misfortunes brought on himself by his own wilfulness.

Per'o-nel'la. The subject of a fairy tale, represented as a pretty country lass, who, at the offer of a fairy, changes places with an old and decrepit queen, and receives the homage paid to rank and wealth, but afterward gladly resumes her beauty and rags.

Pe-tru'chi-o. A gentleman of Verona, in Shakespere's "Taming of the Shrew." A very honest fellow, who hardly speaks a word of truth, and succeeds in all his tricks. He acts his assumed character to the life, with untired animal spirits, and without a particle of ill-humor.

Pev'er-il, Sir Geof'frey. A country gentleman of strong High-church and Royalist opinions, in Sir Walter Scott's novel "Peveril of the Peak."

Phædo. An ancient and well-known work by Plato, in which the doctrine of the immortality of the soul is most fully set forth. It is in the form of a dialogue which combines with the abstract philosophical discussion, a graphic narrative of the last hours of Socrates, which, for pathos and dignity, is unsurpassed.

Philax. Fairy Tales, D'Aunoy. Philax was cousin to the Princess Imsi. The fay Pagan shut them up in the "Palace of Revenge," a palace containing every delight except the power of leaving it. In the course of a few years, Imis and Philax longed as much for a separation as at one time they had wished for a union.

Philip. The Madness of Philip, Josephine Daskam. A representation of the unregenerate child—"the child of strong native impulses who has not yet yielded to the shaping force of education; the child, therefore, of originality, of vivacity, of humor, and of fascinating power of invention in the field of mischief."

Philippic. A word used to denote any discourse or declamation full of acrimonious invective. It derives its name from orations made by Demosthenes against Philip of Macedon, in which the orator bitterly attacked the king as the enemy of Greece.

Philistines. Meaning the ill-behaved and ignorant. The word so applied arose in Germany from the Charlies or Philisters, who were always quarreling with the students. Matthew Arnold applied the term Philistine to the middle class in England.

Philo. The Messiah, Klopstock. A Pharisee, one of the Jewish sanhedrim, who hated Caiaphas, the high priest, for being a Sadducee. Philo made a vow that he would take no rest till Jesus was numbered with the dead. He commits suicide, and his soul is carried to hell by Obaddon, the angel of death.

Philtra. Faery Queen, Spenser. A lady of large fortune, betrothed to Bracidas; but, seeing the fortune of Amidas daily increasing, and that of Bracidas getting smaller, she attached herself to the more prosperous younger brother.

Phineas. Uncle Tom's Cabin, Mrs. Stowe. The quaker, an "underground railroad" man who helped the slave family of George and Eliza to reach Canada, after Eliza had crossed the river on cakes of floating ice.

Phyllis. In Virgil's "Eclogues," the name of a rustic maiden. This name, also written Phillis, has been in common use as meaning any unsophisticated country girl.

Pickanin'ny. A young child. A West Indian negro word.

Pickwick, Mr. Samuel. The hero of the "Pickwick Papers," by Charles Dickens. He is a simple-minded, benevolent old gentleman, who wears spectacles and short black gaiters. He founds a club, and travels with its members over England, each member being under his guardianship. They meet many laughable adventures.

Pied Piper of Hamelin. Old German legend. Robert Browning, in his poem entitled "The Pied Piper," has given a metrical version. The legend recounts how a certain musician came into the town of Hamel, in the country of Brunswick, and offered, for a sum of money, to rid the town of the rats by which it was infested. Having executed his task, and the promised reward having been withheld, he in revenge blew again his pipe, and drew the children of the town to a cavern in the side of a hill, which, upon their entrance, closed and shut them in forever.

Piers Plowman. The hero of a satirical poem of the Fourteenth Century. He falls asleep, like John Bunyan, on the Malvern Hills, and has different visions, which he describes, and in which he exposes the corruptions of society, the dissoluteness of the clergy, and the allurements to sin. The author is supposed to be Robert or William Langland. No other writings so faithfully reflect the popular feeling during the great social and religious movements of that century as the bitterly satirical poem, "The Vision of Piers Ploughman."

In its allegory, the discontent of the Commons with the course of affairs in Church and State found a voice.

Pie'tro. The Ring and the Book, Browning. The professed father of Pompil'ia, criminally assumed as his child to prevent certain property from passing to an heir not his own.

Pilgrim's Progress. Written by Bunyan in the form of a dream to allegorize the life of a Christian, from his conversion to his death. His doubts are giants, his sins a pack, his Bible a chart, his minister Evangelist, his conversion a flight from the City of Destruction, his struggle with besetting sins a fight with Apollyon, his death, a toilsome passage over a deep stream, which flows between him and heaven.

Pilot, The. Title of a sea-story by Cooper, which was called the "first sea-novel of the English language." It was published in the year 1823 and soon translated into Italian, German, and French. It is founded on the adventures of John Paul Jones.

Pinch, Tom. A character in Dickens's "Martin Chuzzlewit," distinguished by his guilelessness, his oddity, and his exhaustless goodness of heart.

Pippa Passes. The title of a dramatic poem by Robert Browning. Pippa is a light-hearted peasant maiden, who resolves to enjoy her holiday. Various groups of persons overhear her as she passes by singing, and some of her stray words act with secret but sure influence for good.

Platonic Love. Spiritual love between persons of opposite sexes. It is the friendship of man and woman without mixture of what is usually called love. Plato strongly advocated this pure affection, and hence its distinctive name.

Pocket. Great Expectations, Dickens. Name of a family prominent in the story.

Pocket. A real scholar, educated at Harrow, and an honor-man at Cambridge, but, having married young, he had to take up the calling of "grinder" and literary fag for a living. Pip was placed in his care.

Pocket, Mrs. Daughter of a city knight, brought up to be an ornamental nonentity, helpless, shiftless, and useless. She was the mother of eight children, whom she allowed to "tumble up" as best they could, under the charge of her maid Flopson.

Pocket, Herbert. Son of Mr. Matthew Pocket, wonderfully hopeful, but had not the stuff to push his way into wealth.

Pocket, Sarah. Sister of Matthew Pocket, a little dry, old woman, with a small face that might have been made of walnut-shell, and a large mouth.

Poetical Romances. These romances, native to the French, group themselves about great names, some having Alexander, some Charlemagne, as their central figure. One cluster, the Arthurian, is of English growth, and possesses the highest interest of all. Translations and imitations of these French romances slowly came into popular favor with the English people.

Po'lyglot. The word means, in general, an assemblage of versions in different languages of the same work, but is almost exclusively applied to manifold versions of the Bible. Besides the Bible, many other works, or small pieces, have been published in polyglot. Of smaller pieces, the Lord's Prayer has been the favorite, of which many collections have been published since the Fifteenth Century. Of these, the most comprehensive, and the most valuable, is the well-known "Mithridates" of Adelung, which contains the Lord's Prayer in more than 400 languages.

Poor Richard. The assumed name of Benjamin Franklin in a series of almanacs from 1732 to 1757. These almanacs contain maxims and precepts.

Pop'injay. A butterfly man, a fop; so called from the popinjay or figure of a bird shot at for practice. The title is used by Scott in "Old Mortality"; by Shakespere in "Henry IV.," and by others.

Portia. Merchant of Venice, Shakespere. A rich hieress whom Bassanio loved and who defended Antonio.

Pot-boilers. Articles written and pictures of small merit drawn or painted for the sake of earning daily bread.

Potiphar Papers. A series of brilliant satiric sketches of society written by George W. Curtis in the year 1852, and afterward collected in book form.

Pres'ter, John. The name given, in the middle ages, to a supposed Christian sovereign and priest of the interior of Asia, whose dominions were variously placed. He has been the subject of many legends and is mentioned by Shakespere in "Much Ado About Nothing."

Primrose, Rev. Charles. Vicar of Wakefield, Goldsmith. A clergyman, rich in heavenly wisdom, but poor indeed in all worldly knowledge.

Primrose, Mrs. Deborah. The doctor's wife, full of motherly vanity, and desirous to appear genteel. She could read without much spelling, and prided herself on her housewifery, especially on her gooseberry wine.

Primrose, George. Son of the vicar. He went to Amsterdam to teach the Dutch English, but never once called to mind that he himself must know something of Dutch before this could be done.

Primrose, Moses. Brother of the above, noted for giving in barter a good horse for a gross of worthless green spectacles with copper rims.

Primrose, Olivia. The eldest daughter of the doctor. Pretty, enthusiastic, a sort of Hebê in beauty. "She wished for many lovers," and eloped with Squire Thornhill.

Primrose, Sophia. The second daughter of Dr. Primrose. She was "soft, modest, and alluring."

Priscilla. Courtship of Miles Standish, Longfellow. A Puritan maiden who is wooed by Captain Standish through the mediation of his friend, John Alden, who is in love with Priscilla. She prefers John Alden and marries him after the captain's supposed death. The captain, however, appears at the close of the wedding service, and the friends are reconciled.

Pros'pero. Tempest, Shakespere. Rightful Duke of Milan, deposed by his brother. Drifted on a desert island, he practiced magic, and raised a tempest in which his brother was shipwrecked. Ultimately Prospero "broke his wand," and his daughter married the son of the King of Naples.

Pynch'eon. The name of an ancient but decayed family in Hawthorne's romance "The House of the Seven Gables." There are: (1) Judge Pyncheon, a selfish, cunning, worldly man. (2) His cousin Clifford, a delicate, sensitive nature, reduced to childishness by long imprisonment and suffering. (3) Hepzibah, the latter's sister, an old maid who devotes herself to the care of Clifford. (4) A second cousin, Phœbe, a fresh, cheerful young girl, who restores the fallen fortunes of the family and removes the curse which rested on it.

Puss in Boots. The subject and title of a well-known nursery tale derived from a fairy story in the "Nights" of the Italian author Straparola, and Charles Perrault's "Contes des Fées." The wonderful cat secures a princess and a fortune for his master, a poor young miller, whom he passes off as the rich Marquis of Carabas.

Quasimo'do. Notre Dame, Hugo. A misshapen dwarf one of the prominent characters in the story. He is brought up in the cathedral of Notre Dame de Paris. One day, he sees Esmeralda, who had been dancing in the cathedral close, set upon by a mob, and he conceals her for a time in the church. When, at length, the beautiful gypsy girl is gibbeted, Quasimodo disappears mysteriously, but a skeleton corresponding to the deformed figure is found after a time in a hole under the gibbet.

Quaver. The Virgin Unmasked, Fielding. A singing-master, who says, "if it were not for singing-masters, men and women might as well have been born dumb." He courts Lucy by promising to give her singing-lessons.

Queen La'be. Arabian Nights. The queen of magic, ruler over the Enchanted City. Beder, Prince of Persia is connected with her in the tale. She transforms men into horses, mules, and other animals. Beder marries her, defeats her plots against him, but is himself turned into an owl for a time.

Quickly, Mistress. Merry Wives of Windsor, Shakespere. A serving woman to Dr. Cains, a French physician. She is the go-between of three suitors for "sweet Anne Page," and with perfect disinterestedness wishes all three to succeed.

Quickly, Mistress Nell. Hostess of a tavern in Eastcheap, frequented by Harry, Prince of Wales, Sir John Falstaff, and all their disreputable crew.

Quid'nunkis. Title and name of hero in a fable found or written by Gay in 1726. This hero was a monkey which climbed higher than its neighbors, and fell into a river. For a few moments the monkey race stood panic-struck, but the stream flowed on, the monkeys continued their gambols. The object of this fable is to show that no one is of sufficient importance to stop the general current of events or cause a gap in nature.

Quilp. Old Curiosity Shop, Dickens. A hideous dwarf, cunning, malicious, and a perfect master in tormenting. Of hard, forbidding features, with head and face large enough for a giant. He lived on Tower Hill, collected rents, advanced money to seamen, and kept a sort of wharf, containing rusty anchors, huge iron rings, piles of rotten wood, and sheets of old copper, calling himself a ship-breaker. He was on the point

of being arrested for felony, when he drowned himself.

Quilp, Mrs. Wife of the dwarf, a young, obedient, and pretty little woman, treated like a dog by her husband, whom she loved but more greatly feared.

Quintessence. "The fifth essence." In the modern and general sense, an epithet applied to an extract which contains the most essential part of anything. It is quite an error to suppose that the word means an essence five times distilled, and that the term came from the alchemists. The ancient Greeks said there are four elements or forms in which matter can exist — fire, or the imponderable form; air, or the gaseous form; water, or the liquid form; and earth, or the solid form. The Pythagore'ans added a fifth, which they call "ether," more subtle and pure than fire, and possessed of an orbicular motion. This element, which flew upwards at creation, and out of which the stars were made, was called the "fifth essence"; quintessence, therefore, means the most subtle extract of a body that can be procured.

Quintillians. These were the disciples of Quintillia, who was said to be a prophetess. These so-called heretical Christians allowed women to become priests and bishops.

Quintus Fixlein. Title of a romance by Jean Paul Richter and the name of the principal character.

Quixote. See Don Quixote.

Quixote of the North. Charles XII. of Sweden, sometimes called in derision the Madman, was also called the Quixote of the North.

Quixotic. Like Don Quixote, or one who has foolish and impractical schemes — a would-be reformer.

Quodling, The Rev. Mr. Peveril of the Peak, Scott. Chaplain to the Duke of Buckingham.

Rad'igund. Faery Queen, Spenser. Queen of the fabled Amazons. Having been rejected by Bellodant "the Bold," she revenged herself by degrading all the men who fell into her power by dressing them like women, and giving them women's work.

Ramona. Name of heroine and title of romance by Helen Hunt Jackson. Ramona saw the American Indian followed by "civilization" while retreating slowly but surely toward his own extinction, and had herself a share in the tragedy. Ramona is considered the great romance of Indian life.

Rasselas. An imaginary prince hero of the romance by Dr. Johnson bearing same title. According to the custom of his country, Abyssinia, he was confined in paradise, with the rest of the royal family. This paradise was in the valley of Amhara, surrounded by high mountains. It had only one entrance, a cavern concealed by woods, and closed by iron gates. He escaped with his sister Nekayah and Imlac the poet, and wandered about to find what condition or rank of life was the most happy. After careful investigation, he found no lot without its drawbacks, and resolved to return to the "happy valley."

Raud the Strong. Tales of a Wayside Inn, H. W. Longfellow. The viking who worshiped the old gods and lived by fire and sword. King Olaf went against him sailing from Dronthiem to Salten Fjord.

Ra'venswood. Bride of Lammermoor, Scott. The lord of Ravenswood an old Scotch nobleman and a decayed royalist. His son Edgar falls in love with Lucy Ashton, daughter of Sir William Ashton, Lord-Keeper of Scotland. The lovers plight their troth, but Lucy is compelled to marry Frank Hayston, laird of Bucklaw. The bride, in a fit of insanity, attempts to murder the bridegroom and dies. Bucklaw goes abroad. Colonel Ashton, seeing Edgar at the funeral of Lucy, appoints a hostile meeting; and Edgar, on his way to the place appointed, is lost in the quicksands. A prophecy, noted as a curse, hung over the family and was thus fulfilled.

Ran'dom. Roderick Random, Smollet. A young Scotch scapegrace in quest of fortune. At one time he revels in prosperity, again he is in utter destitution. He roams at random, in keeping with his name.

Rappacci'ni. Mosses from an Old Manse, Hawthorne. A doctor in whose garden grew strange plants whose juices and fragrance were poison. His daughter, nourished on these odors became poisonous herself, her lover found an antidote which she took, but the poison meant life and the antidote meant death to her.

Ray'mond. In Jerusalem Delivered by Tasso. Raymond was known as the Nestor of the Crusaders, slew Aladine, the king of Jerusalem, and planted the Christian standard upon the tower of David.

Rebec'ca. Ivanhoe, Scott. Daughter of Isaac the Jew, in love with Ivanhoe. Rebecca, with her father and Ivanhoe, as prisoners, are confined in Front de Bœuf's castle. Rebecca is taken to the turret chamber and left with the old sibyl, but when Brian de Bois Guilbert comes to her, she spurns him with heroic disdain. Ivanhoe, who was suffering from wounds received in a tournament, is nursed by Rebecca. After escape and adventure, and being again prisoner, the Grand Master commands the Jewish maiden to be tried for sorcery, and she demands a trial by combat. The demand is granted, when Brian de Bois Guilbert is appointed as the champion against her; and Ivanhoe undertakes her defense, slays Brian, and Rebecca is set free. In contrast with this strong character, Rowena seems insignificant even when she becomes the bride of Ivanhoe. Scott is said to have named Rebecca from the beautiful Rebecca Gratz of Philadelphia, described to him by Washington Irving.

Red-Cross Knight. The Red-Cross Knight is St. George, the patron saint of England, and, in the obvious and general interpretation, typifies Holiness, or the perfection of the spiritual man in religion. In Spenser's "Faëry Queen" the task of slaying a dragon was assigned to him as the champion of Una.

Red'-gaunt'let. One of the principal characters in Sir Walter Scott's novel of the same name, a political enthusiast and Jacobite, who scruples at no means of upholding the cause of the Pretender, and finally accompanies him into exile. His race bore a fatal mark resembling a horse-shoe which appeared on the face of Red-gauntlet as he frowned when angry.

Red-Riding-Hood. This nursery tale is, with slight variations, common to Sweden, Germany, and France. In Charles Perrault's "Contes des Fées" it is called "Le Petit Chaperon Rouge."

Representative Men. In this work Emerson, more nearly than in any of his other works, gives expression to his system as a whole. The topics are, (1) Plato, the Philosopher; (2) Swedenborg, the Mystic; (3) Montaigne the Skeptic; (4) Shakespere, the Poet; (5) Napoleon, the Man of the World; (6) Goethe, the Writer. The mental portraits sketched under these six heads give us Emerson himself, so far as he is capable of being formulated at all.

Republic, The. A work composed by Plato 400 years before Christ. The "Republic" is not, as the title would suggest, a political work, like the "Politics" of Aristotle. The principles and government of an ideal moral organism, of which the rulers shall be types of fully developed and perfectly educated men, is the real subject. In the "Republic" we find the necessity of virtue to the very idea of social life proved in the first book; then the whole process of a complete moral and scientific education is set forth. It has been said that the most complete record of the beliefs or opinions of Plato are found in this work.

Reveries of a Bachelor. Name of a writing by D. G. Mitchell. This "Reveries" is a collection of sketches of life and character, painted in such a dream-like, delicate manner as to make the reader lose for the time being the full consciousness of his own reality. It has called forth a number of imitators more or less successful, no one of whom, however, is comparable to the original.

Reynard (*rā'nard*) **the Fox.** The hero in the beast epics, celebrated epic fables of the Middle Ages, belonging to the series of poems in which "beasts" are the speakers and actors. The "beast fable" goes back to the remotest antiquity and is a common inheritance of the Aryan or Indo-Germanic races. This story of Reynard the Fox, certainly known as early as the 12th century, is the great creation of the people of the Netherlands, northern France, and western Germany. Its source was Flanders, where, apparently, the beasts were named. *Reynard* means "strong in counsel." According to many authorities, this prose poem, in its later form, is a satire on the state of Germany in the Middle Ages. Reynard typifies the Church; his uncle, Isengrin the wolf, typifies the baronial element; and Nobel the lion, the regal. However that may be, in the real fable, Reynard has a constant impulse to deceive and victimize everybody, whether friend or foe, but especially Isengrin; and, though the latter frequently reduces him to the greatest straits, he generally gets the better of it in the end. In a popular form of the tale, "The Judgment of Reynard," the fox becomes emperor. At last he dies, is given a splendid funeral, and goes to "paradouse," two leagues beyond paradise.

Rhapsody means songs strung together. The term was originally applied to the books of the "Iliad" and "Odyssey," which at one time were in fragments. Certain bards collected together a number of the fragments, enough to make a connected "ballad," and sang them as our minstrels sang the deeds of famous heroes.

Rigolette'. The name of a female character in Eugene Sue's "Mysteries of Paris." It has acquired a proverbial currency, and is used as a synonym of "grisette."

Rinaldo. A character in Tasso's "Jerusalem Delivered." He belonged to the army of the Christians. He was the son of Bertoldo and Sophia and nephew of Guelpho, but was brought up by Matilda. The name Rinaldo, is also found in Ariosto's "Orlando Innamorato," in Arnosto's "Orlando Furioso," and in other romantic tales of Italy and France. He was one of Charlemagne's Paladins, and cousin to Orlando. Having killed Charlemagne's nephew Bertoldot, he was banished and outlawed. After various adventures and disasters, he went to the Holy Land, and, on his return, succeeded in making peace with the emperor.

Ring and the Book, The. An epic by Robert Browning. It is founded on Italian history. Guido Francesenini a Florentine Count of shattered fortune, married Pompilia, thinking her to be an heiress. Finding this a mistake the count treated Pompilia so brutally that she left him under the protection of Capon-sacchi, a young priest, and, being arrested at Rome a legal separation took place. Pompilia sued for a divorce but, pending the suit, gave birth to a son. The count murdered Pompilia and Pietro and Violante, her supposed parents, but, being taken red-handed, was brought to trial, found guilty, and executed.

Rip Van Winkle, Sketch Book, Irving. An indolent, good-natured fellow, living in a village on the Hudson. While shooting among the Catskill Mountains he meets with a stranger whom he helps in carrying a keg over rocks and cliffs; with him he joins a party who are silently rolling ninepins. Rip Van Winkle drinks deeply of the liquor they furnish and falls into a sleep which lasts twenty years, during which the Revolutionary War takes place. After awaking, Rip returns to the village, finds himself almost forgotten and makes friends with the new generation. The name of the great actor, Joseph Jefferson, became so identified with this character that to the English-speaking world he was Rip Van Winkle.

Robert the Devil. The hero of an old French metrical romance of the Thirteenth Century, the same as Robert, first Duke of Normandy, who became an early object of legendary scandal. Having been given over to the Devil before birth, he ran a career of cruelties and crimes unparalleled until he was miraculously reclaimed, did penance, became a shining light, and married the emperor's daughter. In the Fourteenth Century the romance was turned into prose, and of the prose story two translations were made into English. There was also a miracle play on the same subject. The opera of "Robert le Diable" was composed by Meyerbeer, in 1826.

Robin des Bois. In Germany, a mysterious hunter of the forest. Robin des Bois occurs in one of Eugene Sue's novels "as a well-known mythical character whose name is employed by French mothers to frighten their children."

Robin Goodfellow. A domestic spirit. He is sometimes called Puck, son of Oberon. He attends the English fairy-court; he is full of tricks and fond of practical jokes. He is also considered the same as Lob-lie-by-the-fire, in some tales. His character and achievements are recorded in the well-known ballad beginning "From Oberon in Fairy-land." Wright, in his "Essays on the Literature, Superstitions, and History of England in the Middle Ages," suspects Robin Goodfellow to have been the Robin Hood of the old popular Morris dance.

Robin Hood. A famous English outlaw whose exploits are the subjects of many ballads, but of whose actual existence little or no evidence can be discovered. Various periods, ranging from the time of Richard I to near the end of the reign of Edward II., have been assigned as the age in which he lived. He is usually described as a yeoman, and his chief residence is said to have been the forest of Sherwood, in Nottinghamshire. Of his followers, the most noted are Little John; his chaplain, Friar Tuck; and his companion, Maid Marian. The popular legends extol his personal courage and generosity, and his skill in archery. Scott introduces Robin Hood in two novels — "Ivanhoe" and "The Talisman." In the former he first appears at the tournament as Locksley the archer.

Robinson Crusoe. A tale by Daniel Defoe. Robinson Crusoe went to sea, was wrecked, lived on an uninhabited island of the tropics, and relieved the weariness of life by numberless contrivances. At length he met a young Indian, whom he saved from death. He called him his "man Friday," and made him his companion and servant. This story has been translated into more languages than any other English book.

Rob Roy. The title and hero of a novel by Sir Walter Scott. It signifies "Rob the Red," and was the sobriquet of a famous Scottish outlaw, Robert MacGregor, the chief of the clan MacGregor.

Roderick Dhu. Lady of the Lake, Scott. An outlaw [illegible] of Scots who resolved to win back [illegible] and [illegible] to his sovereign. In conversation with Ellen Macnaise he sought the life of the Saxon King James.

Roderigo. In Shakespeare's "Othello," a Venetian in love with Desdemona. In order that the lady eloped with Othello [illegible] the Moor.

Roger Drake. Name of [illegible] novel by H. K. Webster. Originality in invention is the added [illegible] to name of hero, who is interested in the working of a copper-mine, the founding of a trust (the change from the old [illegible] trust to the single plan of one [illegible] and the family business [illegible] struggles.

Roland. The [illegible] of one of the most [illegible] and picturesque [illegible] of early French romance, who, according to tradition, was [illegible] and captain of the Emperor Charlemagne's [illegible] In Italian romance he is called Orlando. He was slain in the valley of Roncesvalles as he was marching [illegible] the army from Spain to France. The [illegible] version of this story is "Roland," forming part of the "Chansons de Geste," which treat of the wars, journeys, and [illegible] and are probably [illegible] the Fourteenth Century. Throughout the Middle Ages, the Song of Roland was the most popular of the many [illegible] Taillefer, of Normandy, when on his way to [illegible] England, [illegible] it sung at the head of the troops [illegible] them on their march. At the present day, the traditionary memory of the heroic paladin is still kept up among the [illegible] of the Pyrenees, amongst whose [illegible] he bears the name of Rolando or Orlando. Roland is the hero of Theodulfus's "Carmen de Proditione Guenonis," of Turpin's "Chronique de Roland," of Boiardo's "Orlando Innamorato," of Ariosto's "Orlando Furioso."

Romance of the Rose. A metrical allegory, begun by Guillaume de Lorris in the latter part of the Thirteenth Century, and continued by Jean de Meung in the former half of the Fourteenth Century. The poet dreams that Dame Idleness conducts him to the Garden of Pleasure, where he meets many adventures among the attendant maidens, Youth, Joy, Courtesy, and others by which he is conducted to a bed of roses. He gathers one rose, when an arrow from Love's bow sprouts him inserting on the ground. Fear, Slander and Jealousy are afterward introduced.

Romances. Songs. The French Troubadours composed romances and sang them at the courts of the Norman kings. Richard I. was himself a troubadour. The subjects of the romances were generally the deeds of Charlemagne and his knights, or of King Arthur and his knights, and a third class of tales of the Crusaders became popular. Old tales were revived, and the incidents were transferred to fashionable heroes. During the time of Edward II. many of these tales were translated into English.

Romeo. In Shakespeare's tragedy of "Romeo and Juliet," a son of Montague in love with Juliet, the daughter of Capulet, who was the head of a noble house of Verona, in hopeless enmity with the house of Montague.

Romulus. The mythical founder of the city of Rome. His name is only a long-vowel form of Romus, and he is, therefore, to be considered as a symbolical representation of the Roman people.

Rosetta Stone. A stone found at Rosetta in the delta of the Nile. It contains engraved inscriptions in hieroglyphics and in Greek letters. The meaning of the Greek text being known, the hieroglyphics were translated.

Round Table, The. History of Prince Arthur, Sir T. Malory. A table made by Merlin for Uther the pendragon. Uther gave it to King Leodegraunce of Cameliyard, and when Arthur married Guenevere the daughter of Leodegraunce he received the table with a hundred knights as a wedding present. The table would seat 150 knights, and each seat was appropriated. What is usually meant by Arthur's Round Table is a smaller one for the accommodation of twelve favorite knights. King Arthur instituted an order of knighthood called "the knights of the Round Table," the chief of whom were Sir Launcelot, Sir Tristram, and Sir Lamorack or Lamerake. The "Siege Perilous" was reserved for Sir Galahad, the son of Sir Launcelot by Elaine.

Roussillon, Alice. The heroine of the romance, "Alice of Old Vincennes" by Maurice Thompson. Her guardian was Gaspard Roussillon, a successful trader with the Indians. "Eat frogs and save your scalps" was the plan of the Latin Creoles. "Papa Roussillon" was a frog-eater and the ruling spirit in his little village. The English and their Indian allies arranged their attack on the fort at Vincennes, and the American flag was in danger. Alice, with the help of a crippled boy, Jean, stole the flag. No search or questioning could reveal the whereabouts of either flag or thief. At the end of

the siege it was produced, much to the amazement of General Hamilton. Alice forgot her flag for a moment in the appearance of her lover, Beverly, whom she had mourned as dead, but Jean raised it on a staff from which the stars and stripes still float.

Ruach. Pantagruel, Rabelais. The isle of winds, visited by Pantag'ruel and his companions. The people of this island live on wind, such as flattery, promises, and hope. The poorer sort are very ill-fed, but the great are stuffed with huge mill-draughts of the same unsubstantial puffs.

Ru'be-zahl. The name of a famous spirit of the Riesen-Gebirge in Germany, corresponding to the Puck of England. He is celebrated in innumerable sagas, ballads, and tales, under the various forms of a miner, hunter, monk, dwarf, giant, etc. He is said to aid the poor and oppressed, and show benighted wanderers their road, but to wage incessant war with the proud and wicked.

Rudge. Barnaby Rudge, Dickens. Barnaby, a half-witted lad, with pale face, red hair and protruding eyes, dressed in tawdry finery including peacock feathers in his hat, is the hero of the novel with his inseparable companion, a raven, also of much interest. Barnaby joined the Gordon rioters for the proud pleasure of carrying a flag and wearing a blue bow. He was arrested and lodged in Newgate, from whence he made his escape, with other prisoners, when the jail was burned but both he and his father being betrayed, were recaptured, brought to trial, and condemned to death. By the influence of Gabriel Varden, the locksmith, the poor half-witted lad was reprieved. Mr. Rudge, the father of Barnaby, supposed to have been murdered the same night as Mr. Haredale, to whom he was steward. Rudge himself was the murderer both of Mr. Haredale and also of his faithful servant, to whom the crime was attributed. After the murder, he was seen by many haunting the locality, and was supposed to be a ghost. He joined the Gordon rioters. Mrs. [Mary] Rudge, mother of Barnaby, and very like him, "but where in his face there was wildness and vacancy, in hers there was the patient composure of sorrow.

Ruggie'ro. Orlando Furioso, Ariosto. A young Saracen knight born of Christian parents, who falls in love with Bradamante, a Christian Amazon, and sister to Rinaldo. After numerous adventures and crosses, they marry and found the house of Este. Ruggiero is noted for the possession of a hippogriff, or winged horse, and also a veiled shield, the dazzling splendor of which, when suddenly disclosed, struck with blindness and astonishment all eyes that beheld it.

Rumpelstilz'chen. Old German Tales. According to Grimm, this name is a compound, but the spirit represented is one familiar to all German children. The original story tells of him as a dwarf who spun straw into gold for a certain miller's daughter. He has since done favors to many people and paid visits from his mountain home only known by the results of his helpfulness.

Runes, the earliest alphabet in use among the nations of Northern Europe. The exact period of their origin is not known. They are found engraved on rocks, crosses, monumental stones, coins, medals, rings, brooches, and the hilts and blades of swords. There is no reason to believe that they were at any time in the familiar use in which we find the characters of a written language in modern times, nor have we any traces of their being used in books or on parchment.

Ru'pert, Knight. Formerly in the villages of Northern Germany, a personage clad in high buskins, white robe, mask, and enormous wig, who at Christmas time distributes presents to the children. Like St. Nicholas, he keeps watch over naughty children. The horseman in the May pageant is in some parts of Germany called Ruprecht, or Rupert.

Rustam. Persian Romances. He is the chief of the Persian mythical heroes, son of Zâl, King of India, and descendant of Benjamin, the beloved son of Jacob. He delivered King Caicaus from prison, but afterwards fell into disgrace because he refused to embrace the religious system of Zoroaster. Caicaus sent his son Asfendiar to convert him, and, as persuasion availed nothing, single combat was resorted to. The fight lasted two days, and then Rustam discovered that Asfendiar bore a "charmed life." The valor of these two heroes is proverbial, and the Persian romances are full of their deeds. "Sohrab and Rustum" form the subject of a poetical romance by Matthew Arnold.

Ruy'dera. Don Quixote, Cervantes. A duenna who had seven daughters and two nieces. They were imprisoned for 500 years in a cavern in Spain. Their ceaseless weeping stirred the compassion of Merlin, who converted them into lakes in the same province.

Sac'ri-pant, King. (1) King of Circassia, and a lover of Angelica, in Bojardo and Ariosto. (2) A personage introduced by Alessandro Tassoni, the Italian poet, in his mock-heroic poem, entitled the "Rape of the Bucket," represented as false, brave, noisy, and hectoring. The name is quoted as a synonym with vanity and braggart courage.

Sagas. The name given to those ancient traditions which form the substance of the history and mythology of the Scandinavian races: the language in which they are written is supposed to be the old Icelandic. In the "Edda" there are numerous sagas. As our Bible contains the history of the Jews, religious songs, moral proverbs, and religious stories, so the "Edda" contained the history of Norway, religious songs, a book of proverbs, and numerous stories. The original "Edda" was compiled and edited by Sæmund Sigfusson, an Icelandic priest and scald, in the Eleventh Century. It contains twenty-eight parts or books, all of which are in verse. Two hundred years later, Snorro Sturleson of Iceland abridged, rearranged, and reduced to prose the "Edda," and his work was called "The Younger Edda." In this we find the famous story called by the Germans the "Nibelungen Lied." Besides the sagas contained in the "Eddas," there are numerous others, and the whole saga literature makes over 200 volumes. Among them are the "Völsunga Saga" which is a collection of lays about the early Teutonic heroes. The "Saga of St. Olaf" is the history of this Norwegian king. "Frithjof's Saga" contains the life and adventures of Frithjof of Iceland. Snorro Sturleson, at the close of the Twelfth Century, made the second great collection of chronicles in verse, called the "Heimskringla Saga." This is a most valuable record of the laws, customs, and manners of the ancient Scandinavians.

Seasons. A well-known poem said to be the foundation of Thomson's literary fame. Its description of the phenomena of nature during an English year is minute, and the poem has been much read by foreigners.

St. Leon. The title of a novel by William Goodwin and the name of its hero, a man who becomes possessed of the elixir of life, and the secret of the transmutation of metals—acquisitions which only bring him misfortunes and much protracted misery.

St. Nich'o-las. The patron saint of boys. He is said to have been Bishop of Myra, and to have died in the year 326. The young were universally taught to revere him, and the popular fiction which represents him as the bearer of presents to children on Christmas eve is well known. He is the Santa Claus (or Klaus) of the Dutch.

St. Patrick's Purgatory. The subject and locality of a legend long famous throughout Europe. The scene is laid in Ireland, upon an islet in Lough Derg. The punishments undergone here are analogous to those described by Dante in his "Divina Commedia." The story was made the subject of a romance in the Fourteenth Century: and, in Spain, in the Seventeenth Century, it was dramatized by Calderon.

St. Swith'in. According to legend this saint was tutor to King Alfred and Bishop of Winchester, and many miracles are attributed to him, especially the rain of St. Swithin's Day.

Salmagundi. The name of a periodical started by Washington Irving, his brother, and James K. Paulding, in the year 1807. The object of the paper was the same as that of the "Spectator," "to reform the town." The publishers became tired of their venture before their subscribers did, and only twenty numbers were issued. The political pieces were full of humor, but were not in support of any party. The wit and satire were connected with things local and would not be thoroughly understood now, or appreciated. The writers touched upon the follies of fashionable life as well as other follies of their day.

Salt-Box House. Title of book by J. D. Shelton and name given to an imaginary house supposed to stand in a Connecticut hill town more than a century ago. The life of the family to whom the house belonged is followed for three generations. The people, like most families of the same social station, had no sympathy with the war for colonial independence. They have little to do with political life, but in their every-day concerns, work and play, school and church, love and marriage, sickness and death, with their old-time customs, traditions and habits of thought they are very interesting. Miss Mary, the last mistress of the Salt-Box House, is a most attractive old maid.

Salt River. An imaginary river, up which defeated political parties are supposed to be sent to oblivion. The name and application said to have originated in the United States and in connection with a river of Kentucky. It is called an American cant or slang name.

Sam'bo. This term and the name Quiffey used to designate the negro race. Both used by Mrs. Stowe in her stories.

Samian Letter, The. The letter Y used by Pythagoras as an emblem of the paths of virtue and of vice.

Samian Sage. Pythagoras, said to have been born at Samos.

Sampson, Dominie. See Dominie Sampson.

Samson Agonistes. The principal character in Milton's sacred drama, Samson Agonistes, or Samson the Combatant. Samson blind and bound triumphs over his enemies. As in the Bible story he grasps two of the supporting pillars and pushes in the central room.

Sancho Panza. The squire and companion of Don Quixote in Cervantes' famous novel. He has much shrewdness in practical matters and a store of homely wisdom. He rode upon an ass which he dearly loved, and was noted for his proverbs.

Sandals of Theramenes. Which would fit any foot. Theramenes, one of the Athenian leaders, was nicknamed "the trimmer" from the number of times he left which might be worn on either foot because no distinction could be placed on him. The proverb: He wears the sandals of Theramenes" is applied to one who shall fairly but do the things that proper to suit themselves.

Sand ford and Mer ton. Harry Sandford and Tommy Merton, the two heroes of Thomas Day's once popular tale for the young, the "History of Sandford and Merton" 1783–1789.

Sanscrit. The ancient language of India, now extinct, from which most of the languages there spoken are derived. It belongs to the Aryan or Indo-European group of tongues. It was considered by Sir William Jones to be more perfect than the Greek, more copious than the Latin, and more refined than either. The earliest existing work is the "Vedas." These, and the "Puranas," are religious writings, but there are also Epic poems, dramas, and philosophical composition.

Santa Claus. In fable he was first known as patron saint of children. The vigil of his feast is still kept in some places, but for the most part his name is now associated with Christmas-tide. The old custom used to be for someone, on December 6th, to assume the costume of a bishop and distribute small gifts to "good children." (See St. Nicholas.)

Santia'go. The war cry of Spain; adopted because St James Saint Iago rendered, according to tradition, signal service to a Christian king of Spain in a battle against the Moors.

Sa tan. One of the names of the Devil, and that by which in the Bible, in poetry, and in popular legends, he is often designated. Those mediæval writers who reckoned nine kinds of demons, placed Satan at the head of the fifth rank, which consisted of sorcerers, as magicians and witches. Milton represents him as the monarch of hell. His chief lords are Beelzebub, Moloch, Chemos, Thammuz, Dagon, Rimmon, and Belial. His standard-bearer, Azaz'el.

Sat'yrane, Faerie Queene, Spenser. A noble knight who delivered Una from the fauns and satyrs. The meaning seems to be that Truth driven from the towns and cities, took refuge in caves and dens, where for a time it lay concealed. At length Sir Satyrane (Luther) rescues Una from bondage; but no sooner is this the case than she falls in with Archimago, to show how very difficult it was at the Reformation to separate Truth from Error.

Saun'ders, Clerk. The hero of a well-known Scottish ballad.

Saun ders, Richard. A feigned name under which Dr. Franklin, in 1732, commenced the publication of an almanac, commonly called "Poor Richard's Almanac" of which the distinguishing feature was a series of maxims of prudence and industry in the form of proverbs.

Saw'ney. A spurious Jewish name applied by the English to the Scotch. It is a corruption of "Sandie," the Scottish abbreviation of "Alexander."

Saw'yer, Bob. Pickwick Papers, Dickens. A drinking young doctor who tries to establish a practice at Bristol, but without success. Sam Weller calls him "Mr. Sawbones."

Scalds, or Skalds. Court poets and chroniclers of the ancient Scandinavians. They resided at court, were attached to the royal suite, and attended the king in all his wars. These bards celebrated in song the feats of the kings of Norway, and national heroes. Few complete Skaldic poems have survived, but a multitude of fragments exist.

Scarlet Letter, The. Title of a romance by Nathaniel Hawthorne. The heroine, Hester Prynne, was condemned to wear conspicuously the letter "A" in scarlet, token of her sin as mother of her child, Pearl, whose father was not known. She was first exposed in disgrace on a raised scaffold, then served a term in prison, and afterward gained a moderate support for herself and child by embroidering. She refused to reveal the name of the father, although she might then be allowed to lay aside the letter. He was always near, held an important position, and lived a life of wearing remorse. After his death Hester Prynne took her child to another country, but returned to spend her old age in seclusion and comfort in the same place that had witnessed her punishment. She always bore herself proudly but not defiantly and brought to herself such love and respect that the scarlet letter became a badge of honor. Roger Chillingworth, Hester's husband, appeared as a learned foreign physician, visited her in prison but promised not to reveal his relation to her and devoted his life to learning her secret. The characters in the story are intense and the analysis of motives subtle.

Schah'riah. Arabian Nights. The Sultan of Persia. His reign was a despotism and his decrees absurd.

Schehe'razade. Arabian Nights. The fabled relater of the stories in these "Entertainments." Among other decrees the sultan had decreed upon a new wife for every day. Tradition or fable tells that Scheherazade, wishing to free Persia of this disgrace, requested to be made the sultan's wife. She was young and beautiful, of great courage and ready wit, had an excellent memory, knew history, was poet, musician, and dancer. Scheherazade obtained permission for her younger sister, Dinarzade, to sleep in the same chamber, and instructed her to say, "Sister, relate to me one of those stories." Scheherazade then told the sultan under pretense of speaking to her sister a story, but always contrived to break off before the story was finished. The sultan, in order to hear the end of the story, spared her life till the next night. This went on for a thousand and one nights, when the sultan's resentment was worn out, and his admiration of his sultana was so great that he revoked his decree.

Schle'mil, Peter. The title of a little work by Chamisso (1781–1838), and the name of its hero, a man who sells his shadow to an evil man in gray (the Devil) who meets him just after he has been disappointed in an application for assistance to a nobleman. The name has become a by-word for any poor, silly, and unfortunate fellow.

Scourge of God. Attila, King of the Huns. A. P. Stanley says the term was first applied to Attila in the Hungarian Chronicles. It is found in a legend belonging to the Eighth or Ninth Century.

Scrooge, Ebenezer. Christmas Carol, Dickens. The prominent character, main partner, executor, and heir of old Jacob Marley, stock-broker. When first introduced, he is a grasping, covetous old man, loving no one and by none beloved. One Christmas, Ebenezer Scrooge sees three ghosts: The Ghost of Christmas Past; the Ghost of Christmas Present; and the Ghost of Christmas To-come. The first takes him back to his young life, shows him what Christmas was to him when a schoolboy, and when he was an apprentice. The second ghost shows him the joyous home of his clerk, Bob Cratchit, who has nine people to feed on what seems a pittance, and yet could find wherewithal to make merry on this day; it also shows him the family of his nephew, and others. The third ghost shows him what would be his lot if he died as he then was, the prey of harpies, the jest of his friends on 'Change. These visions wholly change his nature, and he becomes benevolent, charitable, and cheerful, and makes Christmas a happy day for many within his reach.

Sed'ley, Mr. Vanity Fair, Thackeray. A wealthy London stock-broker, brought to ruin in the money market just prior to the battle of Waterloo. The old merchant tried to earn a living by selling wine, coals, or lottery-tickets by commission, but his bad wine and cheap coals found but few customers. Mrs. Sedley, wife of Mr. Sedley, a homely, kind-hearted woman, soured by adversity, and quick to take offense. Amelia Sedley, daughter of the stock-broker, educated at Miss Pinkerton's academy, and engaged to Captain George Osborne, son of a rich London merchant. After the ruin of Mr. Sedley George marries Amelia, and old Osborne disinherits him. George is killed in the Battle of Waterloo. Amelia is reduced to great poverty, but is befriended by Captain Dobbin, and after many years of patience and great devotion she consents to marry him. Joseph Sedley, vain, shy, and vulgar. He told of his brave deeds, and made it appear that he was Wellington's right hand; so that he obtained the sobriquet of "Waterloo Sedley." He became the "patron" of Becky Sharp, who fleeced him of all his money, and in six months he died under suspicious circumstances. Interest in the novel is centered on Amelia, an impersonation of virtue without intellect as contrasted with Becky Sharp, who is an im-

personation of intellect without virtue. The one has no head, the other no heart.

Se'lim. Bride of Abydos, Byron. The character of Selim is bold, full of enterprise, and faithful. The story runs that Selim was the son of Abdallah and cousin of Zuleika. When Giaffir murdered Abdallah, he took Selim and brought him up as his own son. The young man fell in love with Zuleika, who thought he was her brother; when she discovered he was Abdallah's son, she eloped with him. As soon as Giaffir discovered this he went after the fugitives, and shot Selim. Zuleika killed herself, and the old pacha was left childless. Selim, son of Akbar, in Arabian tales, marries Nourmahal, the "Light of the Harem."

Se'lith. The Messiah, Klopstock. One of the two guardian angels of the Virgin Mary and of John the Divine.

Sellock. Peveril of the Peak, Scott. A servant girl in the service of Lady and Sir Geoffrey Peveril of the Peak.

Sene'na. Madoc, Southey. A Welsh maiden in love with Car'adoc. Under the assumed name of Mervyn she became the page of the Princess Goervyl, that she might follow her lover to America, when Madoc colonized Caer-Madoc. Senena was promised in marriage to another; but when the wedding day arrived, the bride was nowhere to be found.

Sentimental Journey, The. By Laurence Sterne. It was intended to be sentimental sketches of his tour through Italy in 1764, but he died soon after completing the first part.

Septuagint. A Greek version of the books of the Old Testament; so called because the translation is supposed to have been made by seventy-two Jews, who, for the sake of round numbers, are usually called the "seventy interpreters." It is said to have been made at the request of Ptolemy Philadelphus, King of Egypt, about 280 B. C. It is that out of which all the citations in the New Testament from the Old are taken. It was also the ordinary and canonical translation made use of by the Christian Church in the earliest ages; and is still retained in the churches both of the East and West.

Sere'na. Faerie Queene, Spenser. Allured by the mildness of the weather, went into the fields to gather wild flowers for a garland, when she was attacked by the Blatant Beast, who carried her off in its mouth. Her cries attracted to the spot Sir Calidore, who compelled the beast to drop its prey.

Ses'ame. In Arabian tales given as the talismanic word which would open or shut the door leading into the cave of the forty thieves. In order to open it, the words to be uttered were, "Open, Sesame!" and in order to close it, "Shut, Sesame!" Sesame is a plant which yields an oily grain, and hence, when Cassim forgot the word, he substituted "barley," but without effect. Sesame has come into general use in connection with any word or act which will open the way for accomplishment of the thing desired.

Seven Bibles, The, or Sacred Books. (1) The "Bible" of Christians. (2) The "Eddas" of the Scandinavians. (3) The "Five Kings" of the Chinese. (4) The "Koran" of the Mohammedans. (5) The "Tri Pitikes" of the Buddhists. (6) The "Three Vedas" of the Hindûs. (7) "Zendavesta" of the Persians.

Seven Sleepers, The. The tale of these sleepers is told in divers manners. The best accounts are those in the "Korân"; "The Golden Legends," by Jacques de Voragine; the "De Gloria Martyrum," by Gregory of Tours; and the "Oriental Tales," by Caylus. According to one version they were seven noble youths of Ephesus, who fled in the Decian persecution to a cave in Mount Celion, the mouth of which was blocked up by stones. After 230 years they were discovered, and awoke, but died within a few days, and were taken in a large stone coffin to Marseilles. Another tradition is, that Edward the Confessor, in his mind's eye, saw the seven sleepers turn from their right sides to their left, and whenever they turn on their sides it indicates great disasters to Christendom. This idea was introduced by Tennyson in his poem, "Harold."

Seven Wise Masters is the title of a mediæval collection of novels, important both from its contents and its wide-spread popularity. The work is undoubtedly of Oriental origin, yet neither the period when it was composed, nor how far it spread through the East, is known, but it existed in Arabic as a translation from Indian sources before the Eleventh Century. The work became known in literature, sometimes in a complete form, sometimes only particular novels were reproduced, under all sorts of names, in verse and in prose. Latin versions began to appear about the beginning of the Thirteenth Century and parts have been translated into English.

Seven Wise Men. The collective designation of a number of Greek sages, who lived about 620-548 B. C., and devoted themselves to the cultivation of practical wisdom. Their moral and social experience was embodied in brief aphorisms, expressed in verse or in prose.

Sga'na'relle'. The hero of Molière's comedy "Le Mariage Force." He is represented as a humorist of about fifty-three, who having a mind to marry a fashionable young woman, but feeling a doubt, consults his friends upon this momentous question. Receiving no satisfactory counsel, and not much pleased with the proceedings of his bride elect, he at last determines to give up his engagement, but is cudgeled into compliance by the brother of his intended.

Shallow. A braggart and absurd country justice in Shakespere's "Merry Wives of Windsor," and in the second part of "King Henry the Fourth."

Shalott', The Lady of. The heroine of Tennyson's poem of the same name. She weaves into her web all the sights reflected in the mirror which hangs opposite her window; but when Sir Lancelot passes, she leaves her mirror and looks out of the casement at the knight himself, whereupon a curse comes upon her. She entered a boat bearing her name on the prow, floated down the river to Camelot, and died heart broken on the way.

Shan'dy, Mrs. The mother of Tristram Shandy in Sterne's novel of this name. She is the ideal of nonentity, a character individual from its very absence of individuality.

Shan'dy, Tristram. The nominal hero of Sterne's "The Life and Opinions of Tristram Shandy, Gent."

Shan'dy, Walter. The name of Tristram Shandy's father in Sterne's novel of this name, a man of an active and metaphysical, but at the same time a whimsical, cast of mind, whom too much and too miscellaneous learning had brought within a step or two of madness. The romance, "Tristram Shandy," is not built on a regular plot. The hero has no adventures, and the story consists of a series of episodes which introduce the reader to the home-life of an English country family. This family is one of the most amusing.

Sharp, Rebecca. The prominent character in Thackeray's "Vanity Fair," the daughter of a poor painter, dashing, selfish, unprincipled, and very clever, who manages to marry Rawdon Crawley, afterwards his excellency Colonel Crawley, C. B. He was disinherited on account of his marriage with Becky, then a poor governess, but she taught him how to live in splendor on no income. Lord Steyne introduced her to court, but her conduct with this peer gave rise to scandal, which caused a separation between her and Rawdon. She joins her fortunes with Joseph Sedley, a wealthy "collector," of Boggley Wollah, in India. Having insured his life and lost his money, he dies suddenly under very suspicious circumstances. Becky at last assumes the character of a pious, charitable Lady Bountiful, given to all good works.

Shepherdess, The Faithful. A pastoral drama by John Fletcher. The "faithful shepherdess" is Corin, who remains faithful to her lover although dead. Milton has borrowed from this pastoral in his "Comus."

Shepherd of Banbury. The ostensible author of a work entitled "The Shepherd of Banbury's Rules to judge of the Changes of Weather, grounded on Forty Years' Experience, etc.," a work of great popularity among the English poor.

Shepherd of Salisbury Plain, The. The hero and title of a religious tract by Hannah More. The shepherd is noted for his homely wisdom and simple piety.

Shepherd's Pipe. Pan, in Greek mythology, was the god of forests, pastures, and flocks, and was the attributed inventor of the shepherd's flute or pipe, a series of graduated tubes set together (open at one end and closed at the other), played by blowing across the open ends.

Shepherd's Calendar, The. Twelve eclogues in various metres, by Spenser, one for each month. January: Colin Clout (Spenser), bewails that Rosalind does not return his love. February: Cuddy, a lad, complains of the cold, and Thenot laments the degeneracy of pastoral life. March: Willie and Thomalin discourse of love. April: Hobbinol sings a song on Eliza. May: Palinode exhorts Piers to join the festivities of May, but Piers replies that good shepherds who seek their own indulgence expose their flocks to the wolves. June: Hobbinol exhorts Colin to greater cheerfulness. July: Morrel, a goat-herd, invites Thomalin to come with him to the uplands. August: Perigot and Willie contend in song, and Cuddy is appointed arbiter. September: Diggon Davie complains to Hobbinol of clerical abuses. October: On poetry. November: Colin, being asked by Thenot to sing, excuses himself because of his grief for Dido, but finally sings her elegy. December: Colin

again complains that his heart is desolate. Thenot is an old shepherd bent with age, who tells Cuddy, the herdsman's boy, the fable of the oak and the briar, one of the best-known fables included in the calendar.

Sheridan's Ride. A lyric by T. B. Read, one of the few things written during the heat of the Civil War that is likely to survive.

She Stoops to Conquer. This well-known comedy by Oliver Goldsmith is said to have been founded on an incident which actually occurred to its author. When Goldsmith was sixteen years of age, a wag residing at Ardagh directed him, when passing through that village, to Squire Fetherstone's house as the village inn. The mistake was not discovered for some time, but all concerned enjoyed the joke. "She Stoops to Conquer" is one of the gayest, pleasantest, and most amusing pieces of English comedy.

Shin'gebis. In Longfellow's "Hiawatha," the diver who challenged the North Wind and put him to flight in combat.

Shocky. The Hoosier School-master, Edw. Eggleston. The little lad from the poorhouse who adores the school-master and early warns him of plans for upsetting his authority. He is also a small poet, not in rhyming, but in comprehension of things about him and in his way of looking at life, and he grows to be a helper in the "Church of the Best Licks," founded by the school-master. He is brother to Hannah whom the master loves. Shocky and Hannah and their companions in the story bring the speech and life of their people and their time into American literature.

Shy'lock. A sordid, avaricious, revengeful Jew, in Shakespere's "Merchant of Venice."

Siege Perilous, The. The Round Table contained sieges or seats in the names of different knights. One was reserved for him who was destined to achieve the quest of the holy graal. This seat was called "perilous," because if any one sat therein except he for whom it was reserved it would be his death. This seat finally bore the name of Sir Galahad.

Siegfried. The hero of various Scandinavian and Teutonic legends, particularly of the old German epic poem, the "Nibelungen Lied." He is represented as a young warrior of physical strength and beauty, and in valor superior to all men of his time. He cannot easily be identified with any historical personage.

Sikes, Bill. A brutal thief and housebreaker in Dickens's novel "Oliver Twist." He murders his mistress, Nancy, and in trying to lower himself by a rope from the roof of a building where he had taken refuge from the crowd, he falls and is choked in a noose of his own making. Sikes had an ill-conditioned savage dog, the beast-image of his master, which he kicked and loved, ill-treated and fondled.

Silken Thread. Gulliver's Travels. In the kingdom of Lilliput, the three great prizes of honor are "fine silk threads six inches long, one blue, another red, and a third green." The thread is girt about the loins, and no ribbon of the Legion of Honor, or Knight of the Garter, is won more worthily or worn more proudly.

Sind'bad the Sailor. A character in the "Arabian Nights," in which is related the story of his strange voyages and wonderful adventures.

Si'non. In Virgil's "Æneid" the cunning Greek, who, by a false tale, induced the Trojans to drag the Wooden Horse into Troy.

Sleeping Beauty. The heroine of a celebrated nursery tale which relates how a princess was shut up by fairy enchantment, to sleep a hundred years in a castle, around which sprung up a dense, impenetrable wood. At the expiration of the appointed time, she was delivered from her imprisonment and her trance by a gallant young prince, before whom the forest opened itself to afford him passage. Grimm derives this popular and widely diffused tale from the old northern mythology.

Slender. A silly youth in Shakespere's "Merry Wives of Windsor," who is an unsuccessful suitor for the hand of "Sweet Anne Page."

Slick, Sam. The title and hero of various humorous narratives, illustrating and exaggerating the peculiarities of the Yankee character and dialect written by Judge Thomas C. Haliburton. Sam Slick is represented as a Yankee clockmaker and peddler, full of quaint drollery, unsophisticated wit, knowledge of human nature, and aptitude in the use of what he calls "soft sawder."

Slop, Dr. The name of a choleric and uncharitable physician in Sterne's novel, "The Life and Opinions of Tristram Shandy, Gent."

Slough of Despond. Pilgrim's Progress, Bunyan. A deep bog, which Christian had to pass on his way to the Wicket Gate. Neighbor Pliable would not attempt to pass it, and turned back. While Christian was floundering in the slough, Help came to his aid, and assisted him over.

Sly, Christopher, Taming of the Shrew, Shakespere. A keeper of bears and a tinker, son of a pedlar, and a sad drinker.

Song of Roland. An ancient song recounting the deeds of Roland, the renowned nephew of Charlemagne, slain in the pass of Roncesvalles. At the battle of Hastings, Taillefer advanced on horseback before the invading army, and gave the signal for onset by singing this famous song. (See Roland.)

Songs of the Sierras. A collection of poems by Joaquin Miller, which made him known on two continents within a year of their publication. The title explains the chief subject of the songs.

Spectator, The. A periodical famous in literature in which most of the articles were written by Addison or Sir Richard Steele. The first number was published in London in the year 1711, the last, No. 635, was issued in December, 1714. The most noted of Addison's writings is said to be the series of sketches in "The Spectator," of which Sir Roger de Coverley is the central figure, and Sir Andrew Freeport and Will Honeycomb the side ones. Sir Roger himself is an absolute creation; the gentle yet vivid imagination, the gay spirit of humor and the keen shrewd observation mark it a work of pure genius. In this Addison has given a delicacy to English sentiment, and a modesty to English wit which it never knew before. Dr. Johnson says, "to attain an English style, familiar but not coarse, and elegant, but not ostentatious, one must give his days and nights to the volumes of Addison."

Sphinx. A Greek word, applied to certain symbolical forms of Egyptian origin. The most remarkable Sphinx is the Great Sphinx at Gizeh, a colossal form, hewn out of the natural rock. Immediately in front of the breast is a small naos, or chapel, formed of three hieroglyphical tablets. Votive inscriptions of the Roman period, some as late as the Third Century, were discovered in the walls and constructions. On the second digit of the left claw of the Sphinx, an inscription, in pentameter Greek verses, by Arrian, was discovered. Another metrical and prosaic inscription was also found. In Assyria and Babylonia, representations of Sphinxes have been found, and the same are not uncommon on Phenician works of art.

Squeers. Name of a family prominent in Dickens's "Nicholas Nickleby." Wackford Squeers, master of Dotheboy's Hall, Yorkshire, a vulgar, conceited, ignorant schoolmaster, overbearing and mean. He steals the boys' pocket money, clothes his son in their best suits, half starves them, and teaches them next to nothing. Ultimately he is transported for theft. Mrs. Squeers, a raw-boned, harsh, heartless virago, with no womanly feeling for the boys put under her charge. Miss Fanny Squeers, daughter of the schoolmaster. Miss Fanny falls in love with Nicholas Nickleby, but later hates him because he is insensible to the soft impeachment. Master Wackford Squeers, overbearing, self-willed and passionate. The picture of this family and their ways had great influence on the schools of England, by rousing the people to a knowledge of their management.

Squire of Dames. A personage introduced by Spenser in the "Faërie Queen," and whose curious adventures are there recorded. It is often used to express a person devoted to the fair sex.

Steer'forth. David Copperfield, Dickens. The young man who led little Em'ly astray. When tired of his toy, he proposed to her to marry his valet. Steerforth being shipwrecked off the coast of Yarmouth, Ham Peggotty tried to rescue him, but both were drowned.

Sten'tor. A Grecian herald in the Trojan War, whom Homer describes as "great-hearted, brazen-voiced Stentor, accustomed to shout as loud as fifty other men."

Steph'a-no. (1) A drunken butler, in Shakespere's "Tempest." (2) A servant to Portia, in Shakespere's "Merchant of Venice."

Stig'gins, Rev. Mr. A red-nosed, hypocritical "shepherd," or Methodist parson, in Dickens's "Pickwick Papers," with a great appetite for pineapple rum. He is the spiritual adviser of Mrs. Weller, and lectures on temperance.

Stone of Sar'dis. The Great Stone of Sardis, Stockton. In this stone the imaginary science of the future is joined to the actual science of to-day in an extremely plausible way. The North Pole is visited by a submarine vessel, a light is found capable of penetrating for miles into the interior of the earth, and finally the center of that earth is discovered to be an enormous diamond.

Storm-and-stress Period. In the literary history of Germany, the name given to a period of great intel-

lectual convulsion, when the nation began to assert its freedom from the fetters of an artificial literary spirit. The period derives its name from a drama of Klinger (1753–1831), whose high-wrought tragedies and novels reflect the excitement of the time.

Sur'name. The overname; either the name written over the Christian name, or given over and above it; an additional name. For a long time persons had no family name, but only one, and that a personal name. Plato recommended parents to give happy names to their children; and the Pythagoreans taught that the minds, actions, and successes of men were according to their names, genius and fate. The popes changed their names at their exaltation to the pontificate, "a custom introduced by Pope Sergius." In France it was usual to change the name given at baptism, as was done in the case of two sons of Henry II. of France. They were christened Alexander and Hercules; but at their confirmation, these names were changed to Henry and Francis. It is usual for the religious at their entrance into monasteries to assume new names, to show they are about to lead a new life.

Swallow Barn. The three novels, "Swallow Barn," "Horse-Shoe Robinson," and "Rob of the Bowl," besides their value as works of art, are all careful historical studies giving admirable pictures of life in the Southern States in the earlier days of the republic. They were written by John P. Kennedy, who is quoted in literature as next after Cooper among American novelists.

Swiv'el-ler, Dick. A careless, light-headed fellow in Dickens's novel of the "Old Curiosity Shop," whose flowery orations and absurdities of quotation provoke laughter, but whose real kindness of heart enlists sympathy.

Tab'ard. The name of the Inn at Southwark where the pilgrims in Chaucer's "Canterbury Tales" assembled. It took its name from its sign, a tabard, or herald's jacket.

Tales of a Wayside Inn. Name given by Longfellow to a collection of short poems arranged by himself and collected together much in the same form as Chaucer's "Canterbury Tales." These "tales" were mostly gathered from old literatures and translated into Longfellow's own verse, only one, "The Birds of Killingworth," is said to be entirely original. Seven narrators are represented: the Landlord, the Student, the Spanish Cavalier, the Jew, the Sicilian, the Musician, and the Theologian. Four colonial tales are included in the work. "Paul Revere's Ride," "Elizabeth," "Lady Wentworth," and "The Rhyme of Sir Christopher."

Tal'mud is a Hebrew word meaning doctrine. It is a name applied to a work containing traditions respecting the usages and laws of the Jewish people. The law, among that people, was divided into the written and the unwritten. The written law embraced the five books of Moses; the unwritten was handed down orally; the oral being, in fact, explanatory of the written. But, in time, the oral came, also, to be put in writing, and formed the text of the Talmud. This was first done, it is believed, about the year 200. There are two separate commentaries on this text, which are distinguished as the Babylonian and the Jerusalem. The Talmud of Jerusalem consists of two parts, the "Mishna" and the "Gemara." The "Mishna" is more correct than the "Gemara," which is filled with dreams and foolish disputations. The Talmud of Babylon, which is of higher authority among the Jews than that of Jerusalem, was composed by Rabbi Aser, who lived near Babylon; he did not live to finish it, but it was completed by his disciples about 500 years after Christ.

Tam O'Shanter. The title of a poem by Burns, and the name of its hero, a farmer, who, riding home very late and very drunk from Ayr, in a stormy night, had to pass by the kirk of Alloway, a place reputed to be a favorite haunt of the Devil and his friends and emissaries. On approaching the kirk, he perceived a light gleaming through the windows; but having got courageously drunk, he ventured on till he could look into the edifice, when he saw a dance of witches. His presence became known and, in an instant all was dark, and Tam, recollecting himself, turned and spurred his horse to the top of her speed, chased by the whole fiendish crew. It is a current belief that witches, or any evil spirits, have no power to follow a poor wight any farther than the middle of the next running stream. Fortunately for Tam, the River Doon was near and Tam escaped while the witches held only the tail of his mare, Maggie. It has been said of "Tam O'Shanter" that in no other poem of the same length can there be found so much brilliant description, pathos, and quaint humor, nor such a combination of the terrific and the ludicrous.

Te Deum. A well-known hymn (so called from its first words) of the Roman Catholic Church, sung on all occasions of triumph and thanksgiving, and a theme upon which the most celebrated composers have exercised their musical genius. The hymn is one of the most simple and at the same time the most solemn and majestic in the whole range of the hymnology of the Roman Catholic Church. Its authorship is uncertain.

Tann'häuser. A famous legendary hero of Germany, and the subject of an ancient ballad of the same name. The noble Tannhäuser is a knight devoted to valorous adventures and to beautiful women. In Mantua, he wins the affection of a lovely lady, Lisaura, and of a learned philosopher, Hilario, with whom he converses frequently upon supernatural subjects. Enchanted by marvelous tales, he wishes for nothing less than to participate in the love of some beauteous elementary spirit, who shall, for his sake, assume the form of mortal woman. Hilario promises to grant even more than he has wished, if he will have courage to venture upon the Venusberg. Tannhäuser ascends the mountain and, hearing of his departure, Lisaura dies. Tannhäuser stays long on the enchanting mountain, but at last, moved to repentance, he obtains permission to depart. He hastens to Mantua, weeps over the grave of Lisaura, and thence proceeds to Rome, where he makes public confession of his sins to Pope Urban. The pope refuses him absolution, saying he can no more be pardoned than the dry wand which he holds can bud and bear green leaves. Tannhäuser, flees from Rome, and vainly seeks his former preceptor, Hilario. Venus appears before him, and, lures him back to the mountain, there to remain until the day of judgment. Meanwhile, at Rome the dry wand bears leaves. Urban, alarmed at this miracle, sends messengers in search of the unhappy knight; but he is nowhere to be found. This Tannhäuser legend is very popular in Germany, and is often alluded to by German writers. Tieck has made it the subject of a narrative, and Wagner of an opera which has gained great celebrity.

Tar-tuffe'. A common nick-name for a hypocritical pretender to religion. It is derived from a celebrated comedy of the same name by Molière, in which the hero, a hypocritical priest, is so called.

Tea'zle, Lady. The heroine of Sheridan's comedy, "The School for Scandal," and the wife of Sir Peter Teazle, an old gentleman who marries late in life. She is represented as being "a lively and innocent, though imprudent, country girl, transplanted into the midst of all that can bewilder and endanger her, but with enough of purity about her to keep the blight of the world from settling upon her.

Tea'zle, Sir Peter. A character in Sheridan's play, "The School for Scandal," husband of Lady Teazle.

Tempest, The. This has been called one of Shakespere's fairy plays. The story of it runs: Prospero, Duke of Milan, was dethroned by his brother Antonio, and left on the open sea with his three-year old daughter, Miranda, in "a rotten carcass of a boat." In this they were carried to an enchanted island, uninhabited except by a hideous creature, Caliban, the son of a witch. Prospero was a powerful enchanter, and soon had not only Caliban, but all the spirits of the region under his control, including Ariel, chief of the spirits of the air. Years afterward Antonio, Alfonso, Sebastian and other friends of the usurper came near the island. Prospero, by his magic, raises a storm which casts their ship on the shore and the whole party are spell-bound and brought to Prospero. Plots and counter-plots follow, bringing in Caliban and clowns, but all are made ridiculous and defeated by Prospero and Ariel.

Ten'son. A kind of poem among the troubadours which carries on a contention or dispute, apparently serious, and often concerning love. The tenson was usually recited by two persons in alternating stanzas. The greater number of these are found in early Italian and French literature.

Ten Times One. A writing in story form by E. E. Hale. It is said that the inspiration of this story led to the founding of the "King's Daughters" Society.

Thaddeus of Warsaw. The hero and title of a novel by Jane Porter.

Thang'brand. Tales of a Wayside Inn, H. W. Longfellow. King Olaf's drunken priest, "short of stature and large of limb," who was sent to Iceland, found the people poring over their books, and sailed back to Norway to say to Olaf that there was "little hope of those Iceland men."

Thek'la. The daughter of Wallenstein, in Schiller's drama of this name. She is an invention of the poet.

Theodo'rus. The name of a physician, in Rabelais's romance of "Gargantua." At the request of Ponocrates, Gargantua's tutor, he undertook to cure the latter of his vicious manner of living, and accordingly purged him canonically with Anticyrian hellebore, by which medicine he cleared out all the foulness and perverse

habit of his brain, so that he became a man of great honor, sense, courage, and piety.

Thor'berg Skaft'ing. Tales of a Wayside Inn, H. W. Longfellow. The master-builder ordered by King Olaf to build a ship twice as long and twice as large as the "Dragon" built by Rand the Strong, which was stranded. Thorberg built the ship, watching his workmen closely, and when she was ready for launching King Olaf and the workmen were amazed to see every plank down her sides cut with deep gashes and more amazed to find that Thorberg had done the deed. From these gashes he then chipped and smoothed the sides, to the delight of all; she was christened the "Long Serpent" and the name of her builder recited in the Saga.

Thorpe, Harry. The Blazed Trail, S. E. White. The hero of the novel a vigorous young man, who, as a "land-looker," finds and takes up a valuable timber tract, against the crafty old corporation which seeks first to steal the timber, then to forestall him in buying it, and finally to ruin him. The true romance of the story is that of the forest and the titanic struggle of man against nature and against man.

Three Kings, Feast of the. A famous mediæval festival, identical with Epiphany. But the name is more particularly given to a kind of dramatic or spectacular representation of the incidents recorded in the second chapter of Matthew — as, the appearance of the wise men in splendid pomp at the court of Herod, the miraculous star, the manger at Bethlehem, the solemn and costly worship of the Babe — which was long very popular.

Three Kings of Cologne, The. The three "Wise Men" who followed the guiding star "from the East" to Jerusalem, and offered gifts to the babe Jesus.

Thunderer, The. Name popularly given to the English newspaper, the "London Times." The accepted version of the way in which the great journal got its name of "The Thunderer," is that Captain Sterling, one of the "staff," once wrote a sort of apology in reference to a mistaken assertion and used the phrase "We thundered out." This caught the public fancy, hence the name. Captain Sterling was a well-known figure in London political circles and was father of the more famous John Sterling, critic, essayist, and friend of Wordsworth, Coleridge, and De Quincey.

Thyrsis. Corydon and Thyrsis are favorite names given to shepherds by writers of pastoral poetry. So also, Phyllis and Thestylis are names often applied to rustic maidens or shepherdesses.

Tibbs or **Tibs.** A character in Goldsmith's "Citizen of the World," quoted as a "most useful hand." He will write you a receipt for the bite of a mad dog, tell you an Eastern tale to perfection, and understands the business part of an author so well that no publisher can humbug him.

Tigg, Mon'tague. Martin Chuzzlewit, Dickens. A clever impostor, who lives by his wits. He starts a bubble insurance office and makes considerable gain thereby. Having discovered the attempt of Jonas Chuzzlewit to murder his father, he compels him to put his money in the "new company," but Jonas afterwards murders him.

Ti'mon. Timon of Athens, Shakespere. The drama begins with the joyous life of Timon, and his hospitable extravagance, launches into his pecuniary embarrassment, and the discovery that his "professed friends" will not help him, and ends with his flight into the woods, his misanthropy, and his death. Introduced into the play is "Timon's Banquet." Being shunned by his friends in adversity, he pretended to have recovered his money, and invited his false friends to a banquet. The table was laden with covers, but when the contents were exposed, nothing was provided but lukewarm water.

Ti'ny Tim. Christmas Stories, Dickens. A striking character, the little son of Bob Cratchett, whose family were made happier by gifts from the converted Scrooge. (See Scrooge.)

Tirzah'. Ben Hur, General Lew Wallace. A beautiful Jewish maiden, sister of Ben Hur. Their father had been a prince of Jerusalem, and died leaving a large estate. At the age of fifteen, Tirzah, with her mother, was imprisoned through the cruelty of Messala who coveted their property. They both became lepers and when released from prison were forced to live among the outcasts. They were healed by Jesus, Ben Hur, himself, witnessing the miracle. As soon as the change in their look had taken place he recognized them, and when the Jewish statutes had been complied with, Tirzah and her mother were united with their brother in their former home.

Tippecanoe'. Name given to William Henry Harrison during the political canvass which preceded his election, on account of the victory gained by him over the Indians in the battle which took place on the 6th of November, 1811, at the junction of the Tippecanoe and Wabash rivers.

Toby, Uncle. A character in Sterne's "Tristram Shandy." A captain who was wounded at the siege of Namur, and was obliged to retire from the service. He is the impersonation of kindness, benevolence, and simple-heartedness; his courage is undoubted, his gallantry delightful for its innocence and modesty.

Token, The. A collection of original articles, prose and poetry, by various contributors, issued first in the year 1824. This was the first "annual" that appeared in our country; it became popular and was continued for fifteen years under the supervision of "Peter Parley."

Tom, Dick, and Harry. An appellation very commonly employed to designate a crowd or rabble.

Tommy At'kins. Barrack-room Ballads, Kipling. The name is here used in its general meaning, a British soldier. The name came from the little pocket ledgers served out, at one time, to all British soldiers. In these manuals were to be entered the name, the age, the date of enlistment, etc. The War Office sent with each little book a form for filling it in, and the hypothetical name selected was "Tommy Atkins." The books were instantly so called, and it did not require many days to transfer the name from the book to the soldier.

Tom Saw'yer. Adventures of Tom Sawyer, Mark Twain. An "elastic" youth whose performances delight both old and young readers. Queer enterprises influenced by the old superstitions among slaves and children in the Western States give reliable pictures of boy-life in the middle of the Nineteenth Century.

Tom the Piper. One of the characters in the ancient Morris dance, represented with a tabour, tabour-stick, and pipe. He carried a sword and shield, to denote his rank.

Tom Thumb. In legendary history a dwarf no larger than a man's thumb. He lived in the reign of King Arthur, by whom he was knighted. He was killed by the poisonous breath of a spider in the reign of the successor of King Arthur. Amongst his adventures it is told that he was lying one day asleep in a meadow, when a cow swallowed him as she cropped the grass. At another time, he rode in the ear of a horse. He crept up the sleeve of a giant, and so tickled him that he shook his sleeve, and Tom, falling into the sea, was swallowed by a fish. The fish being caught and carried to the palace, gave the little man his introduction to the king. The oldest version of this nursery tale is in rhyme.

To'nio. Daughter of the Regiment, Donizetti. The name of the youth who saved Maria, the sutler-girl from falling down the precipice. The two fall in love with each other, and the regiment consents to their marriage, provided Tonio will enlist under its flag. No sooner is this done than the marchioness of Berkenfield lays claim to Maria as her daughter, and removes her to the castle. In time, the castle is besieged and taken by the very regiment into which Tonio had enlisted, and, as Tonio had risen to the rank of a French officer, the marchioness consents to his marriage with her daughter.

Top'sy. Uncle Tom's Cabin, Mrs. Stowe. A young slave-girl, who never knew whether she had either father or mother, and being asked by Miss Ophelia St. Clare how she supposed she came into the world, replied, "I'spects I growed." Topsy illustrates the ignorance, low moral development, and wild humor of the African character, as well as its capacity for education.

Touchstone. A clown in Shakespere's "As You Like It."

Townley Mysteries. Certain religious dramas; so called because the MS. containing them belonged to P. Townley. These dramas are supposed to have been acted at Widkirk Abbey, in Yorkshire.

Trad'dles. David Copperfield, Dickens. A simple, honest young man, who believes in everybody and everything and who is never depressed by his want of success. He had the habit of brushing his hair up on end, which gave him a look of surprise. Traddles was generally accompanied by "the dearest girl" and her numerous sisters.

Tragedy and Comedy. The earliest regular tragedy written in English was the play of "Gorboduc" by Thomas Sackville. This was acted in the year 1562. The first English comedy was "Ralph Royster Doyster," acted in 1551, and written by Nicholas Udall.

Triads. Three subjects more or less connected formed into one continuous poem or subject: thus the "Creation, Redemption, and Resurrection" would form a triad. The conquest of England by the Romans, Saxons, and Normans would form a triad. The Welsh triads, known in literature, are collections of historic facts,

mythological traditions, moral maxims, or rules of poetry disposed in groups of three.

Trim, Corporal. Uncle Toby's attendant, in Sterne's novel, "The Life and Opinions of Tristram Shandy, Gent," distinguished for his fidelity and affection, his respectfulness, and his volubility.

Tris'tram, Sir. One of the most celebrated heroes of mediæval romance. His adventures form an episode in the history of Arthur's Court, and are related by Thomas the Rhymer, as well as by many romancists.

Trot'wood, Betsey. David Copperfield, Dickens. A great-aunt to David whose daily trial seemed to be donkeys. A dozen times a day would she rush on the green before her house to drive off the donkeys and donkey-boys. She was a most kind-hearted woman, who concealed her tenderness under a snappish manner. Miss Betsey was the true friend of David Copperfield.

Troubadours were minstrels of Southern France in the Eleventh, Twelfth, and Thirteenth Centuries. They were the first to discard Latin and use the native tongue in their compositions. Their poetry was either about love and gallantry, or war and chivalry. In Northern France they were called Trouvères and the language employed was the Walloon. The troubadours were held in high esteem by the Court in England. They furnished literature for the readers, and so wielded potent influence over English thought and language.

Trovato're. Il Trovatore, Verdi. This opera is founded on a drama belonging to the Fifteenth Century. The story is that Trovatore, or the Troubadour, is Manrico, the supposed son of a gypsy but really a brother to the count. The princess Leono'ra falls in love with the troubadour, but the count is about to put Manrico to death, when Leonora intercedes on his behalf, and promises to give herself to him if he will spare her lover. The count consents; but while he goes to release his captive, Leonora kills herself by sucking poison from a ring. When Manrico discovers this sad calamity, he dies also.

Tuck, Friar. Ivanhoe, Scott. The father-confessor of Robin Hood and connected with Fountain's Abbey. He is represented as a clerical Falstaff, very fat and self-indulgent, very humorous, and somewhat coarse. His dress was a russet habit of the Franciscan order. He was sometimes girt with a rope of rushes. Friar Tuck also appears in the "Morris dance" on May-day.

Tur'vey-drop. Bleak House, Dickens. A conceited dancing-master, who imposes on the world by his majestic appearance and elaborate toilette. He is represented as living upon the earnings of his son, who has a most slavish reverence for him as a perfect "master of deportment."

Twelfth Night, a drama by Shakespere. The story is said to have come from a novelette written early in the Sixteenth Century. A brother and sister, twins, are shipwrecked. Viola dressed like her brother becomes page to the duke Orisino. The duke was in love with Olivia, and as the lady looked coldly on his suit, he sent Viola to advance it, but the wilful Olivia, instead of melting towards the duke, fell in love with his beautiful page. Sebastian, the twin-brother of Viola, was attacked in a street brawl before Olivia and thinking him to be the page she invited him in. The result was the marriage of Sebastian to Olivia and the duke to Viola.

Twice-Told Tales. This name was given by the author, Nathaniel Hawthorne, to the tales included under its title, because some of them had been already published in the "Token," and other periodicals. They are mystical and though in prose form are the work of a poet. The tales are nearly all American in subject but treated from the spiritual rather than the practical side.

Two Gentlemen of Vero'na, a drama by Shakespere, the story of which is taken from the "Diana" of Montemayor (Sixteenth Century). The plot resembles that of Twelfth Night, as Julia, disguised as a page, is a prominent figure.

Ubal'do. Jerusalem Delivered, Tasso. One of the older crusaders, who had visited many regions. He and Charles the Dane went to bring back Rinaldo from the enchanted castle.

Ube'da. Don Quixote, Cervantes. A noted artist who one day painted a picture, but was obliged to write under it, "This is a cock," in order that the spectator might know what was intended to be represented.

U'lin. Tales of the Genii, Ridley. An enchantress, who had no power over those who remained faithful to Allah and their duty; but if any fell into error or sin, she had full power to do as she liked. Thus, when Misnar (Sultan of India) mistrusted the protection of Allah, she transformed him into a toad.

Ul-ri'ca. A hideous old sibyl in Sir Walter Scott's "Ivanhoe."

Ul'tima Thule. The extremity of the world; the most northern point known to the ancient Romans. Pliny and others say it is Iceland.

U'na. Faerie Queen, Spenser. The personification of truth. She goes, leading a lamb and riding on a white ass, to the court of Gloriana, to crave that one of her knights might undertake to slay the dragon which kept her father and mother prisoners. The adventure is accorded to the Red Cross Knight. Being driven by a storm into "Wandering Wood," a vision is sent to the knight, which causes him to leave Una and she goes in search of him. In her wanderings a lion becomes her attendant. After many adventures, she finds St. George, "the Red Cross Knight," but he is severely wounded. Una takes him to the house of Holiness, where he is carefully nursed, and then leads him to Eden.

Uncle Tom. Uncle Tom's Cabin, Stowe, Mrs. A negro slave of unaffected piety, and most faithful in the discharge of all his duties. His master, a humane man, becomes embarrassed in his affairs, and sells him to a slave-dealer. After passing through various hands, and suffering intolerable cruelties, he dies.

Underground Railroad, The. A popular embodiment of the various ways in which fugitive slaves from the Southern States of the American Union were assisted in escaping to the North, or to Canada; often humorously abbreviated U. G. R. R.

Un'dine. In French fable a water-nymph, who was exchanged for the young child of a fisherman living near an enchanted forest. One day, Sir Huldbrand took shelter in the fisherman's hut, fell in love with Undine, and married her. By marrying a mortal she obtained a soul, and with it all the pains and penalties of the human race.

Ur'gan. Lady of the Lake, Scott. A human child stolen by the king of the fairies, and brought up in elf-land. He said to Alice Brand (the wife of Lord Richard), "if any woman will sign my brow thrice with a cross, I shall resume my proper form." Alice signed him thrice, and Urgan became at once "the fairest knight in all Scotland," and Alice recognized in him her own brother Ethert.

Urgan'da. In the romance of "Amadis de Gaul," a powerful fairy sometimes appearing in all the terrors of an evil enchantress.

U'ther. Son of Constans, one of the fabulous or legendary kings of Britain, and the father of Arthur.

Uto'pia. The name of an imaginary island described in the celebrated work of Sir Thomas More, in which was found the utmost perfection in laws, politics, and social arrangements. More's romance obtained a wide popularity, and the epithet "Utopian" has since been applied to all schemes for the improvement of society which are deemed not practicable.

Val'en-tine. (1) One of the heroes in the old romance of "Valentine and Orson," which is of uncertain age and authorship. (2) One of the "Two Gentlemen of Verona," in Shakespere's play of that name. (3) A gentleman attending on the Duke in Shakespere's "Twelfth Night." (4) One of the characters in Goethe's "Faust." He is a brother of Margaret.

Vale'rian or **Vall'rian. Canterbury Tales, Chaucer.** The husband of St. Cecilia. Cecilia told him she was beloved by an angel, who constantly visited her; and Valirian requested to see this visitant. Cecilia replied that he should do so, if he went to Pope Urban to be baptized. This he did, and on returning home the angel gave him a crown of lilies, and to Cecilia a crown of roses, both from the garden of paradise.

Valley of Humiliation. Pilgrim's Progress, Bunyan. The place where Christian encountered Apollyon, just before he came to the "Valley of the Shadow of Death."

Van'ity Fair. Pilgrim's Progress, Bunyan. (1) A fair established by Beelzebub, Apollyon, and Legion, for the sale of all sorts of vanities. It was held in the town of Vanity, and lasted all the year round. Here were sold houses, lands, trades, honors, titles, kingdoms, and all sorts of pleasures and delights. Christian and Faithful had to pass through the fair, which they denounced. (2) Thackeray gave the name, "Vanity Fair," to the first of his famous works. It has been called "A novel without a hero." (See Sedley.)

Veck, Toby. The Chimes, Dickens. A ticket-porter who went on errands and bore the nickname Trotty. One New Year's Eve he had a nightmare and fancied he had mounted to the steeple of a neighboring church, and that goblins issued out of the bells. He was roused from his sleep by the sound of the bells ringing in the new year.

Veda. The technical name of those ancient Sanscrit works on which the first period of the religious belief of the Hindus is based.

Veiled Prophet. Lalla Rookh, Moore. He assumed to be a god, and maintained that he had been Adam, Noah, and other representative men. Having lost an eye, and being otherwise disfigured in battle, he wore a veil to conceal his face, but his followers said it was done to screen his dazzling brightness.

Ve'ni Crea'tor Spi'ritus. An ancient and very celebrated hymn of the Roman Breviary, which occurs in the offices of the Feast of Pentecost, and which is used in many of the most solemn services of the Roman Catholic Church. Its author is not known with certainty.

Ver'non, Die or **Diana. Rob Roy, Scott.** The heroine of the story, a high-born girl of great beauty and talents. She is an enthusiastic adherent to a persecuted religion and an exiled king. She is excluded from the ordinary wishes and schemes of other girls by being predestined to a hateful husband or a cloister, and by receiving a masculine education, under the superintendence of two men of talent and learning.

Version of the Scriptures. The common English version of the Scriptures, the most remarkable of Bible translations, was made by a company of forty-seven scholars who did their work at the request of King James I. The version was published in 1611. "Tyndale's translation of the New Testament is the most important philological monument of the first half of the Sixteenth Century, both as an historical relic, and as having more than anything else contributed to shape and fix the sacred dialect, and establish the form which the Bible must permanently assume in an English dress."

Vicar of Wakefield. The hero of Goldsmith's novel of the same name, Dr. Primrose, a simple-minded, pious clergyman, with six children. He begins life with a good fortune, a handsome house, and wealthy friends, but is reduced to poverty without any fault of his own, and, being reduced like Job, like Job he is restored. (See Primrose).

Vin-cen'ti-o. The Duke of Vienna in Shakespere's "Measure for Measure." He commits his scepter to Angelo, under the pretext of being called to take an urgent and distant journey, and by exchanging the royal purple for a monk's hood, observes incognito the condition of his people.

Vi'ola. Twelfth Night, Shakespere. A sister of Sebastian. They were twins, and so much alike that they could be distinguished only by their dress. When they were shipwrecked Viola was brought to shore by the captain, but her brother was left to shift for himself. Being in a strange land, Viola dressed as a page, and, under the name of Cesario, entered the service of Orsino, Duke of Illyria. The duke greatly liked his beautiful page, and, when he discovered her true sex, married her.

Violen'ta. All's Well that Ends Well, Shakespere. A character in the play who enters upon the scene only once and then she neither speaks nor is spoken to. The name has been used to designate any young lady nonentity; one who contributes nothing to the amusement or conversation of a party.

Vin'land. A name given, according to Snorro Sturleson, by Scandinavian voyagers, to a portion of the coast of North America discovered by them toward the close of the Tenth Century, well wooded, and producing agreeable fruits, particularly grapes. It is thought to have been some part of the coast of Massachusetts or Rhode Island.

Viv'ien or **Viv'ian. Idylls of the King, Tennyson.** She is also known as the Lady of the Lake, and according to early legends was of a high family. These legends tell that Merlin in his dotage, fell in love with her, and she imprisoned him in the forest of Brittany. She then persuaded Merlin to show her how a person could be imprisoned by enchantment without walls, towers, or chains, and after he had done so, she put him to sleep. While he slept, she performed the needful ceremonies, whereupon he found himself enclosed in a prison stronger than the strongest tower, and from that imprisonment was never again released.

Volapuk. This so-called universal language was invented in 1879, by Johann Martin Schleyer, a Swabian pastor and later a teacher in Constance. Of the vocabulary, about one-third is of English origin, while the Latin and Romance languages furnish a fourth. The grammar is simplified to the utmost.

Vulgate. Name given to a version of the Scriptures made in Latin, probably by St. Jerome, about the year 380. This version was authorized by the Council of Trent in the year 1546.

Walden. A record of the experiences of the author, Thoreau, while living near Walden Pond, on nine cents a day. He read Homer, watched the birds, bees, ants, and the animals that came within his range, describing the results of his acute powers of observation in a characteristic, quaint form.

Wa'verley. Name of hero and title of novel by Scott. Waverley was captain of "Waverley Honour" and after an injury he resigned his commission, and proposed to Flora M'Ivor, but was not accepted. Flora's brother, Fergus M'Ivor, introduced him to Prince Charles Edward. He entered the service of the Young Chevalier, and in the battle of Preston Pans saved the life of Colonel Talbot. The colonel, out of gratitude, obtained the pardon of young Waverley, who then married Rose Bradwardine, and settled down quietly in Waverley Honour. The novel, Waverley, was the first of Scott's historical novels, published in 1814. The materials are Highland feudalism, military bravery, and description of natural scenery. The chief characters are Charles Edward the Chevalier, the noble old baron of Bradwardine, the simple faithful clansman Evan Dhu, and the poor fool Davie Gellatley.

Waverley Novels. General name given to Scott's historical novels. Those founded on English history are "Ivanhoe," "Kenilworth," "Peveril of the Peak," "Betrothed," "Talisman," and "Woodstock." Founded on Scotch history are "Waverley," "Old Mortality," "Monastery," "The Abbott," "Legend of Montrose," "Fair Maid of Perth," and "Castle Dangerous." Treating of continental history are "Quentin Durward," "Anne of Geirstein," and "Count Robert of Paris." Twelve others in the series, including "Rob Roy," "Heart of Midlothian," "Bride of Lammermoor," are connected with historical events, but are more personal, and deal mainly with Scottish character.

Weird Sisters, The. Three witches, in Shakespere's tragedy of "Macbeth."

Weller, Samuel. In Dickens's celebrated "Pickwick Papers." A servant to Mr. Pickwick, to whom he becomes devotedly attached. Rather than leave his master, when he is sent to the Fleet, Sam Weller gets his father to arrest him for debt. He is an inimitable compound of wit, simplicity, quaint humor, and fidelity. "Tony Weller," father of Sam; a coachman of the old school, who drives between London and Dorking. On the coachbox he is a king, elsewhere a mere London "cabby." He marries a widow and his constant advice to his son is, "Sam, beware of the vidders." Everybody was merry over Mr. Pickwick and Sam Weller, and everybody was eager to read this entertaining author.

Westover Manuscripts. In the year 1728 Colonel Byrd set out with a party of commissioners to meet another party of commissioners from North Carolina, to survey and settle the boundary between North Carolina and Virginia. The other Virginia commissioners were Dandridge and Fitz-William. With them were two surveyors, a chaplain, and seventeen woodsmen and hunters. Colonel Byrd took notes of the journey. These important documents remained in manuscript until 1841, when they were printed under the title of "The Westover Manuscripts," being so called from the estate of Westover, on the north branch of the James River, where the author lived. These journals of Colonel Byrd are remarkable for the freshness and vividness of their descriptions, and for a continued undercurrent of good-natured humor. He is particularly fond of indulging in a bit of fun at the expense of the North Carolinians. The journals abound in stories illustrative of Natural History.

Whit'ting-ton, Dick. The hero of a famous old legend, in which he is represented as a poor orphan boy from the country, who went to London, where, after undergoing many hardships he obtained a penny and bought a cat. Shortly after, he sent his cat on a venture in his master's ship; and the King of Barbary, whose court was overrun with mice, gladly bought the cat at a high price. With this money Whittington commenced business, and succeeded so well that he finally married his former master's daughter, was knighted, and became lord mayor of London.

Wilfer. Name of a family prominent in "Our Mutual Friend," by Dickens. Reginald Wilfer, called by his wife R. W., and by his fellow-clerks Rumty. He was clerk in the drug-house of Chicksey, Stobbles, and Veneering. Mrs. Wilfer, wife of Mr. Reginald, a most majestic woman, with an exalted idea of her own importance. Bella Wilfer, daughter of Mr. and Mrs. Wilfer, a wayward, playful, affectionate, spoilt beauty, so pretty, so womanly, and yet so childish that she was always captivating. She spoke of herself as "the lovely woman." Bella married John Harmon. Lavinia Wilfer, youngest sister of Bella, and called "The Irrepressible."

Winter's Tale, The. Shakespere (1604). Leontês, King of Sicily, invites his friend Polixenês to visit him, becomes jealous, and commands Camillo to poison him.

Camillo warns Polixenês, and flees with him to Bohemia. Leontês casts his queen, Hermionê, into prison, where she gives birth to a daughter. Hermionê is reported dead and the child is brought up by a shepherd, who calls it Perdita. Florizel sees Perdita and falls in love with her; but Polixenês, his father, tells her that she and the shepherd shall be put to death if she encourages the suit. Florizel and Perdita flee to Sicily, and being introduced to Leontês, it is soon discovered that Perdita is his lost daughter. Polixenês tracks his son to Sicily, and consents to the union. The party are invited to inspect a statue of Hermionê, and the statue turns out to be the living queen.

Worldly-Wiseman, Mr. One of the characters in Bunyan's "Pilgrim's Progress," who converses with Christian by the way, and endeavors to deter him from proceeding on his journey.

Wrayburn, Eugene. Our Mutual Friend, Dickens. Barrister-at-law. He is an indolent, moody, whimsical young man, who loves Lizzie Hexham. After he is nearly killed by Bradley Headstone, he reforms, and marries Lizzie, who saved his life.

Ya'hoo. A name given by Swift, in his satirical romance of "Gulliver's Travels," to one of a race of brutes having the form and all the vices of man. The Yahoos are represented as being subject to the Houyhnhnms, or horses endowed with reason.

Yamoyden. A romantic poem having for its hero Philip, the celebrated Sachem of the Pequod Indians. The author, Sands, published the poem between the years 1817 and 1819.

Yarpe. The Gray Horse Troop, Hamlin Garland. The resolute leader of the cowboy gang that undertook to drive the Tetongs from their reservation lands in the far West. The real hero of the story, Captain Curtis, is in charge, and his rational management of the Indians, his fight against the political ring that would defraud his wards, and his courageous handling of a serious crisis show him to be a different power from that these cowboys generally met, when they shot up towns and raced the Tetongs across the hills, making of themselves a lynching party on federal territory. United States soldiers appear on the scene and Yarpe and his men depart.

Yeast. A romance by Charles Kingsley. It was the outcome of his interest in the Chartist riots and disturbances, and gives concerning the sufferings of the poor some of the most powerful delineations found in English literature.

Yemasse. A historical tale founded on personal knowledge of the American Indian character. It was written in the first half of the Nineteenth Century by Simms, of whom it has been said, "He has done for the historical traditions of the Carolinas what Cooper did for those of the North and West."

Ye'o. Westward Ho! Chas. Kingsley. A character in the novel prominent as a bold mariner, a true friend, a terrible foe. He was all his life a sailor and made voyages to New Guinea for negro slaves which were sold in the West Indies. He joined in the search for fabulous wealth in New Spain, crossed the Isthmus of Panama, was pursued, and wandered in the woods of the isthmus for some months. "Westward Ho!" is a historical novel, relating to Elizabethan English history.

Yor'ick. (1) The King of Denmark's jester, mentioned in Shakespere's "Hamlet." Hamlet picks up his skull in the churchyard and apostrophizes it. (2) A humorous and careless parson in Sterne's "Tristram Shandy."

Yule Clog. A great log of wood, sometimes the root of a tree, brought into the house with great ceremony on Christmas Eve, laid in the fireplace, and lighted with the brand of last year's clog. While it lasted, there was great drinking, singing, and telling of tales. Sometimes it was accompanied by Christmas candles, but in the cottages the only light was from the ruddy blaze of the great wood fire. The Yule clog was to burn all night; if it went out, it was considered a sign of ill luck that would govern the ensuing year.

Zano'ni. Hero of a novel so called by Lord Lytton. Zanoni is supposed to possess the power of communicating with spirits, prolonging life, and producing gold, silver, and precious stones.

Zeno'bia. Blithedale Romance, Hawthorne. A strong-minded woman, beautiful and intelligent, who was interested in playing out the pastoral of the life at Brook Farm. She is represented as disappointed in love; at last she drowned herself.

Ze'phon. A "strong and subtle spirit" in Milton's "Paradise Lost," whom Gabriel dispatched with Ithuriel to find Satan.

Zo'phi-el. In Milton's "Paradise Lost," an angelic scout.

FAMOUS POEMS, AUTHOR, AND FIRST LINE

Abou Ben Adhem, ... *Leigh Hunt.*
"Abou Ben Adhem, (may his tribe increase!)."

Address to Light, ... *John Milton.*
"Hail, holy light, offspring of Heaven, first-born."

Address to a Mummy, ... *Horace Smith.*
"And thou hast walked about (how strange a story)."

Adonais, ... *Percy Bysshe Shelley.*
"I weep for Adonais — he is dead!"

Advice of Polonius to Laertes, . . . *William Shakespere.*
"Give thy thoughts no tongue."

After the Curfew, ... *Oliver Wendell Holmes.*
"The Play is over. While the light."

Afton Water, ... *Robert Burns.*
"Flow gently, sweet Afton, among thy green braes."

Alexander's Feast, ... *John Dryden.*
"'Twas at the royal feast for Persia won."

Alexander Selkirk, ... *Wm. Cowper.*
"I am monarch of all I survey."

Alfred The Harper, ... *John Sterling.*
"Dark fell the night, the watch was set."

America, ... *S. F. Smith.*
"My country, 'tis of thee."

American Flag, ... *Joseph Rodman Drake.*
"When Freedom, from her mountain height."

Annabel Lee, ... *Edgar Allan Poe.*
"It was many and many a year ago."

Answer to Passionate Shepherd, . . *Sir Walter Raleigh.*
"If all the world and love were young."

Apostrophe to the Ocean, ... *Lord Byron.*
"There is a pleasure in the pathless woods."

Ariel's Song, ... *William Shakespere.*
"Come unto these yellow sands."

A Thing of Beauty, ... *John Keats.*
"A thing of beauty is a joy forever."

Auf Wiedersehen, ... *James Russell Lowell.*
"The little gate was reached at last."

Auld Lang Syne, ... *Robert Burns.*
"Should auld acquaintance be forgot."

Auld Robin Gray, ... *Lady Anne Lindsay.*
"When the sheep are in the fauld, and the kye at hame."

Baby, The, ... *George Macdonald.*
"Where did you come from, baby dear?"

Baby Bye, ... *Theodore Tilton.*
"Baby Bye, here's a fly."

Ballad of Baby Bell, ... *T. B. Aldrich.*
"Have you not heard the poets tell."

Bannockburn, ... *Robert Burns.*
"Scots, wha hae wi' Wallace bled."

Barbara Frietchie, ... *John G. Whittier.*
"Up from the meadows rich with corn."

Barefoot Boy, ... *John G. Whittier.*
"Blessings on thee, little man."

Battle Hymn of the Republic, ... *Julia Ward Howe.*
"Mine eyes have seen the glory of the coming of the Lord."

Battle of Agincourt, ... *Michael Drayton.*
"Fair stood the wind for France."

Battle of Blenheim, ... *Robt. Southey.*
"It was a summer's evening, old Kaspar's work was done."

Beggar, The, ... *James Russell Lowell.*
"A beggar through the world am I."

Bells, The, ... *Edgar Allan Poe.*
"Hear the sledges with the bells."

Belshazzar, ... *Barry Cornwall.*
"Belshazzar is king, Belshazzar is lord."

Ben Bolt, ... *Thos. Dunn English.*
"Don't you remember sweet Alice, Ben Bolt?"

Bill and Joe, ... *Oliver Wendell Holmes.*
"Come, dear old comrade, you and I."

Bingen on the Rhine, ... *Caroline Norton.*
"A soldier of the Legion lay dying in Algiers."

Blessed Damozel, The, ... *Dante Gabriel Rossetti.*
"The blessed damozel leaned out."

Blindness, Ode on, ... *John Milton.*
"When I consider how my light is spent."

Blue and the Gray, The, ... *Francis Finch.*
"By the flow of the inland river."

Bonnie Doon, ... *Robert Burns.*
"Ye banks and braes o' bonnie Doon."

Boys, The, ... *Oliver Wendell Holmes.*
"Has there any old fellow got mixed with the boys?"

Bridge of Sighs, The, ... *Thomas Hood.*
"One more unfortunate."

Bridge, The, ... *Henry W. Longfellow.*
"I stood on the bridge at midnight."

Brook, The, ... *Alfred Tennyson.*
"I come from haunts of coot and hern."

Bugle Song, ... *Alfred Tennyson.*
"The splendor falls on castle walls."

Burial of Moses, ... *Cecil Frances Alexander.*
"By Nebo's lonely mountain."

Burial of Sir John Moore, ... *Charles Wolfe.*
"Not a drum was heard, not a funeral note."

Captain's Daughter, The, ... *James T. Field.*
"We were crowded in the cabin."

Carmen Bellicosum, ... *G. H. McMaster.*
"In their ragged regimentals."

Carry On, ... *Robert W. Service.*
"It's easy to fight when everything's right."

Casabianca, ... *Felicia Hemans.*
"The boy stood on the burning deck."

Cataract of Lodore, ... *Robert Southey.*
"How does the water come down at Lodore?"

Cato's Soliloquy, ... *Joseph Addison.*
"It must be so — Plato, thou reasonest well."

Celestial Music, ... *William Shakespere.*
"How sweet the moonlight sleeps upon this bank!"

Chambered Nautilus, ... *Oliver Wendell Holmes.*
"This is the ship of pearl, which, poets feign."

Charge of the Light Brigade, . . . *Alfred Tennyson.*
"Half a league, half a league."

Charles XII., ... *Samuel Johnson.*
"On what foundations stands the warrior's pride."

Child Musician, The, ... *Austin Dobson.*
"He had played for his lordship's levee."

Children, The, ... *Charles M. Dickinson.*
"When the lessons and tasks are all ended."

Children's Hour, ... *H. W. Longfellow.*
"Between the dark and the daylight."

Choir Invisible, The, ... *George Eliot.*
"O, may I join the choir invisible."

Christmas Hymn, ... *Alfred Domett.*
"It was the calm and silent night."

Christmas Hymn, ... *Charles Wesley.*
"Hark, the herald angels sing."

Christmas Bells, ... *H. W. Longfellow.*
"I heard the bells on Christmas Day."

Clear the Way, ... *Charles Mackay.*
"Men of thought, be up and stirring."

Closing Scene, The, ... *T. B. Read.*
"Within the sober realm of leafless trees."

Closing Year, ... *George D. Prentice.*
" 'Tis midnight's holy hour,— and silence now."

Cloud, The, ... *Percy Bysshe Shelley.*
"I bring fresh showers for the thirsting flowers."

Comin' Through the Rye, ... *Robert Burns.*
"Gin a body meet a body."

Concord Hymn, ... *Ralph Waldo Emerson.*
"By the rude bridge that arched the flood."

Cover Them Over, ... *Will Carleton.*
"Cover them over with beautiful flowers."

Cowper's Grave, ... *Elizabeth Barrett Browning.*
"It is a place where poets crowned may feel the heart's decaying."

Cradle Song, ... *Alfred Tennyson.*
"Sweet and low, sweet and low."

Crossing the Bar, ... *Alfred Tennyson.*
"Sunset and evening star, and one clear call for me."

Cry of the Children, . . . *Elizabeth Barrett Browning.*
"Do ye hear the children weeping, O, my brothers."

Curfew must not Ring Tonight, . . . *Rose H. Thorpe.*
"Slowly England's sun was setting."

Culprit Fay, ... *Joseph Rodman Drake.*
" 'Tis the middle watch of a summer's night."

Cry of the Dreamer, ... *John Boyle O'Reilly.*
"I'm tired of planning and toiling."

Daffodils, ... *William Wordsworth.*
"I wandered lonely as a cloud."

Death of the Flowers, ... *William Cullen Bryant.*
"The melancholy days are come."

Deserted Village, The, ... *Oliver Goldsmith.*
"Sweet Auburn! loveliest village of the plain."

Destruction of Sennacherib, ... *Lord Byron.*
"The Assyrian came down like a wolf on the fold."

Dirge, ... *Sir Walter Scott.*
"Soldier, rest! thy warfare o'er."

Domestic Peace, ... *Samuel Taylor Coleridge.*
"Tell me, on what holy ground."

Dorothy Q., ... *Oliver Wendell Holmes.*
"Grandmother's mother: her age, I guess."

Dream Ship, The, ... *Eugene Field.*
"When the world is fast asleep."

Drifting, ... *T. B. Read.*
"My soul to-day is far away."

Driving Home the Cows, ... *Kate Osgood.*
"Out of the clover and blue-eyed grass."

Dying Christian to His Soul, ... *Alexander Pope.*
"Vital spark of heavenly flame!"

Each and All, ... *Ralph Waldo Emerson.*
"Little thinks, in the field, yon red-cloaked clown."

Elegy in a Country Churchyard, ... *Thomas Gray.*
"The curfew tolls the knell of parting day."

End of Life, The, ... *Philip James Bailey.*
"We live in deeds, not years; in thoughts, not breaths."

End of the Play, ... *William Makepeace Thackeray.*
"The play is done — the curtain drops."

Erl King, ... *Goethe.*
"Who rideth so late through the night wind wild."

Eve of St. Agnes, ... *John Keats.*
"St. Agnes' Eve,— Ah, bitter chill it was!"

Evening Cloud, ... *John Wilson.*
"A cloud lay cradled near the setting sun."

Evelyn Hope, ... *Robert Browning.*
"Beautiful Evelyn Hope is dead!"

Evening in Paradise, ... *John Milton.*
"Now came still evening on, and twilight gray."

Evening, Ode to, ... *Joseph Addison.*
"The spacious firmament on high."

Evening Prayer, ... *James Edmeston.*
"Saviour breathe an evening blessing."

Fairies, The, ... *William Allingham.*
"Up the airy mountain."

Family Meeting, ... *Charles Sprague.*
"We are all here, father, mother, sister, brother."

Farewell, ... *Charles Kingsley.*
"My fairest child, I have no song to give you."

Fare Thee Well, ... *Lord Byron.*
"Fare thee well, and if forever."

Fire of Driftwood, ... *Henry W. Longfellow.*
"We sat within the farmhouse old."

First Snow Fall, ... *James Russell Lowell.*
"The snow had begun in the gloaming."

Flight of Youth, ... *Richard Henry Stoddard.*
"There are gains for all our losses."

Fool's Prayer, The, ... *Edw. Rowland Sill.*
"The royal feast was done; the king."

For a' That, ... *Robert Burns.*
"Is there for honest poverty."

Friends Together, ... *Caroline Norton.*
"We have been friends together."

Good Time Coming, The, ... *Chas. Mackay.*
"There's a good time coming, boys."

Good Night and Good Morning, . . . *Lord Houghton.*
"A fair little girl sat under a tree."

Graves of a Household, The, ... *Felicia Hemans.*
"They grew in beauty, side by side."

Grecian Urn, Ode on a, ... *John Keats.*
"Thou still unravished bride of quietness!"

Hamlet's Address to His Father's Ghost, *William Shakespere.*
"Angels and ministers of grace, defend us!"

Hamlet's Soliloquy, ... *William Shakespere.*
"To be, or not to be: that is the question."

Hannah Binding Shoes, ... *Lucy Larcom.*
"Poor lone Hannah, sitting at the window, binding shoes."

Highland Mary, ... *Robt. Burns.*
"Ye banks and braes and streams around."

High Tide on the Coast of Lincolnshire, . *Jean Ingelow*
"The old mayor climbed the belfry tower."

Hohenlinden, ... *Thomas Campbell.*
"On Linden, when the sun was low."

Home, Sweet Home, ... *John Howard Payne.*
"'Mid pleasures and palaces though we may roam."

Horatius, ... *Lord Macaulay.*
"Lars Porsena of Clusium."

Hour of Death, ... *Felicia Hemans.*
"Leaves have their time to fall."

House Where I Was Born, ... *Thomas Hood*
"I remember, I remember."

How They Brought the Good News, . . *Robert Browning.*
"I sprang to the stirrup, and Joris and he."

Hymn Before Sunrise, ... *Samuel Taylor Coleridge.*
"Hast thou a charm to stay the morning star."

Hymn on the Morning of the Nativity, . . *John Milton.*
"It was the winter wild."

If, ... *Rudyard Kipling.*
"If you can keep your head when all about you."

If Only the Dreams Abide, ... *Clinton Scollard.*
"If the things of earth must pass."

Il Penseroso, ... *John Milton*
"Hence, vain deluding joys."

I'm Growing Old, ... *John G. Saxe.*
"My days pass pleasantly away."

I Love My Love, ... *Charles Mackay.*
"What is the meaning of the song."

Inchcape Rock, ... *Robert Southey.*
"No stir in the air, no stir in the sea."

In Flanders Fields, ... *John McCrae.*
"In Flanders fields the poppies blow."

Ingratitude, ... *William Shakespere.*
"Blow, blow, thou winter wind."

Invictus, ... *W. E. Henley.*
"Out of the night that covers me."

Ivy Green, ... *Charles Dickens.*
"Oh, a dainty plant is the ivy green."

Jerusalem, the Golden, ... *Gerald Massey.*
"Jerusalem, the golden, I weary for one gleam."

John Anderson, ... *Robert Burns.*
"John Anderson, my jo, John."

John Gilpin, ... *William Cowper.*
"John Gilpin was a citizen."

Knee-deep in June, ... *James Whitcomb Riley.*
"Tell you what I like the best."

Ladder of St. Augustine, . . . *Henry W. Longfellow.*
"St. Augustine, well hast thou said."

L'Allegro, ... *John Milton.*
"Hence, loathed melancholy."

Landing of the Pilgrims, ... *Felicia Hemans*
"The breaking waves dashed high."

Land o' the Leal, ... *Carolina Oliphant.*
"I'm wearin' awa', John."

Lark, The, ... *Robert W. Service.*
"From wrath-red dawn to wrath-red dawn."

Last Leaf, ... *Oliver Wendell Holmes.*
"I saw him once before."

Light Out of Darkness, ... *William Cowper.*
"God moves in a mysterious way."

Little Boy Blue, ... *Abby Sage Richardson.*
"Under the haystack, Little Boy Blue."

Little Boy Blue, ... *Eugene Field.*
"The little toy dog is covered with dust."

Little While, A, ... *Horatius Bonar.*
"Beyond the smiling and the weeping."

Lochinvar, ... *Sir Walter Scott.*
"O, young Lochinvar is come out of the West."

Lord Ullin's Daughter, ... *Thomas Campbell.*
"A chieftain, to the highlands bound."

Lost Chord, ... *Adelaide Procter.*
"Seated one day at the organ."

Lost Leader, The, ... *Robert Browning.*
"Just for a handful of silver he left us."

Lotus Eaters, The, ... *Alfred Tennyson.*
"'Courage!' he said, and pointed toward the land."

Love of Country, ... *Sir Walter Scott.*
"Breathes there the man with soul so dead."

Love's Immortality, ... *Robert Southey.*
"They sin who tell us love can die."

Lucy Gray, ... *William Wordsworth.*
"Oft I had heard of Lucy Gray."

Lux Benigna, ... *Cardinal Newman.*
"Lead, kindly light, amid the encircling gloom."

Lycidas, ... *John Milton.*
"Yet once more, O ye Laurels, and once more."

Maid of Athens, ... *Lord Byron.*
"Maid of Athens, ere we part."

Man With the Hoe, ... *Edwin Markham.*
"Bowed with the weight of centuries, he leans."

Marco Bozzaris, ... *Fitz-Greene Halleck.*
"At midnight, in his guarded tent."

Maud Muller, ... *John G. Whittier.*
"Maud Muller on a summer's day."

Meeting of the Waters, ... *Thomas Moore.*
"There is not in the wide world a valley so sweet."

Melrose Abbey, ... *Sir Walter Scott.*
"If thou wouldst view fair Melrose aright."

Mercy, ... *William Shakespere.*
"The quality of mercy is not strained."

Mighty Fortress, A, ... *Martin Luther.*
"A mighty fortress is our God."

Miller's Daughter, ... *Alfred Tennyson.*
"It is the miller's daughter."

Milton, ... *John Dryden.*
"Three poets, in three distant ages born."

Mind Alone Valuable, ... *William Shakespere.*
"'Tis the mind that makes the body rich."

Morte d'Arthur, ... *Alfred Tennyson.*
"So all day long the noise of battle rolled."

Mother and Poet, ... *Elizabeth Barrett Browning.*
"Dead! one of them shot by the sea in the east."

Music, ... *William Collins.*
"When Music, heavenly maid, was young."

Musical Instrument, A, . . . *Elizabeth Barrett Browning.*
"What was he doing, the great God Pan."

My Ain Countree, ... *Mary Demarest.*
"I am far frae my hame."

My Mind, a Kingdom, ... *Sir Edward Dyer.*
"My mind to me a kingdom is."

My Native Land — Good-Night, ... *Lord Byron.*
"Adieu, adieu! my native shore."

Nathan Hale, ... *Francis Finch.*
"To drum beat and heart beat."

Not as I Will, ... *Helen Hunt Jackson.*
"Blindfolded and alone I stand."

Ocean, The, ... *Lord Byron.*
"Roll on, thou deep and dark blue ocean — roll!"

Ode on Immortality, ... *William Wordsworth.*
"There was a time when meadow, grove, and stream."

Oh, Sleep, ... *Samuel Taylor Coleridge.*
"Oh, Sleep! it is a gentle thing."

Old Arm Chair, The, ... *Eliza Cook.*
"I love it, I love it! and who shall dare."

Out to Old Aunt Mary's, ... *James Whitcomb Riley.*
"Wasn't it pleasant, O brother mine?"

Old Ironsides, ... *Oliver Wendell Holmes.*
"Ay, tear her tattered ensign down!"

Old Oaken Bucket, ... *Samuel Woodworth.*
"How dear to this heart are the scenes of my childhood."

Old Minstrel, The, ... *Sir Walter Scott.*
"The way was long, the wind was cold."

Old Song, An, ... *Joanna Baillie.*
"The bride she is winsome and bonny."

One-Hoss Shay, ... *Oliver Wendell Holmes.*
"Have you heard of the wonderful one-hoss shay."

On the Loss of the Royal George, . . *William Cowper.*
"Toll for the brave."

On Virtue, ... *Alexander Pope.*
"Know then this truth (enough for man to know)."

Opportunity, ... *John J. Ingalls.*
"Master of human destinies am I."

Order for a Picture, ... *Alice Cary.*
"O good painter, tell me true."

Other World, The, ... *Harriet Beecher Stowe.*
"It lies around us like a cloud."

Paradise and the Peri, ... *Thomas Moore.*
"One morn a Peri at the gate."

Passionate Shepherd to His Love, . *Christopher Marlowe.*
"Come live with me and be my love."

Picket-Guard, The, ... *Ethel L. Beers.*
" 'All quiet along the Potomac,' they say."

Pictures of Memory, ... *Alice Cary.*
"Among the beautiful pictures."

Pied Piper of Hamelin, ... *Robert Browning.*
"Hamelin Town's in Brunswick."

Planting the Apple Tree, ... *William Cullen Bryant.*
"Come, let us plant the apple-tree."

Prayer, ... *James Montgomery.*
"Prayer is the soul's sincere desire."

Prayer, ... *Louis Untermeyer.*
"God, though this life is but a wraith."

Prisoner of Chillon, ... *Lord Byron.*
"My hair is gray but not with years."

Proud Miss MacBride, ... *John G. Saxe.*
"O, terribly proud was Miss MacBride."

Rabbi Ben Ezra, ... *Robert Browning.*
"Grow old along with me."

Raven, The, ... *Edgar Allan Poe.*
"Once upon a midnight dreary."

Recessional, ... *Rudyard Kipling.*
"God of our fathers, known of old."

Red Crosse Knight, ... *Edmund Spenser.*
"A gentle knight was pricking on the plaine."

Rendezvous With Death, ... *Alan Seeger.*
"I have a rendezvous with Death."

Rhodora, ... *Ralph Waldo Emerson.*
"In May when sea-winds pierced our solitudes."

Rime of the Ancient Mariner, ... *S. T. Coleridge.*
"It is an ancient mariner."

Ring Out, Wild Bells, ... *Alfred Tennyson.*
"Ring out, wild bells, to the wild sky."

Rock Me to sleep, ... *Elizabeth A. Allen.*
"Backward, turn backward, O time in your flight."

Robert of Lincoln, ... *W. C. Bryant.*
"Merrily swinging on brier and weed."

Rosary of My Years, ... *Father Ryan.*
"Some reckon their age by years."

Rule, Britannia, ... *James Thomson.*
"When Britain first, at heaven's command."

Sandpiper, The, ... *Celia Thaxter.*
"Across the narrow beach we flit."

Sands of Dee, ... *Charles Kingsley.*
"O Mary, go and call the cattle home."

Seven Ages of Man, ... *William Shakespere.*
"All the world's a stage."

Sheridan's Ride, ... *T. B. Read.*
"Up from the south at break of day."

Sir Galahad, ... *Alfred Tennyson.*
"My good blade carves the casques of men."

Skipper Ireson's Ride, ... *John G. Whittier.*
"Of all the rides since the birth of time."

Skylark, The, ... *James Hogg.*
"Bird of the wilderness."

Skylark, To a, ... *William Wordsworth.*
"Up with me! up with me into the clouds!"

Skylark, To a, ... *Percy Bysshe Shelley.*
"Hail to thee, blithe spirit."

Sleep, ... *Edward Young.*
"Tired Nature's sweet restorer, balmy sleep."

Sleep, ... *Elizabeth Barrett Browning.*
"Of all the thoughts of God that are."

Soldier, The, ... *Rupert Brooke.*
"If I should die, think only this of me."

Soldier's Dirge, ... *William Collins.*
"How sleep the brave, who sink to rest."

Song from Cymbeline, ... *William Shakespere.*
"Hark! hark! the lark at heaven's gate sings."

Song of Doubt, A, ... *Josiah Gilbert Holland.*
"The day is quenched and the sun is fled."

Song of Faith, A, ... *Josiah Gilbert Holland.*
"Day will return with a fresher boon."

Song of Pippa, ... *Robert Browning.*
"The year's at the spring."

Song of the Camp, ... *Bayard Taylor.*
" 'Give us a song!' the soldiers cried."

Song of the Chattahoochee, ... *Sidney Lanier.*
"Out of the hills of Habersham."

Song of the Fairy, ... *William Shakespere.*
"Over hill, over dale."

Song of the Shirt, ... *Thomas Hood.*
"With fingers weary and worn."

Songs of Seven, ... *Jean Ingelow.*
"There's no dew left on the daisies and clover."

Songs of Innocence, ... *William Blake.*
"Piping down the valleys wild."

Sonnet to Milton, ... *William Wordsworth.*
"Milton! thou should'st be living at this hour."

Soul and Body, ... *William Shakespere.*
"Poor soul, the center of my sinful earth."

Soul's Errand, ... *Sir Walter Raleigh.*
"Go, soul, the body's guest."

Spare the Tree, ... *George P. Morris.*
"Woodman, spare that tree."

Stanzas for Music, ... *Lord Byron.*
"There's not a joy the world can give like that it takes away."

Stars, The, ... *Lord Byron.*
"Ye stars! which are the poetry of heaven."

Stirrup Cup, The, ... *John Hay.*
"My short and happy day is done."

Storm Fear, ... *Robert Frost.*
"When the wind works against us in the dark."

Sweet Content, ... *Thomas Dekker.*
"Art thou poor, yet hast thou golden slumbers?"

Tenting on the Old Camp Ground, . . *Walter Kittredge.*
"We are tenting to-night on the old camp ground."

Thanatopsis, ... *William Cullen Bryant.*
"To him who, in the love of nature, holds."

Thou Mother, ... *Walt Whitman.*
"Thou Mother with thy equal brood."

To a Mountain Daisy, ... *Robert Burns.*
"Wee, modest, crimson-tippèd flower."

To a Mouse, ... *Robert Burns.*
"Wee, sleekit, cow'rin', tim'rous beastie."

To a Waterfowl, ... *William Cullen Bryant.*
"Whither, midst falling dew."

To Celia, ... *Ben Jonson.*
"Drink to me only with thine eyes."

To Mary in Heaven, ... *Robert Burns.*
"Thou ling'ring star, with less'ning ray."

To Night, ... *Percy Bysshe Shelley.*
"Swiftly walk over the western wave."

True Woman, ... *William Wordsworth.*
"She was a phantom of delight."

Two Angels, ... *H. W. Longfellow*
"Two angels, one of life and one of death."

Vagabonds, The, ... *J. T. Trowbridge.*
"We are two travelers, Roger and I."

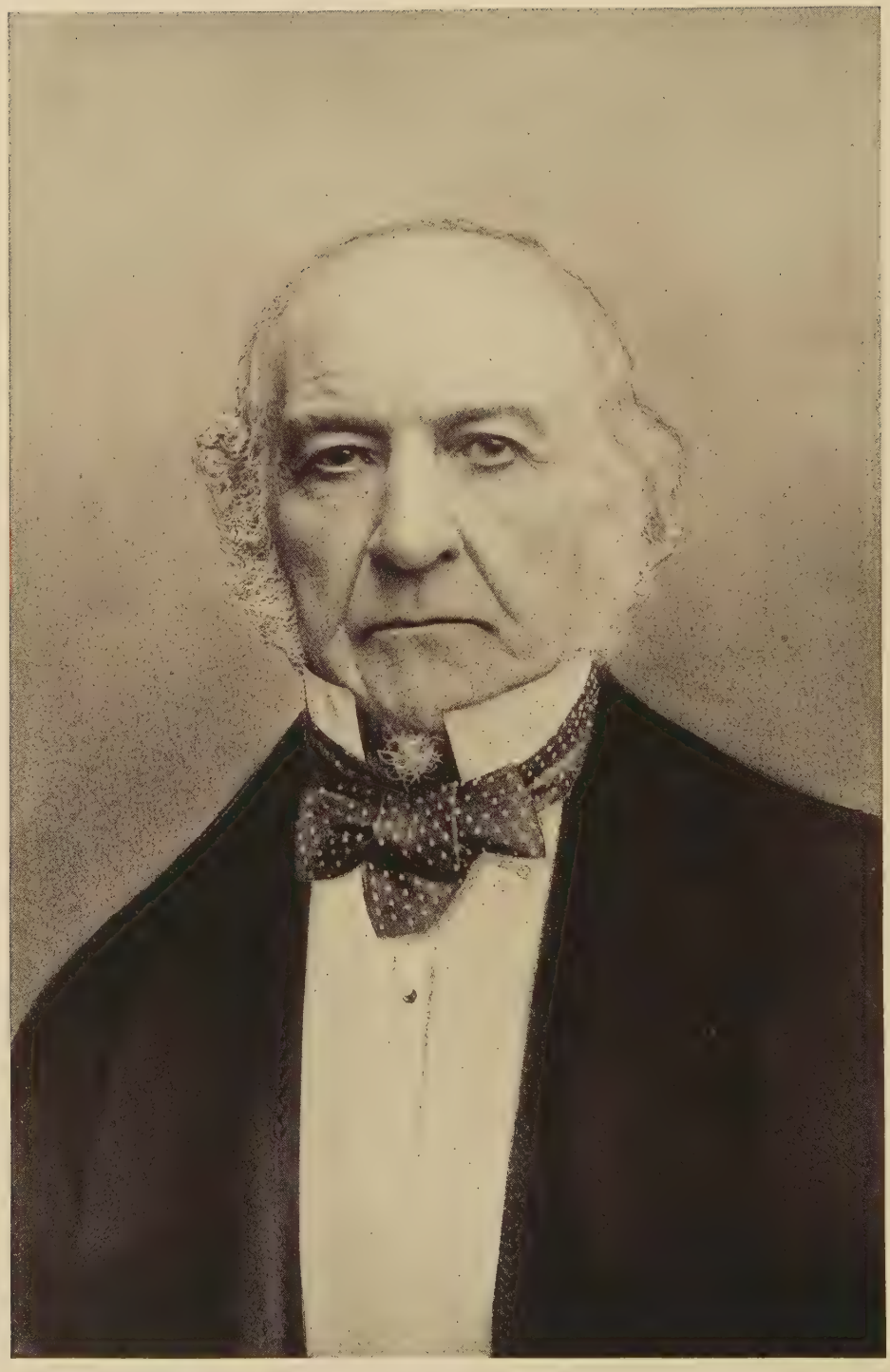
Waiting. . . . . *John Burroughs.*
"Serene I fold my hands and wait."

When Malindy Sings, ... *Paul Laurence Dunbar.*
"G'way an' quit dat noise, Miss Lucy."

We are Seven, ... *William Wordsworth.*
"A simple child, that lightly draws its breath."

Yankee Girl, ... *John G. Whittier.*
"She sings by her wheel at the low cottage door."

Young and Old, ... *Charles Kingsley.*
"When all the world is young, lad."



WILLIAM EWART GLADSTONE

BIOGRAPHY

Aaron, son of Amram and Jochebed, of the tribe of Levi, and the elder brother of Moses and Miriam. He appeared with Moses before Pharaoh, and was the first high priest of Israel, his sons being also consecrated to the priesthood. He shared the sin of Moses at Meribah, as well as its punishment, his death taking place shortly afterwards on Mount Hor.

Abbey, Edwin Austin, R. A., was born in 1852, and began his art studies at the Academy of Fine Arts in Philadelphia. He stood in the foremost rank of painters of historical and subject pictures. All his works show his fine decorative instinct, and are painted with a rich, glowing palette. They are remarkable for the correctness of all archæological detail. He acquired great fame as an illustrator of Shakespere, whose plays also supplied him with the subjects for some of his most successful pictures. Principal works: Richard III. and Lady Anne, King Lear's Daughters, Hamlet, the decorative panels illustrating the Quest of the Holy Grail, in the Boston Public Library, Coronation of King Edward VII., Columbus in the New World. Died, 1911.

Abbot, Ezra, LL.D., D.D., born in 1819, American critic, very precocious as a child, graduated at Bowdoin College, and settled at Cambridge, gaining considerable reputation as a biblical critic. He contributed to periodicals, and also wrote several critical works, and in support of Unitarianism; the best known is that on "The Authorship of the Fourth Gospel." Died, 1884.

Abbott, Lyman, clergyman, author, editor "The Outlook"; born in Roxbury, Mass., December 18, 1835; graduated University of New York, 1853; practiced law; ordained Congregational minister, 1860; pastor Terre Haute, Ind., 1860-65; New England Church, New York, 1865-69; resigned pastorate, 1869, to devote himself to literature. Edited "Literary Record" of Harper's Magazine; associate editor "The Christian Union" with Henry Ward Beecher, whom he succeeded as pastor of Plymouth Church, Brooklyn, May, 1888; resigned, November, 1898. Author: Jesus of Nazareth; Old Testament Shadows of New Testament Truth; A Layman's Story; How to Study the Bible; Illustrated Commentary on the New Testament; Dictionary of Religious Knowledge (with T. J. Conant); A Study in Human Nature; In Aid of Faith; Life of Christ; Evolution of Christianity; The Theology of An Evolutionist; Christianity and Social Problems; Life and Letters of St. Paul; The Life that Really Is; Problems of Life; Life and Literature of the Ancient Hebrews; The Rights of Man; Henry Ward Beecher; The Other Room; The Great Companion; Christian Ministry; Personality of God; and Industrial Problems.

Abd-ul-Hamid II., formerly Sultan of Turkey, was born in 1842, the second son of Sultan Abd-ul-Medjid. He was proclaimed Sultan in succession to his brother Murad V., who was deposed in consequence of mental incapacity (August 31, 1876), and died on August 29, 1904. The succession to the throne, according to Turkish custom, vests in the senior male descendant of the house of Othman, sprung from the Imperial Harem. The Sultan does not marry, but from the inmates of the Harem selects a certain number who are known as ladies of the palace, the others occupying positions subordinate to them. All children born in the Harem are held to be of legitimate and equal birth. The eldest son of the Sultan succeeds only when there are no uncles or cousins of greater age than himself. Abd-ul-Hamid had several children. He was forced to abdicate the throne in May, 1909. Died, 1918.

Abélard, or **Abailard** (*ab'-a-lard*), **Pierre,** a French philosopher and ecclesiastic, was born in the year 1079, at Palais, near Nantes, in Brittany. He was celebrated for his learning and genius, and opened a school in Paris in 1103, where he taught philosophy with great success. His romantic love for Héloïse, and the misfortunes which followed in consequence of his unhappy passion, have added greatly to his celebrity. He died at the priory of St. Marcel, near Châlons, in 1142. He was at first interred by the monks of Cluni in their monastery, but his remains were afterwards removed to the Paraclete (a monastery in Champagne, which Abélard had himself founded, and which was then a convent presided over by Héloïse); finally they were deposited, together with those of Héloïse, in the cemetery of Père la Chaise.

Abraham (*ā'bra-ham*), the progenitor of the Hebrew nation, descendant of Shem, born about 1996 B. C., in Mesopotamia, died at the age of 175 years, and was buried in the Cave of Machpelah. Isaac and Ishmael were his sons by Sarah and Hagar, the latter being a slave.

Abruzzi, Duke of the, prince of Royal House of Italy, was born in 1873; scientist, explorer, aeronaut, sportsman, littérateur; traveled round world as a youth; ascended Mount St. Elias, Alaska, 1896; his Arctic expedition of 1899 penetrated nearest to North Pole up to that time; in 1906, he ascended the topmost height in the Ruwenzori Range, East Africa, for which he was eulogized by King Edward.

Abu Bekr (*ā'bu bā'ker*), father-in-law and successor of Mohammed, born in 573, was elected Caliph over Ali, son-in-law of Mohammed, and the contest caused a schism in the Church, which still exists. Died, 634.

Adams, Charles Francis, born in 1807; son of J. Q. Adams; spent his childhood in Europe, and, returning to America, graduated at Harvard College, 1825. He was educated for the law, but, adopting politics, eventually joined the coalition now known as the Republican party, and was appointed minister to England, 1861-68. He was arbitrator for America for the settlement of claims under the Treaty of Washington, 1871, and continued to take an active interest in political life. He wrote biographies of his father and grandfather. Died, 1886.

Adams, Charles Francis, history writer; born in Boston, May 27, 1835; son of C. F. Adams; graduated at Harvard, 1856; admitted to bar, 1858; served in Union Army through Civil War; brevetted brigadier-general, United States Army, 1865. Became identified with railway interests; appointed member board of railway commissioners of Massachusetts, 1869; president Union Pacific Railway, 1884-90; president Massachusetts Historical Society, 1895. Author: Chapters on Erie and Other Essays; Railroads, their Origin and Problems; Notes on Railway Accidents; Massachusetts, Its Historians and Its History; Three Episodes of Massachusetts History; Life of Charles Francis Adams; Richard Henry Dana, a Biography; A College Fetich; Lee at Appomattox, and other papers. Died, 1915.

Adams, Henry, author; born in Boston, February 16, 1838; graduate Harvard, 1858; private secretary to his father, who was American Minister at London, 1861-68; assistant professor history, Harvard, 1870-77; editor "North American Review," 1870-76. Author: Essays in Anglo-Saxon Law; Historical Essays; Life of Albert Gallatin; John Randolph; Documents Relating to New England Federalism; History of United States (9 vols.); Life of George Cabot Lodge. Died, 1918.

Adams, Henry Carter, professor political economy and finance, University of Michigan, 1887-1921; born in Davenport, Ia., 1851; graduate Iowa College, 1874; lecturer in Cornell and University of Michigan, 1880-87, also in Johns Hopkins, 1880-82; director division transportation, 11th census; statistician, Interstate Commerce Commission, 1887-1911; president American Economic Association, 1895-97. Author: Outline of Lectures on Political Economy; State in Relation to Industrial Action; Taxation in the United States; Public Debts; The Science of Finance; Statistics of Railways; Economics and Jurisprudence. Died, 1921.

Adams, John, born in 1735; second President of the United States; graduated at Harvard, and was admitted to the bar, 1758. He was one of the delegates at the Congress at Philadelphia, 1774, and throughout encouraged the movement for independence, in which, as chairman of the board of war, he took an active part. He was commissioner to the Court of France, 1778, and was sent on an embassy to England, 1779. He was elected Vice-President of the Union in 1789, and succeeded Washington as president in 1797, but in 1801 failed to gain reëlection, and then retired from public affairs. Died, 1826.

Adams, John Quincy, born in 1767; son of President John Adams, and sixth President of the United States, studied at Leyden and Harvard, and was admitted to the bar in 1791. He entered the diplomatic

service, and was successively American minister in Holland, England, and Prussia, and as a senator (1803–1808) he supported Jefferson's Embargo Act. From 1806–1809 he occupied the chair of rhetoric at Harvard College. After holding various offices, in 1825 he was elected President of the United States, and being returned to Congress in 1830, became a vigorous supporter of the Abolitionists. Author of "Letters on Silesia," "Lectures on Rhetoric," and a poem "Dermot MacMorrogh." Died, 1848.

Adams, Maude, actress; born (Kiskadden) in Salt Lake City, November 11, 1872; her mother (stage name "Adams") was leading woman of stock company there. Appeared on stage in child's parts; went to school; joined E. H. Sothern Company, New York, at 16; ingénue rôle in the "Midnight Bell"; afterward in Charles Frohman's Stock Company; later supported John Drew; pronounced success in "Little Minister," 1897–98; also in "L'Aiglon," "Peter Pan," "What Every Woman Knows," "Chantecler," and in Shakesperian roles.

Adams, Oscar Fay, author, lecturer upon literature and architecture; born in Worcester, Mass., 1855, graduated at New Jersey State Normal School. Author: Handbook of English Authors; Handbook of American Authors; Through the Year with the Poets (12 vols. edited); Post-Laureate Idyls; Chapters from Jane Austen (edited); Morris's "Atalanta's Race," with Notes (edited); Dear Old Story Tellers; The Poets' Year (edited); The Story of Jane Austen's Life; The Presumption of Sex; Dictionary of American Authors (5th edition enlarged); The Archbishop's Unguarded Moment, and Other Stories; Some Famous American Schools. American editor of The Henry Irving Shakespere. Died, 1919.

Adams, Samuel, one of the leading men of the American Revolution; born in Boston, Mass., 1722. He displayed on all occasions an unflinching zeal for popular rights, and was, by the patriotic party, placed in the legislature in 1766. Adams was a member of the first Congress, and signed the Declaration of Independence in 1776; took an active part in framing the Constitution of Massachusetts, and was for several years president of the senate of that State. He held the office of lieutenant-governor from 1789 to 1794, and of governor from that time till 1797. Died, 1803.

Addams, Jane (Miss), head resident of Hull House; born in Cedarville, Ill., September 6, 1860; graduated at Rockford College, 1881; spent two years in Europe, 1883–85; studied in Philadelphia, 1888; in 1889 opened with Miss Ellen Gates Starr, Social Settlement of Hull House, Chicago; inspector of streets and alleys in neighborhood of Hull House three years; writer and lecturer on social and political reform. At the Progressive National Convention held at Chicago in August, 1912, Jane Addams made a speech seconding the nomination of Theodore Roosevelt for president. Author: Democracy and Social Ethics; Newer Ideals of Peace; The Spirit of Youth and the City Streets; Twenty Years at Hull House; A New Conscience and an Ancient Evil.

Addison, Joseph, born in 1672, passed from Charterhouse school to Queen's College, Oxford, and graduated at Magdalen College in 1693. He spent four years traveling on the Continent, returning in 1703, and in 1704, "The Campaign," a poem celebrating the victory of Blenheim, brought him into favor. In 1709 he was sent to Ireland as secretary to the Lord Lieutenant. He contributed largely to the "Tatler" and "Spectator" from their commencement, and wrote 274 numbers for the latter. In 1713 he brought his tragedy of "Cato" before the public, and at Drury Lane it proved an unprecedented success. In 1716 he married the Countess Dowager of Warwick, and the following year was appointed secretary of state. Died at Holland House in 1719.

Adler, Felix, educator, lecturer; born in Alzey, Germany, August 13, 1851; studied under Hebrew rabbi; graduated at Columbia, 1870; studied at Berlin (Ph. D.); professor of Hebrew and Oriental literature at Cornell, 1874–76; established, 1876, New York Society for Ethical Culture, to which he gives regular Sunday discourses. Professor of political and social ethics, Columbia University, member of editorial board of International Journal of Ethics. Author: Creed and Deed; The Moral Instruction of Children; Life and Destiny; Marriage and Divorce; Religion of Duty.

Æschines, born 389 B. C., celebrated Athenian orator. Failing in an attack on Demosthenes, was twice sent on an embassy to Philip of Macedonia, and retired to Rhodes where he founded a school. Died, 314 B. C.

Æschylus (*es'-ke-lus*), an eminent Greek tragedian, born at Athens, 525 B. C. Of seventy-six tragedies which he wrote, fifty were crowned. Seven of them only remain; viz, "Prometheus Bound," "The Seven Chiefs before Thebes," "The Persians," "Agamemnon," "The Choephori," "The Eumenides," and "The Suppliants." In his old age, Æschylus retired to the court of Hiero, King of Sicily. The oracle having predicted that the fall of a house should prove fatal to him, he went to reside in the fields, and was killed, it is said, by a tortoise which an eagle dropped upon his head. Died, 456 B. C.

Æsop (*e'-sop*). A celebrated fabulist, said to have been born at Phrygia, about 620 B. C. He was as deformed in body as accomplished in mind, and was originally a slave at Athens and at Samos. Having gained freedom by his wit, he traveled through Asia Minor and Egypt, and attached himself to the court of Crœsus, King of Lydia. Sent by that monarch upon an embassy to Delphi, he so offended the inhabitants by the keenness of his sarcasms, that they hurled him from a rock into the sea about 564 B. C. His history appears to be altogether legendary.

Agassiz, Alexander, naturalist; born in Neuchâtel, Switzerland, December 17, 1835; graduated at Harvard, 1855; Lawrence Scientific School, B. S., 1857; on coast survey of California, 1859; assistant in zoölogy, Harvard, 1860–65; developed and was superintendent, 1865–69, Calumet & Hecla copper mines, Lake Superior; curator Museum Comparative Zoölogy, Cambridge, 1874–85; afterward engaged in zoölogical investigation. Appointed director Museum Comparative Zoölogy, Cambridge, 1902; appointed by Emperor William III. of Germany member Order of Merit, 1902; member of Academy of Sciences, Paris; president of National Academy of Science. Author, "Explorations of Lake Titicaca," "List of the Echinoderms," "Three Cruises of the Blake," "Revision of the Echini," "Pacific Coral Reefs," "Coral Reefs of the Maldives," "Panamic Deep Sea Echini," etc. Died, 1910.

Agassiz, Louis Johann Rudolph, born 1807; eminent naturalist, was the son of a Swiss Protestant clergyman. He studied medicine and graduated at Munich, but devoted himself principally to ichthyology, and was employed to classify and arrange the collection brought from Brazil by Martius and Spix. In 1846, he came to America, where he was well received, and accepted the chair of zoölogy and geology at the University of Cambridge (Harvard College). In 1865, he visited Brazil, and on his return placed the large collection he had made in the museum of Cambridge. He wrote numerous very valuable works, and was to the last a disbeliever in the Darwinian theory of evolution. Died, 1873.

Agricola (*a-grick'-o-la*) (Cnæus Julius), a Roman governor of Britain under Vespasian, born A. D. 37. He subjected Scotland and Ireland; reduced the Britons; and, by his able government, preserved these territories to the Romans. Domitian, jealous of his success, recalled him; and Agricola withdrew to his estate, where he died in 93. His life, written by his son-in-law, Tacitus, is extant, and is considered a model of biographical writing.

Aguesseau, Henri François d', born in 1668; orator and advocate, took part in the contest between the Pope and the Gallican Church, 1699; was made procureur-general in 1700, and defended the Gallican Church against the Ultramontane Party. After the death of Louis XIV. was appointed chancellor in 1717, but was twice deprived of the seals, retiring from Paris, 1722, but was finally restored in 1727. He was a great scholar and jurist. Died, 1751.

Aguinaldo, Emilio, general, born in Imus, a village near Cavite, Luzon, May, 1870; educated at St. Thomas by the Dominicans. He is short of stature, with a Japanese cast of countenance. During the rebellion of the Filipinos against Spain he was in constant fear of assassination, as the Spanish Government offered a reward of $25,000 for his head. He was the chief of the insurgents and a capable man; acting as a dictator, he assumed sovereign power. In March, 1901, was captured by General Fred. Funston, a Kansas volunteer, after being in constant flight.

Alaric (*al'-ar-ick*). Two kings of the Visigoths have borne this appellation. Alaric I., after having despoiled several provinces of the Roman Empire, in the reign of Honorius, twice besieged Rome itself. At first he contented himself with levying heavy contributions; when he again invaded it, he plundered the city, and destroyed its noblest monuments. In 406, he extorted from Honorius the province of Spain, and a part of Gaul, and established the kingdoms of the Visigoths. He died in 410, while making preparations for the conquest of Africa and Sicily. Alaric II., eighth King of the Visigoths, came to the throne in 484. Besides Spain, he possessed Languedoc, Provence, and various other tracts of country. Alaric held his court at Toulouse. Clovis I., King of the Franks, jealous of his power, carried war into the south of Gaul. A great battle was fought near Poitiers, in which Alaric fell by the hand of Clovis.

Albert I., king of the Belgians, was born in 1875. He was carefully educated, traveled widely, and became well versed in politics and economics. In 1898, during a visit to the United States, he made a study of American railroads. Later he investigated conditions in the Belgian Congo and urged many improvements and reforms. In 1900 he married the Duchess Elizabeth of Bavaria. Upon the death of his uncle, Leopold II., in 1909, he was made king. By reason of his democratic tastes he became one of the most popular of sovereigns. His heroic leadership in resisting the brutal German invasion of 1914 made him the idol of the Belgian people. With his equally devoted queen, he shared throughout the ensuing struggle the perils and hardships of his soldiers. Following the expulsion of the invaders, King Albert and his queen, on November 22, 1918, reentered Brussels in triumph and at once proclaimed a new, free, and independent Belgium based on universal suffrage and representative government.

Albertus Magnus, born 1193, a man of great sanctity and learning, was appointed Bishop of Ratisbon, and assisted at the General Council of Lyons in 1274. He left numerous works, and among his scholars was the famous Thomas Aquinas. Died, 1280.

Albuquerque, Alfonso d' (*ăl-boo-kair'-ka*), a Portuguese viceroy of the Indies, born in 1453, made his first expedition to the East in 1503, and in 1508 became governor of the Indies. After a just and humane rule, he died at Goa, 1515.

Alcibiades (*al-se-bi'-a-deez*), famous Athenian general, was born at Athens about 450 B. C., and educated in the house of his uncle Pericles. He held joint command with Nicias over the expedition against Sicily; but, being accused of impiety during his absence, he fled to Sparta, and then to Persia. Recalled to Athens, he forced the Lacedæmonians to sue for peace, and made several conquests, but again losing his popularity, he withdrew to the court of Pharnabazus, the Persian satrap, in Phrygia. His treacherous host, instigated by Lysander, King of Sparta, set fire to the place where Alcibiades lived, and in seeking to escape, he was assassinated, 404 B. C.

Alcott, Louisa May, born in 1832, an American author. She began early to write, but met with no marked success till the publication of "Little Women" in 1868. She wrote many other books, the material for her first volume, "Hospital Sketches," being gathered during her experience as nurse in the military hospital at Washington, where she went in 1862. Died, 1888.

Alcuin, English theologian, especially noted as the coadjutor of Charlemagne in his educational reforms. At the invitation of that emperor he left England, and settled in France, where he founded several schools; but on being made abbot of Tours he abandoned the court and devoted himself to theology. Born, 735; died, 804.

Aldrich, Nelson Wilmarth, United States senator from Rhode Island, from 1881 to 1911; born in Foster, R. I., 1841; academic education; engaged in mercantile pursuits. President of Providence common council, 1872-73; member Rhode Island legislature, 1875-77, and its speaker, 1876-77; member of congress, elected for terms 1879-83, but resigned to take seat in senate. He was chairman of committee on finance, and Republican leader in senate. Died, 1915.

Aldrich, Thomas Bailey, American poet and editor; born in 1836. While engaged in the office of a New York merchant he began to write verses, the success of which soon induced him to enter on a literary career. His first volume, miscellaneous poems, was published in 1855, and was called "The Bells"; afterwards, he published "Babie Bell," several other volumes of poems, and "The Story of a Bad Boy." Mr. Aldrich was an industrious contributor to our best periodicals, and was also on the editorial staff of the "Home Journal," 1856-59, and "Every Saturday." From 1881 to 1890 he was editor of the "Atlantic Monthly." Died, 1907.

Alembert (*ă-lon-bare'*), **Jean le Rond d',** a celebrated man of letters and a mathematician, the natural son of Madame de Tencin and the poet Destouches; was born in 1717. He was the friend of Voltaire, and acquired high esteem by his works, which fill eighteen volumes. His treatises on dynamics and fluids at once established for him a reputation in science. Died, 1783.

Alexander I., Paulovich, born in 1777; emperor of Russia and king of Poland. He succeeded to the throne in 1801, and showed himself a brave and judicious monarch. He entered into a treaty with England, Austria, and Sweden to resist the encroachments of France, but was defeated at the battles of Austerlitz, Eylau, and Friedland, and compelled to make peace with Napoleon at Tilsit. In 1812 war again broke out, and on the conclusion of peace in 1814 Alexander visited England and Poland. Died, 1825.

Alexander II., Nikolayevitch, emperor of Russia, born in 1818; succeeded his father as czar in 1855. He married in 1841 Marie, daughter of the Grand Duke Louis II., of Hesse-Darmstadt. He terminated the Crimean War soon after his accession by the Treaty of Paris. Though trained by his father to a military life, he devoted himself to the internal affairs of his country, improved the popular education, and emancipated the Russian serfs. He waged war successfully on Turkey in 1877-78. He was assassinated in Petrograd, 1881.

Alexander III., of Macedon, surnamed "The Great," born in 356 B. C., son of Philip. He was educated partly by Aristotle, and early gave proofs of skill and courage. A revolt of Thebes at the commencement of his reign was promptly quelled with great severity; then crossing the Hellespont, he marched against the Persians, whom he repeatedly defeated, conquering Phœnicia and Egypt. After the final defeat of Darius at Gaugamela, and the capture of Babylon, Susa, and Persepolis, Alexander commenced the conquest of India, but after penetrating almost as far as the Ganges, he was compelled to return to Babylon, but paused at Susa to celebrate his marriage with the daughter of Darius. He died at Babylon, 323 B. C., after a reign of about thirteen years; his body was embalmed and taken to Alexandria, which city had been founded by him and named in his honor.

Alexander VIII. (Pope), Pietro Ottoboni, born in 1610; was Bishop of Brescia, and afterwards of Frascati; he became pope in 1689, and succeeded in reforming many abuses and reestablishing friendly relations with France. He placed in the Vatican the fine collections of books left him by the Queen of Sweden. Died, 1691.

Alexander Nevski, Saint, born in 1219, prince of Novgorod. A brave soldier, his surname of "Nevski" being given him after a signal victory over the Swedes on the banks of the Neva. He submitted to Batu Khan, the Tartar chief, who confirmed him in his dominions and also bestowed upon him the sovereignty of southern Russia. Died, 1263.

Alexis (*a-lez'-is*), **Mikhallovitch,** a Russian emperor, born in 1629, came to the throne in 1645, and died in 1676. He was the progenitor of Peter the Great. In his reign the laws of the kingdom were first printed, various manufactories established, Moscow beautified, and many new cities built.

Alfieri (*al-fe-a'-re*), **Vittorio,** a Piedmontese count, born in 1749. This distinguished poet is the author of several esteemed tragedies, sonnets, and other works of fancy. He is equally celebrated for his "liaison" with the Countess of Albany. Died, 1803.

Alfonso I., of Asturias and Leon, born in 693; a wise and brave king, who, elected in 739, succeeded in expelling the Moors from Galicia, Leon, and Castile. He also established towns, built churches, and generally improved the internal condition of his country. Died, 756.

Alfonso X., of Leon and Castile, born in 1221, succeeded to the throne in 1252; aspired to be emperor of Germany, and in 1257 divided the election with Richard of Cornwall. In 1272 he again unsuccessfully attempted to gain the imperial crown. He was driven from the throne by his son Sancho. Alfonso was the most learned ruler of his time. Died, 1284.

Alfonso XIII., king of Spain, born in 1886, son of Alfonso XII. He acceded to the throne in his own right in 1902; married, 1906, Princess Ena of Battenberg, niece of King Edward VII.

Alfred the Great, born in Wantage, Berks, 849, the youngest son of Ethelwulf, king of the West Saxons, succeeded on the death of his brother Ethelred to a throne threatened by invasion from without and dissension within. His first care was to drive off the Danes, whom he is said to have encountered in fifty-six battles by land and sea. The great victory of Edington (878) led to the peace of Wedmore, and Alfred was thus for a time free to devote himself to the peaceful reforms for which his name is renowned. Prominent among these are the establishment of social order, the encouragement of learning, and the founding of a national fleet. Alfred died in 901, esteemed as a religious and industrious man and a wise and learned king.

Alger, Russell Alexander, senator, capitalist, was born in Lafayette, Ohio, 1836. Left an orphan at 12, he worked on a farm for seven years, earning money to defray expenses at Richfield, O., academy during winters. He was admitted to the bar, 1859; began practice in Cleveland but removed, 1860, to Michigan. In 1861 he enlisted, rose from captain to colonel, and was brevetted major-general of volunteers. After the war he engaged very extensively in the lumber business. He was governor of Michigan, 1885-86; secretary of war, 1897-99; and United States senator from 1902 until his death, 1907.

Alison, Sir Archibald, born in 1792, son of a clergyman. He was educated at the University of Edinburgh, and called to the Scottish bar, becoming deputy advocate in 1822. But he is best known as a historian, his great work being "The History of Europe from the French Revolution to the Restoration of the Bourbons." He died in 1867.

Allen, Ethan, an officer of the American Revolution, born in 1737. He captured Forts Ticonderoga and Crown Point at the opening of the war. His troops were mostly from Vermont, and were called "Green Mountain Boys." Died, 1789.

Allen, James Lane, author; born in Kentucky, 1849; graduate of Transylvania University; taught in Kentucky University; later professor of Latin and higher English, Bethany, West Virginia, College; since 1886, given entire attention to literature. Author: "Flute and Violin," "The Blue Grass Region and Other Sketches of Kentucky," "John Gray, a novel," "The Kentucky Cardinal," "Aftermath," "A Summer in Arcady," "The Choir Invisible," "The Reign of Law," "The Mettle of the Pasture," "The Bride of the Mistletoe," "The Doctor's Christmas Eve," "The Heroine in Bronze," "The Last Christmas Tree," "Sword of Youth," "The Cathedral Singer," "Kentucky Warbler," "Emblems of Fidelity."

Allen, Viola, actress, born in the South, 1869; daughter Leslie Allen, character actor, of old Boston family, and Sarah (Lyon) Allen, English woman of good descent; went to Boston when three years old; educated in Boston and at Wykham Hall, Toronto, and boarding school in New York. Made début, Madison Square Theater, New York, in Esmeralda, at age of 15; after few months joined John McCullough Company, playing Virginia, Desdemona, Cordelia, etc. Subsequently played leading classical, Shakesperean, and comedy rôles with Lawrence Barrett, Tommaso Salvini, Joseph Jefferson, and William J. Florence. Leading lady at Boston Museum for a season; also at Empire Theater in 1893, and four years following, creating and playing rôles in "Liberty Hall," "Sowing the Wind," "The Masqueraders," "Under the Red Robe," etc. Starred, 1898, as Gloria Quayle in "The Christian," by Hall Caine, and, in 1900, produced "In the Palace of the King," by F. Marion Crawford and Lorimer Stoddard; starred, in 1902, as Roma in Hall Caine's "The Eternal City." In 1903, under management of her brother, began series of Shakesperean revivals, producing first "Twelfth Night," in which she played "Viola" with success; in subsequent seasons, she appeared as Hermione and Perdita in "A Winter's Tale."

Allenby, Sir Edmund, English general, was born in 1861, and was educated at Haileybury. Entering the Inniskilling dragoons, he served in the Bechuanaland expedition, 1884-85, in the Zulu war, 1888, in the South African war, 1899-1902, and on the outbreak of the European war was placed in command of cavalry. In 1917 he was made commander of the Egyptian expeditionary force. Under his direction British armies invaded Palestine and captured Jerusalem from the Turks, Dec. 10, 1917. At the decisive battle of Samaria, Sept. 18-22, 1918, Allenby, by skilful use of his cavalry, utterly crushed a Turkish army of 100,000 under command of the German field marshal Liman von Sanders, capturing more than 75,000 prisoners and 350 guns. This notable victory virtually destroyed the military power of Turkey and hastened the collapse of the Teutonic nations and their allies in the world war.

Allison, William Boyd, distinguished American legislator, born in Ohio, 1829; educated at Western Reserve College and practiced law till 1857; emigrated to Iowa; served in the Civil War; was sent to Congress while that struggle was going on, and remained in Congress as representative and senator from that time until his death in 1908, save in 1872–73. His influence was marked and salutary on the legislation of his day.

Almanzor (*al-man'-zor*) (surnamed the Victorious), The second caliph of the Abbassidian Dynasty, succeeded his brother, Abul Abbas, in 754. He exterminated the race of the Ommaïades, and in 762 founded the city of Bagdad, which became the capital of his empire. Several other Mohammedan princes, famed for their martial achievements, also bore this name. He died in 775.

Alma-Tadema, Laurence, born in Friesland in 1836; painter; studied at the Royal Academy of Antwerp, and was afterwards pupil and assistant of Baron Henry Leys. He settled in England, where his pictures found a ready welcome. He was elected A. R. A. in 1876, and R. A. in 1879. Among his numerous works are "Phidias and the Elgin Marbles" (1868), "A Roman Emperor" (1871), "The Sculpture Gallery" (1875), "Sappho" (1881), and "The Roses of Heliogabalus" (1888). Died, 1912.

Alstroemer (*al-stro'-mer*), **Jonas,** a Swede, born, 1685, remarkable for the great commercial improvements which he introduced into his native country. Of very humble origin, he was for a time unable to surmount the obstacles which arose from the poverty that oppressed him. He visited England; and having minutely noticed the sources of its manufacturing prosperity, returned to Sweden, and obtained permission to establish a manufactory at Alingsas, in West Gothland, his birthplace. So extensive and successful were the manufacturing and agricultural resources which he introduced into Sweden, that the state, in acknowledgment of his merit, conferred on him a patent of nobility, made him chancellor of commerce, and erected a statue to his honor on the Stockholm Exchange. Died, 1761.

Alva, Ferdinando Alvarez de Toledo, Duke of, born in 1508, Spanish governor of the Netherlands under Philip II. of Spain, and notorious for the merciless manner in which he exercised his dictatorial power. Under his rule more than 18,000 persons were sent to the scaffold, and a revolt, headed by the Prince of Orange, broke out, which, after nearly forty years of war, resulted in the independence of the provinces. Alva was recalled in 1573, but he was soon given the command of Portugal, which he quickly conquered. Though his pride and cruelty were excessive, he was undoubtedly the greatest general of his age. Died, 1582.

Alvarado, Alonzo, one of the Spanish conquerors of Mexico under Cortez, and of Peru under Pizarro; he was defeated and made prisoner by Almagro. He afterwards joined De Castro (1542), and was lieutenant-general of the army which suppressed the rebellion of Gonzalo Pizarro in 1548. Died, 1554.

Alvarado, Pedro de, one of the Spanish conquerors of Mexico; he took part in the expedition and victories of Cortez, and was entrusted with the command of the city of Mexico, and afterwards made governor of Guatemala and Honduras. He explored California, and was killed in 1541, soon after his return from an expedition against Xalisco.

Amaral, Antonio Caetano do, born in 1747; a learned Portuguese historian and author of the valuable "Memoirs on the Forms of Government and Customs of the Nations that Inhabited Portugal." Died, 1819.

Amasis, or **Amosis** (*a-ma'-sis, a-mo'-sis*), an Egyptian who, from a common soldier, rose to be a king of Egypt. He made war against Arabia, and died before the invasion of his country by Cambyses, King of Persia. Cambyses caused his body to be dug up, insulted, and burnt.

Amaziah (*am-a-zi'-ä*), the son of Joash, whom he succeeded as eighth King of Judah. He adhered to the worship of the true God, but permitted some idolatrous observances. Having arrogantly challenged Jehoash, King of Israel, to battle, the armies met at Beth-she-mesh, where Amaziah was defeated, himself taken prisoner, and subsequently his city and palace were plundered. Fifteen or sixteen years afterwards he fled from conspirators, by whom he was overtaken and assassinated. Flourished in Eighth or Ninth Century.

Amboise, George d', born in 1460, a French cardinal and minister of state. He was successively Bishop of Montauban, Archbishop of Narbonne and of Rouen, and after acquiring considerable popularity as prime minister under Louis XII., was made cardinal and appointed legate in France, where he effected great reforms among the religious orders. Died, 1510.

Ambrose (*ăm'-brōz*), **St.,** a doctor in the Latin Church of the Fourth Century, was born at Treves, 340. Consecrated archbishop of Milan, 374. Ambrose was repeatedly, in the discharge of his duty to the Church, brought into direct conflict with the highest secular authority. He rebuked Valentinian, defied Maximus, and after the massacre of Thessalonica, compelled the great Theodosius to a humiliating penance before admitting him to Christian communion. To him is ascribed the noble hymn, "Te Deum Laudamus." No father of the Church has a fame more wide, more beautiful, or more deserved. Died, 397.

Amerigo Vespucci, born in Florence, 1451, was an Italian navigator who visited Brazil in 1503. He had previously made several voyages of exploration, and claimed priority over Cabot and Columbus in reaching the mainland, named in his honor America, but the best authorities consider this claim to be unfounded. Died in Seville, 1512.

Amherst, Jeffrey, Lord, born in 1717; British general, served on the Continent and in America, where he succeeded Abercrombie as commander-in-chief. Here he was remarkably successful, and after many victories, Montreal surrendered and Newfoundland was recovered

from the French. He was raised to the peerage in 1776, and was appointed field marshal in 1796. Died, 1797.

Ampère, André Marie, born in 1775; a distinguished electrician, who may be considered the father of electro-magnetics. He first attracted attention by a treatise on the "Theory of Probability," published in 1802, and obtained a post as teacher, and ultimately as professor, at the polytechnic school in Paris. In 1820, Oersted's discovery of the effect of voltaic currents upon magnetic needles was brought to his notice, and Ampère verified and completed this, and showed also the mutual effect of currents upon each other, from which he deduced a new theory of magnetism. The Royal Academy of Sciences recognized his services, and gave his name to one of the electro-magnetic units. Ampère's last great work was the classification of the sciences, but this he did not live to finish. Died, 1836.

Amphictyon (*am-fik'-te-on*). One of the heroes of ancient Greece, son of Deucalion and Pyrrha. On the dominions of his father being divided between him and his brother Helenus, Amphictyon reigned over Thermopylæ, in the Fourteenth or Fifteenth Century before Christ. He invaded Athens, which he consecrated to Minerva, and governed it as sovereign during a period of ten years.

Amundsen, Roald, explorer, discoverer of the South Pole, was born in Borge, Norway, 1872. Studied at Christiania; student of medicine two years; qualified at public school for sailors, Christiania, as first officer. At the age of twenty-five he became mate with the Belgica Antarctic expedition. In June, 1903, he sailed in the Gjöa and after two years located the North magnetic pole and the Northwest passage. In June, 1910, in Nansen's famous ship, the Fram, he led the Norwegian Antarctic expedition which resulted in the discovery of the South Pole December 14, 1911. On August 20, 1912, he presented to the king of Norway the flag which he had carried to the South Pole. Made a member of the French legion of honor in 1912. Received gold medal from the national geographic society in 1913. Has lectured extensively in Europe, America, and Australia. Author: "The Northwest Passage," "The South Pole."

Anacreon (*an-ack'-re-on*). A celebrated Greek lyric poet, born at Teos in Ionia, about 563 B. C. He was patronized by Polycrates, the tyrant of Samos, and Hipparchus, the tyrant of Athens. He died at Abdera, suffocated by a grape-stone while in the act of drinking. His poems are chiefly devoted to the praises of love, pleasure, and wine. They were admirably translated by Moore.

Anaxagoras (*an-ax-ag'-o-ras*), a Greek philosopher of the Ionian school, born at Clazomenæ, 500 B. C. He studied under Anaximenes, and, after traveling through all the known parts of the globe in search of knowledge, established himself at Athens, where he opened the first school of philosophy. He introduced the dualistic explanation of the universe, distinguishing sharply between mind and matter. Pericles, Socrates, and Euripides were among his pupils. He was condemned to die for alleged impiety, a sentence which was changed to exile, whereupon he retired to Lampsacus, and there continued to teach philosophy until his death, 428 B. C.

Anaximander (*an-ax-e-man'-der*), a philosopher and famous mathematician of the Ionian school, born in 610 B. C. He was the first who noticed the obliquity of the ecliptic, and taught that the moon is indebted for her light to the sun, and that the earth is round. He constructed a sphere to represent the heavenly divisions, and is said to have invented geographical charts and the gnomon. He also believed in a multitude of worlds. He died, 546 B. C.

Andersen, Hans Christian, the son of poor parents, was born in 1805 at Odense in Funen; he early showed a strong inclination for the stage, and at fourteen went to Copenhagen, where he obtained an engagement at the theater royal. His voice soon broke down, but through the kindness of Conference Councillor Collin he was admitted to the grammar school at Slagelse. His first prose work, a book of travels, was published in 1828, and was followed by others, as well as novels and poems. He is best known for his fairy tales, which are full of charm. Died, 1875.

Anderson, Mary, born in 1859, at Sacramento, California; well known as an actress of great beauty and considerable dramatic taste; at 16 years of age made her début at Louisville, Ky., as Juliet. She met with great success both in the United States and in London.

Anderson, Rasmus Björn, author; born at Albion, Dane County, Wisconsin, of Norwegian parentage, January 12, 1846; graduate of Luther College, Decorah, Iowa, 1866; A. B., University of Wisconsin, 1885 (LL. D., 1888); professor of Greek and modern languages, Albion (Wis.) Academy, 1866; instructor of languages, 1869–75, professor of Scandinavian languages and literature 1875–83; University of Wisconsin, United States minister to Denmark, 1885–89; married July 21, 1868, to Bertha Karina Olson. Editor and Publisher of "Amerika" since October, 1898. Author: "Norse Mythology," "Viking Tales of the North," "America Not Discovered by Columbus," "The Younger Edda," "First Chapter of Norwegian Immigration, 1821–1840"; also many translations of Norse books, and author of several works in Norwegian.

Anderson, Robert, born in 1805; an American general, who served as colonel in the Black Hawk War, and distinguished himself in the Mexican War (1846–48), in the battle of El Molino del Rey. On the outbreak of the Civil War he was appointed to the defense of Charleston Harbor, and held Fort Sumter for two days against the Confederates; failing health prevented his taking further part in the war. Died, 1871.

André, John, born in 1751; a British soldier who served in the war with America, and rose to the rank of major. He conducted the negotiations with Benedict Arnold for the betrayal of West Point, but being discovered in disguise, was arrested and put to death as a spy. His remains lie in Westminster Abbey, where a cenotaph was erected to his memory. Died, 1780.

Andrea, Pisano, born in 1270; an Italian architect and sculptor, who produced many fine works in Florence, his greatest being the bronze figures in relief for the baptistery of St. John's. Died in 1345.

Andreani (*ăn-drā-ā'-nē*), a distinguished engraver, who flourished in the Seventeenth Century. He obtained engravings worked by other hands, which he disposed of as his own. He engraved on wood in a peculiar style, known as "chiaro-oscuro," of which, however, he was not the inventor. One of his productions, "The Triumph of Julius Cæsar," from Andrea Mantegna, the original of which is at Hampton Court, is cut on ten blocks of wood, and dated 1598. Andreani died at an advanced age, in 1623.

Andrew, Saint, one of the twelve apostles, who before his call was a disciple of John the Baptist. He was the means of bringing his brother, Simon Peter, to Christ, and is said to have preached the Gospel in various countries, and to have been at last crucified at Patræ in Achaia.

Andrews, Elisha Benjamin, educator, was born in Hinsdale, N. H., 1844. He served in Union Army in Civil War; wounded at Petersburg, 1864, losing an eye; graduate of Brown University, 1870; Newton Theological Institution, 1872-74; Principal Connecticut Literary Institution, Suffield, Conn., 1870–72; pastor First Baptist Church, Beverly, Mass., 1874–75; president Denison University, Granville, O., 1875–79; professor homiletics, Newton Theological Institution, 1879–82; professor history and political economy, Brown University, 1882–88; professor political economy and finance, Cornell, 1888–89; president Brown University, 1889–98; superintendent schools, Chicago, 1898–1900; chancellor University of Nebraska, 1900–09. Author: "Institutes of General History," "Institutes of Economics," "An Honest Dollar," "History of the United States." Died, 1917.

Andros, Sir Edmund, born in 1637; an English officer who served in the wars with the Dutch, and afterwards went as governor to various provinces of North America. He was recalled in 1698, and made lieutenant-governor of Guernsey. Died, 1714.

Angell, James Burrill, educator, diplomat; born in Scituate, R. I., 1829; graduate of Brown University, 1849; professor modern languages and literature, Brown, 1853–60; editor Providence Journal, 1860–66; president of University of Vermont, 1866–71; president University of Michigan, 1871–1909, president emeritus, 1909–16; United States Minister to China, 1880–81; member Anglo-American International Commission on Canadian Fisheries, 1887; chairman Canadian - American Commission on Deep Waterways from Lakes to Sea, 1896; minister to Turkey, 1897–98. Died, 1916.

Angell, James Rowland, educator, was born at Burlington, Vt., 1869, son of James Burrill Angell. He graduated at the University of Michigan, 1890; A. M., Harvard, 1892; studied also at Berlin, Halle, Leipzig, and Paris. Beginning as assistant professor of psychology, University of Chicago, 1894, he became associate professor, 1901, professor and head of the department, 1905. In 1911 he was made dean of the faculties, and, during 1918–19, was acting president, of the University of Chicago. In 1921 he was chosen president of Yale University.

Angelo, Michael de Buonarotti, a distinguished painter, sculptor, architect, and poet of Italy. He was born in 1475, in the territory of Arezzo, in Tuscany. At an early age he became the pupil of Domenico Ghir-

landajo, a celebrated artist of his day. He soon displayed such uncommon merit, that Lorenzo de' Medici took him into his service. His mastery over the grand and terrible has never been equaled; and his correct design and knowledge of anatomy has not been attained by other artists. Several editions of his poetry have been published. Michael Angelo discontinued painting in his 75th year, and terminated his brilliant career at Rome, at the advanced age of 89, in 1564. He was splendidly interred in that city by Cosmo, Duke of Tuscany, but his remains were subsequently, by command of that prince, removed to Florence, and deposited beneath a magnificent monument, embellished with three statues, representing painting, sculpture, and architecture.

Anjou, Counts and Dukes of (*an-joo'*), a powerful French family, connected with the regal house of Valois which maintained a considerable share of independence until the reign of Louis XI. One of its members, Fulke, became King of Jerusalem, 1131; and his son, Geoffroy, founded the royal house of Plantagenet. The second house of Anjou was a branch of the royal family of France. The title of Duke d'Anjou was also borne by several sons of kings of France, and lastly by a grandson of Louis XIV., who became Philip V. of Spain.

Anna Comnena (*kom-nē'-na*), the daughter of Alexius Comnenus I., by his wife Irene, was born at Constantinople, in 1083. She devoted herself to the study of literature and philosophy, and was esteemed the most learned woman of her age. After the death of her father, she conspired to depose her brother, and to place the crown upon the head of her husband, Nicephorus Bryennius. Her plot being discovered, she lost all her influence at court, and employed the last ten years of her life in composing a history of her father's reign, called the "Alexiad." Died, 1148.

Anne of Austria, the eldest daughter of Philip III. of Spain, was born in 1601, and married Louis XIII., King of France, in 1615. Upon the death of her consort, in 1643, she was declared queen-regent, during the minority of her son. She placed unbounded confidence in Cardinal Mazarin, whose rule was so unpopular that a civil war ensued, which compelled the queen and her son to fly from Paris, and to solicit the aid of the great Condé. In 1661, the young king assumed the reins of government, and Anne retired, to pass the remainder of her life in religious exercises. She died from the effects of a cancer in her breast, in 1666.

Anne of Beaujeu, daughter of Louis XI., married Peter Beaujeu, Duke of Bourbon, and constable of France. She acted as regent of the kingdom during the minority of her brother, Charles VIII. Born, 1462, died in 1522.

Anne Boleyn, the second queen of Henry VIII., was born in 1507. She was the daughter of Sir Thomas Boleyn, and a maid of honor to Queen Katherine, whom Henry divorced, that he might raise Anne to the throne; she became the mother of Queen Elizabeth. The fickle king caused her to be decapitated in May, 1536.

Anne of Brittany, the daughter and heiress of Duke Francis II., was born in 1476. In 1491 she was united to Charles VIII., King of France, and governed the kingdom during the expedition of that prince to Italy. After his death, she married Louis XII. in 1499, over whom she exercised great influence. She died in 1514.

Anne of Cleves, the fourth wife of Henry VIII., to whom she was married in 1540. She was the daughter of John, third Duke of Cleves. The match was projected by Cromwell, and was partly the cause of that minister's ruin. Henry put her aside, settled on her a liberal annuity, with which she was well satisfied, and she spent the remainder of her days in England, where she died in 1557.

Anne, Queen of England, was the second daughter of King James II., by his first wife, Anne Hyde, and was born in 1665. In 1683, she married Prince George, brother to the King of Denmark, by whom she had a number of children, all of whom died young. Anne ascended the throne on the 8th of March, 1702. She established a fund, known as "Queen Anne's Bounty," for the augmentation of the livings of the poor clergy. During her reign (which was made illustrious by the military triumphs of the Duke of Marlborough), Sir George Rooke and Sir Cloudesley Shovel conquered the fortress of Gibraltar, a possession which Spain has never been able to regain; and the legislative union of Scotland with England was effected. The glorious galaxy of writers, in almost every branch of learning, who flourished in her time, has caused it to be considered the Augustan age of British literature. Died, 1714.

Annunzio, Gabriele d', the pseudonym of the Italian poet Gaetano Rapagnetta; was born in 1864, on a boat in the Adriatic; educated in a college at Prato, and studied in Rome. He was elected, 1898, to the Italian Parliament. His first volume of verse, "Primavera," appeared in 1879, and was followed by "In Memoriam," "Canto Novo," "Intermezzo di Rime." His "Odi Novelli" reached their ninth edition in 1899. "Terra Vergine" appeared in 1882. His first novel, "Il Piacere," obtained ten editions. In drama he wrote "Il Sogno d'un Mattino di Primavera," "La Gioconda," "Francesca da Rimini," and "Più che l' Amore." During the world war he served with distinction as a military aviator. In 1919, with a force of Italian volunteers, he seized and held Fiume in defiance of the Paris Peace Conference which had awarded the city to Jugo-Slavia.

Anselm, Saint, born in 1033; Archbishop of Canterbury during the reigns of William Rufus and Henry I., to which post he was summoned from his position as Abbot of Bec in Normandy. He was a man of great piety and intellectual power, and firmly resisted the efforts of the king to despoil the Church of her dignity or revenues. He died at Canterbury in 1109.

Anthony the Great, St. (*ăn'to-ne*), the founder of monastic institutions, was born A. D. 251 near Heraclea, in Upper Egypt. In 285, having sold all his property and given the proceeds to the poor, he withdrew into the desert whither a number of disciples were attracted by his reputation for sanctity; and thus was formed the first community of monks. He afterwards went to Alexandria to seek the honor of martyrdom amid the persecutions there raging against the Christians; but, as his life was spared, he again returned to the desert, and died at the great age of 105.

Anthony, Susan Brownell, reformer; born in Adams, Mass., February 15, 1820; educated in school maintained by father for his own and neighboring children, Battenville, N. Y., and 1837–38 at Friends' Boarding School, West Philadelphia. Taught school from age of 15 to 30; aided, 1852, in organizing the first State woman's temperance society; active in anti-slavery and woman's rights work; organizer and secretary of Women's National Loyal League during Civil War. After war, was entirely devoted to the woman suffrage movement; founded, 1868, "The Revolution," exclusively woman's rights paper; managed it several years; in 1869 organized, with Mrs. Stanton, National Woman Suffrage Association; joint author with Mrs. Elizabeth Cady Stanton and Mrs. Matilda Joslyn Gage of "The History of Woman Suffrage" (3 volumes), and of Volume IV. with Mrs. Ida Husted Harper; contributed to leading magazines and lectured in England and throughout the United States. Died, 1906.

Antigonus, Cyclops or **"one-eyed,"** a distinguished general of Alexander the Great, on whose death he became Governor of Phrygia, Lycia, and Pamphylia, and after defeating and slaying Eumenes, and waging other successful wars, assumed the title of king. His ambitious schemes united his rivals, and he was slain in battle at Ipsus, 301 B. C.

Antiochus (*ăn-tī'o-kŭs*), a favorite royal name in ancient Syria, no less than eleven of her kings bearing it. The most noted was Antiochus III., the Great, contemporary with Hannibal, 223 B. C., and Antiochus IV., his son.

Antipater, born about 400 B. C.; a Macedonian, the friend and minister of Philip and Alexander the Great; during the absence of the latter was appointed regent of Macedonia and Greece, and in that capacity defeated the Greeks. On the death of Alexander, Antipater received the government of Macedonia. Died, 319 B. C.

Antipater of Idumea, father of Herod the Great; took part in the disputes between Hyrcanus II. and Aristobulus II. He assisted in placing Hyrcanus on the throne of Judæa 63 B. C., and contrived to get the power in his own hands. He was afterwards appointed Procurator of all Judæa. Died, 43 B. C.

Antoinette (*ăn-twä-nĕt'*), **Marie,** Archduchess of Austria, was born at Vienna, November 2, 1755. She was the daughter of the Emperor Francis I. and Maria Theresa, and was given in marriage to the Dauphin, son of Louis XV., in 1770, being then 14 years of age. Her beauty and amiable conduct gained universal admiration. Her consort having ascended the throne as Louis XVI., during the troubles which occurred in the latter years of his reign she became the object of popular hatred. She was confined in the same prison with her husband for some time, but afterwards separated from him and detained in the Conciergerie, whence, after much suffering, she was carried before a Revolutionary tribunal in October, 1793, by judgment of which she suffered by the guillotine on the same day.

Antommarchi (*an-to-mar'-ke*), **Doctor,** a celebrated anatomist, born in 1780 in Corsica. When Napoleon was a captive he was selected to attend the deposed emperor. He remained with him in his last moments, and refused to sign the document prepared on the examination of the corpse by the English surgeons. He died in 1838.

Antoni'nus Pius, Titus, adopted son and successor of Hadrian, Emperor of Rome, was born in 86. His reign of twenty-three years was powerful and prosperous. He died in 161.

Antony, Mark. See Mark Antony.

Appelles (*a-pel'-leez*), a celebrated Greek painter, born in the island of Cos, according to Pliny, but by some writers said to have been a native of Ephesus. During the reign of Philip, father to Alexander the great, Apelles visited Macedon. The monarch became his patron and friend, as did Alexander after him. The latter would not permit any one else to paint his portrait. His most famous works are "Venus asleep," and "Venus Anadyomene." He died in the island which is supposed to have been his native place.

Apollodorus of Damascus, a great architect of the Second Century, worked at Rome for the Emperor Trajan, and built the forum and column which bear that monarch's name, but his greatest work was a huge bridge over the Danube at its confluence with the Alt. He was banished and put to death by Hadrian.

Apollonius (*a-pol-lo'-ne-us*), called the Rhodian (Apollonius Rhodius), was born in Alexandria, B. C., 230. He presided over an academy at Rhodes, was an eminent rhetorician, and wrote a poem, in four books, on the expedition of the Argonauts, and other poems. This name was also borne by a mathematician of Perga in Pamphylia, who lived in 240 B. C.; by a Roman senator, and Christian martyr, who suffered in 186; and by a sophist, a stoic, and a Pythagorean philosopher.

Apollos (*a-pol'-los*), a Jew born in Alexandria, and converted in the time of the Apostles to Christianity. In the year 54, being at Ephesus, and famed for eloquence and Scriptural knowledge, he preached the gospel in the absence of St. Paul. At Corinth he preached with great success, and was there promoted to the dignity of a bishop.

Aquinas (*a-kwi'-nas*), **St. Thomas d',** popularly called the "Angelic Doctor," was a descendant from the counts of Aquino, in Calabria. He was born in 1227, and in 1323 Pope John XXII. enrolled his name in the calendar of saints. His writings, which are very highly esteemed among Catholics, gave rise to a sect called Thomists. Died, 1274.

Arago (*ăr-ă-go'*), **Dominique,** a celebrated French philosopher; was born February 26, 1786. In 1806, he was engaged, with Biot, in measuring an arc of meridian. His subsequent life was distinguished by an ardent and successful devotion to science; he was also eminent as a liberal politician. He died in October, 1853.

Arbaces (*ar-ba'-seez*), a general of the Medes, who served under Sardanapalus, King of Assyria. Disgusted with the effeminacy of that monarch, Arbaces took arms against him, and compelled him to fly to Nineveh, where he committed suicide, when Arbaces ascended his throne, which he filled for twenty-eight years

Arc, Joan of, a celebrated heroine, otherwise called the Maid of Orleans, was born at Domremy, on the borders of Lorraine, January 6, 1412. She was the daughter of humble peasants, and in her earlier years is said to have tended horses, and rendered other menial services as the servant at a small inn. In her eighteenth year, however, professing to have a divine mission to be the saviour of her country, she got herself introduced to the Dauphin Charles, headed his troops, and infusing courage into his dispirited adherents, restored his fallen fortunes in a most incredibly short period, and secured to him the crown of France. Eventually she fell into the hands of the Burgundians, and having been delivered over by them to the English and their French partisans, the latter caused her to be condemned to the flames as a heretic and sorceress, in 1431.

Archelaus, a Cappadocian, the distinguished general of Mithridates VI., flourished in the First Century B. C. After defeating Nicomedes III. at Amnias, 88 B. C., he sailed to Greece, captured Delos and other towns, and induced Achaia, Lacedemon, and Bœotia to form an alliance with Mithridates against Rome. Sulla besieged him in the Piræus, and compelled him to withdraw his forces. Returning to the contest with a still larger army, Archelaus was again defeated and forced to retire, when, acting upon instructions received from Mithridates, he concluded peace with Sulla, but upon terms unsatisfactory to the king, and he finally deserted to the Romans, after which little is known of him.

Archimedes (*ar-ke-me'-deez*), a renowned mathematician, whose astonishing skill in mechanics was such that some of the greatest real triumphs of antiquity may be ascribed to him. His inventions amazed his contemporaries: the lifting of weights by means of pulleys, and the endless screw, are among them. A Roman historian celebrates the warlike engines produced by the skill of Archimedes. His mind ever fruitful of extraordinary resources, when Syracuse was besieged by Marcellus, he constructed a burning-glass, on a scale of such magnitude that by means of it the enemy's fleet was fired. Eventually the city being taken, he was found among the slain.

Argand, Aime', born in 1755, a chemist of Geneva, inventor of the Argand lamp, which he brought out in England in 1782. The patent was also claimed by a Frenchman, Ambroise Langé, and finally taken out in France in their joint names, the priority of invention being conceded to Argand. The French Revolution, however, deprived him of all profit from his patent. Died, 1803.

Ariosto (*ar-e-os'-to*), **Ludovico,** a famous Italian poet. He was born at Reggio in 1474, and educated at Ferrara. His writings were numerous, but his "Orlando Furioso" is the work which established his fame. Died, 1533.

Aristides (*ar-is-ti'-deez*), an Athenian patriot whose unbending integrity gained for him among his countrymen the name of The Just. He distinguished himself at Marathon, Salamis, and Platæa. After gaining great honor for virtuous conduct, he died poor, 468 B. C. There were also, an orator of Adriani in Mysia, a Christian philosopher in Athens, a painter of Thebes, a historian mentioned by Plutarch as of Miletus, and a Greek musician, who bore the same name.

Aristophanes (*a-ris-tof'-a-neez*). The most celebrated of the ancient Athenian writers of comedy, contemporary with Socrates and Plato. He wrote fifty-four comedies, of which eleven only remain. In one of them, "The Clouds," Socrates (or rather the philosophy of the age) is held up to ridicule. The date of his death is not known.

Aristotle (*ar'-is-tot-l*), a distinguished philosopher, born at Stagira in Thrace, 384 B. C. When twenty years of age, he had the advantage of being placed under Plato, who pronounced his eulogy by describing him to be "the mind" of his academy. His growing fame caused Philip of Macedon to make him tutor to his son Alexander. That prince is said to have profited from his sage counsel to restore towns that he had ruined. Pursued by envy, Aristotle was accused of impiety, and retired to Chalcis, where he died 322 B. C.

Arius (*a'-ri-us*), a presbyter in the Church of Alexandria, who lived in the Fourth Century. His doctrine was that the Father and Son were essentially distinct. That the latter was created out of nothing by the will of the former. For this he was excommunicated and banished, but having been recalled, was about again to enter the Church from which he had been exiled, when he suddenly expired. The sect called Arians are named after him, but they do not adopt all his opinions.

Arkwright, Sir Richard, born in 1732; a Lancashire barber, renowned as the inventor of the spinning-frame. Of humble birth, he exhibited considerable mechanical skill, joined with the greatest industry. In 1767 he attempted to solve the problem of perpetual motion, and soon after, with the help of a clock maker named Kay, his spinning inventions began to take shape. He then entered into partnership with a firm of stocking manufacturers, and his invention was patented in 1769, and though many difficulties arose, from infringements of the patent, the hostility of the work-people, and disputes to his claim as the inventor of his machines, Arkwright was enabled to rise from poverty, and was chosen to present a congratulatory address to George III. in 1786, on which occasion he was knighted. Died, 1792.

Armour, Jonathan Ogden, capitalist, packer; born in Milwaukee, Wis., November 11, 1863; entered Yale but did not complete course, yielding to request of father that he should return to Chicago and relieve him of some of his business cares. Now president of Corporation of Armour & Co., packers, and director in other corporations.

Arnheim or **Arnim, George, Baron von,** born in 1581, a distinguished general and politician, who took part in the Thirty Years' War, serving successively under Gustavus Adolphus, Wallenstein, and the Elector of Saxony. After gaining the decisive victory of Liegnitz (1634) he retired to his estates, but was seized and imprisoned by the King of Sweden; he escaped, however, but died soon after. Died, 1641.

Arnold, Benedict, born in 1741; American general, a brave but unprincipaled man. At fifteen he enlisted in the English army, but soon deserted, and adopted a

mercantile life. In the Anglo-American War Arnold took an extremely active part, his skill and gallantry being especially exhibited in the siege of Quebec and the victories of Ridgefield and Bemis. Meanwhile a party hostile to him had been growing up; his due promotion was deferred, several serious charges were brought against him, the fortunes of the Americans grew worse and worse, and he became affected with the prevalent spirit of desertion. Accordingly he entered into negotiation with the British commander, and treacherously asked and obtained the command of West Point, with the intention of surrendering it to the enemy; the capture of André betrayed his duplicity, and the traitor fled in disgrace to the English army at New York. Here he was appointed brigadier-general, and after serving against his countrymen, retired to London. Died, 1801.

Arnold, Sir Edwin, born in 1832, died, 1904; journalist and poet, educated at King's College, London, and Oxford, where he won the Newdigate Prize in 1853. He was for several years principal of the Government Sanskrit College at Poonah, Bombay Presidency, but resigned his post in 1861, when he first became connected with the London "Daily Telegraph," for which he continued to write, finally being appointed editor. His "Light of Asia" (1879) achieved extraordinary popularity, and obtained him a high place among the poets of the day.

Arnold, Matthew, born in 1822, eldest son of Dr. Arnold of Rugby, was educated at Winchester, Rugby, and Balliol College, Oxford, and was a distinguished critic, poet, scholar, and theologian. He was elected Fellow of Oriel College in 1845, and in 1851, after having been for some time private secretary to Lord Lansdowne, he was appointed Lay Inspector of Schools under the Committee of Council on Education, in which capacity he twice visited the Continent for the purpose of collecting information, and which appointment he resigned in 1886. His poetic activity was manifested in early life; for ten years (1857–1867) he held the chair of poetry at Oxford, and among his productions may be noted his Newdigate prize poem "Cromwell" (1843), "The Strayed Reveller," and a volume of "New Poems" published in 1869. As a critic he holds a very high place. His later works were chiefly theological, being attempts to grapple with the supernatural aspects of Christianity from a rationalistic standpoint. "St. Paul and Protestantism" (1870), "Literature and Dogma" (1873), and "God and the Bible" (1875), are among his writings. Died, 1888.

Arnold, Thomas, D. D., born in 1795, was educated at Winchester, and Corpus Christi College, Oxford. In 1815 he became Fellow of Oriel, obtaining in that year the Chancellor's Prize for the Latin, and in 1817 for the English essay. After taking holy orders, he passed nine years at Laleham, near Staines, in literary occupations, and in preparing young men for the universities. Appointed head master of Rugby School in 1828, he raised that institution beyond all precedent, both by the remarkable success of his pupils and by the introduction of new branches of study into the Rugby course. He was of the Broad Church school of thought, and a vigorous opposer of the then new Tractarian movement. In 1841 he was appointed professor of modern history at Oxford. The best known of Dr. Arnold's works are his edition of "Thucydides," his "History of Rome" (unfinished), and his sermons delivered in the chapel of Rugby School. Died, 1842.

Artemisia, Queen of Halicarnassus, wife and successor of Mausolus, to whose memory she erected a splendid monument, which has given to similar erections the name of "mausoleum." Died, 350 B. C.

Artevelde, Jacob van, popular Flemish leader in the Fourteenth Century, assisted Edward III. in his French wars, and for nine years was practically ruler of Flanders. He determined to convert his country into a kingdom, and offered the crown to the Prince of Wales. This led to a tumult in which Artevelde was slain, 1345.

Arthur, Chester Alan, born in 1830; twenty-first President of the United States; took a leading part in the Civil War, and from 1871–78 was collector of the port of New York City. When Garfield was elected president, he was vice-president, and on the former's assassination succeeded to the presidency. Died, 1886.

Arthur, Julia, actress; born in Hamilton, Ont., May 3, 1869, of Irish and Welsh parentage; real name, Ida Lewis, stage name being taken from her mother's maiden name of Arthur. At 11, played in amateur dramatic club, taking part of Gamora in "The Honeymoon" and of Portia in "The Merchant of Venice"; three years later made professional début as the Prince of Wales in Daniel Bandmann's presentation of "Richard III."; remained three seasons with that company; studied violin music and dramatic art in England; first New York success at Union Square theater in "The Black Masque"; later in A. M. Palmer's company in several rôles, notably in "Mercedes," 1893; London début, February 1, 1895, in Henry Irving's company, playing rôles next to Miss Terry; especially successful as Rosamond in "à Becket," with Irving and Terry in United States, 1896. Now, Mrs. B. P. Cheney, Jr.

Asbury, Francis, born in 1745; the "Pioneer Bishop," an English Methodist preacher who undertook an evangelistic mission to America in 1771, by the wish of John Wesley. In 1784 he was ordained Bishop of the Methodist Episcopal Church of America. Thenceforth his life was devoted with untiring energy to the organization and extension of that Church. Died, 1816.

Ashmole, Elias, born in 1617; astrologer and antiquary, held the appointment of Windsor Herald, and published the "History of the Order of the Garter." He left many works, and presented to the University of Oxford his valuable collection of coins, specimens, and manuscripts. Died, 1692.

Aspasia (*as-pa'-se-a*), a beautiful Athenian courtesan. Socrates is said to have been one of her admirers. In order to marry her, Pericles repudiated his wife. An affront offered to Aspasia is said to have caused the Peloponnesian War.

Asquith, Rt. Hon. H. H., Prime Minister of England, 1908–1916, was born in 1852, and entered the British Parliament in 1886. He was educated at Balliol College, Oxford, and was admitted to the bar, Lincoln's Inn, 1876. In the course of the Home Rule debates, he rose rapidly to the first rank in the House. He was entrusted with the conduct of the Disestablishment of the Church of Wales bill in 1894. On the defeat of the Rosebery Ministry in June, 1895, he resumed practice at the bar. He was one of the most effective speakers on the Liberal side during 1903 and, 1903–05, in opposition to Mr. Chamberlain's fiscal policy. Chancellor of the Exchequer, 1905-08. He introduced minimum wage bill, 1912; in 1915 organized new coalition cabinet; in 1916 proposed compulsory military service bill which at once became law.

Astor, John Jacob, capitalist; born in Rhinebeck, N. Y., July 13, 1864; son of William, grandson of William B., and great-grandson of John Jacob Astor; B. S., Harvard, 1888; traveled abroad, 1888–91; 1891–1912 manager of the family estates; built (1897) Astoria Hotel, New York, adjoining Waldorf Hotel, which was built by William Waldorf Astor, his cousin, the two now forming one building under the name of Waldorf-Astoria Hotel, one of the largest and probably most costly hotels in the world. Was colonel, staff of Governor Levi P. Morton, and in May, 1898, commissioned lieutenant-colonel of United States Volunteers; presented to the government a mountain battery for use in war against Spain, said to have cost over $100,000. After assisting Major-General Breckinridge, Inspector-General U. S. A., in inspection of camp and troops at Chickamauga Park, Ga., assigned to duty on staff of Major-General Shafter, and served in Cuba in operations ending in surrender of Santiago. Invented a bicycle brake, a pneumatic road improver, and an improved turbine engine. Author: "A Journey in Other Worlds," etc. Died, 1912.

Astor, William Waldorf, capitalist, author; born in New York, March 31, 1848; son of John Jacob and Charlotte Augusta (Gibbes) A.; great-grandson of John Jacob, founder of the Astor fortune. Educated by private tutors, finishing in Europe; entered office of the Astor Estate, 1871; succeeded his father, 1890, as head of the Astor family, with personal fortune estimated at about $100,000,000. Member of New York Legislature, 1878–81; United States minister to Italy, 1882–85; removed to England, 1890; became owner "Pall Mall Gazette" and "Pall Mall Magazine," 1893. Author: "Valentino, a Story of Rome"; "Sforza," an historical romance of the Sixteenth Century in Italy, etc. Made baron by George V., 1916. Died, 1919.

Atahualpa, the last of the Incas of Peru, succeeded his father, Huayna Capac, in 1525, on the throne of Quito, while his half-brother, Huascar, although the rightful heir, obtained only the kingdom of Peru. The two brothers engaged in a struggle for supremacy, in which Huascar was defeated. The Spaniards under Pizarro, taking advantage of these internal dissensions, invaded Peru, and by an act of deliberate perfidy obtained possession of the person of Atahualpa, and attempted to compel him to acknowledge the King of Spain as master, and to embrace the Christian religion. His refusal was made a pretext for a massacre and the imprisonment of their king, whom the Spaniards induced to raise an enormous treasure in the hopes of regaining his throne. After a mock trial, however, he was condemned and strangled at the stake, 1533.

Athanasius (*a-tha-na'-shus*), **Saint,** was born in Egypt about the year 296, entered the Church at an early age, and was chosen bishop of Alexandria in 326. He is esteemed one of the most eminent among the ancient fathers of the Church. He was a violent opponent of Arius; and his earnest advocacy of the Catholic faith, more particularly of the doctrine of the Trinity, subjected him to much persecution from the emperors Constantine and Julian, by both of whom he was several times exiled, but he finally closed his days in tranquillity in 373, in the forty-eighth year of his prelacy. His works are numerous, but consist chiefly of invectives against his enemies, and controversial treatises against Arianism. The more important of his writings are his "Apologies," "Two Books on the Incarnation," "Conference with the Arians," "The Life of St. Anthony," "The Abridgment of the Holy Scriptures," "Letters to Those that Lead a Monastic Life," and "Letters to Serapion."

Athelstan (*ăth'el-stăn*), or **Æthelstan,** one of the ablest of the Anglo-Saxon kings, born about 895, succeeded his father, Edward the Elder, 925. In 937 he gained a great victory at Brunanburh, over the Danes, Scots, etc., and reigned over all the island except Cumbria, Wales, Cornwall, and Scotland, which were tributary to him. Died without issue, 940.

Athenagoras (*ath-e-nag'-o-ras*), a Christian philosopher, born in Athens, who lived toward the close of the Second Century. His conversion to Christianity has been likened to that of St. Paul. Writing against the Christians, in order to render his attacks more formidable, he referred to the Scriptures, and by reading them was converted to the true faith. A "Discourse on the Resurrection of the Dead" and his "Apology for Christians" were much admired.

Attila (*at'te-la*), a king of the Huns, who lived in the Fifth Century. He styled himself "The Scourge of God," and devastated Lombardy. The city of Venice was founded by those who fled before him. On his death, in 453, his body was buried in three coffins, made of silver, gold, and iron. The captives who dug his grave were put to death.

Atwood, George, F. R. S., a distinguished mathematician, and author of many valuable scientific works, born in 1746, and died in 1807.

Atwood, Thomas, born in 1765, was the son of a coal merchant. He commenced his musical education in the choir of the Chapel Royal under Dr. Nares. The celebrated Mozart, under whom he studied, thought highly of his talents. In 1796 he was appointed organist of St. Paul's. He wrote coronation anthems for George IV. and William IV. Died in 1838.

Auber, Daniel François Esprit, born in 1782; French composer, was intended for a business career, and it was not until he met with Scribe, in 1822, that his long course of successful composition commenced. "La Muette de Portici," or "Masaniello," as it is called in England, was brought out in 1828. He produced many other works which enjoy a European reputation, his last being "Le Rêve d'Amour" (1870), composed shortly before his death. Died, 1871.

Aubigne, Jean Henri Merle d', born in 1794; Swiss theologian and writer, studied at Geneva and Berlin, and became professor of Church history at Geneva in 1830. He was author of "The History of the Reformation of the Sixteenth Century," and other works. Died, 1872.

Audubon, John James, born in 1780; a celebrated American naturalist of French descent; a pupil of the great painter David; from his childhood he was devoted to natural history, but it was not until 1830 that the first of the four volumes of his great work, "The Birds of America," appeared. This magnificent collection of plates, which was sold for $1,000 a copy, was quickly followed by explanatory letterpress under the title of "American Ornithological Biography." Audubon also projected a similar work on the "Quadrupeds of America," but much of this work was done by his sons, John and Victor. Died, 1851.

Auerbach, Berthold, born in 1812; German novelist, was a native of the Black Forest; his reputation was established by the publication, in 1843, of his "Village Tales from the Black Forest," and this was followed by a number of other popular novels. Among his earlier works were a translation of Spinoza's writings, and an essay on modern Jewish literature. He died at Cannes in 1882, shortly after the publication of "Brigitta."

Augustine, Saint, one of the fathers of the Christian Church, was born at Tagaste in Africa, in 354. In his youth he was favorable to the Manichean doctrines. Subsequently he became Bishop of Hippo, and wrote with great force against all whom he deemed heretics. He died in 430. Another St. Augustine (or St. Austen), called the "Apostle of the English," was sent with a party of forty monks by Pope Gregory I. to preach the Gospel in England in 597, where he was advanced to be first Archbishop of Canterbury. The exact date of his death is not known.

Augustulus, Romulus, the last of the Roman emperors in the West, was the son of Orestes, who, after deposing Julian Nepos, advanced him to the throne. Odoacer, a barbarian, raised a mutiny against him, and having put Orestes to death, compelled Augustulus to resign his imperial dignity. He was then dismissed with his family, and allowed 6,000 pieces of gold annually for his maintenance in the castle of Lucullus in Campania.

Augustus, Caius Julius Cæsar Octavianus, a Roman emperor, born 63 B. C., was the son of Caius Octavius and Atia, niece of Julius Cæsar, by whom he was adopted when but four years of age. He was in Epirus when Julius Cæsar was assassinated, but speedily returned to claim his inheritance. Connected with Antony and Lepidus, Octavianus shared the guilt which stains the name of the triumvirate. His colleagues put aside, at the age of 36 he became emperor, with the title of Augustus. His reign was fortunate, good laws were framed in it, and the arts flourished under his protection. He died, A. D. 14.

Aurelianus, Claudius or **Lucius Domitius,** Emperor of Rome, born in 212, the son of a peasant; entered the Roman army, his exploits in which attracted the notice of the emperors Valerian and Claudius, and on the death of the latter in 270, he was proclaimed emperor. His short reign was a series of brilliant victories: the Goths and Vandals were subdued, the Alemanni, who threatened Rome itself, were exterminated, Palmyra was sacked, and in the splendid triumph of Aurelian were led captive Tetricus, the ex-emperor of Gaul, Britain and Spain, and Zenobia, the renowned Queen of the East. A formidable rebellion at home was crushed with terrible sternness, and the emperor's severity made him feared even by his friends, who, as they deemed in pure self-defense, conspired against him and put him to death, 275.

Aurelius, Antoninus Marcus, born in 121 A. D.; Emperor of Rome, was the adopted son of Antoninus Pius, to whose throne he succeeded in 161, and took as associate Lucius Verus. Most of his reign was disturbed by wars with the Germans. Aurelius was distinguished for his love of truth and his adhesion to the Stoic school of philosophy, and his "Meditations" still exist, and give a trustworthy record of his private opinions. Died, 180.

Aurungzebe (*aw-rung-ze'-be*), Emperor of Hindustan, known as the Great Mogul, was born in 1618. The third son of Shah Jehan, he affected devotion in early life but subsequently, at the call of ambition, he deposed his father and put to death his two brothers and nephew. As emperor, his career was brilliant. He conquered Golconda, Visapour, and Bengal. His sons disturbed his latter days by attempting to depose him. He died in 1707.

Austen, Jane, novelist; born in 1775, at Steventon, Hampshire, England, of which parish her father was rector. Her principal productions are "Pride and Prejudice" (composed 1796, published 1813), "Sense and Sensibility" (1811), and "Emma" (1816). They are distinguished for originality, naturalness, and fidelity of delineation, qualities in which the literature of her time was most deficient. She died at Winchester in 1817.

Austin, Alfred, born in 1835; critic, journalist, and satirical poet, was educated for the bar, but resigned that profession for literature. As a strong Conservative, was one of the editors of the "National Review." He succeeded Tennyson as poet-laureate. Died, 1913.

Averroës, a famous Spanish-Arabian philosopher, born at Cordova, about 1126, of distinguished parentage. In theology and philosophy he was a pupil of Ibn Tofail, and in medicine, of Ibn Zuhr. Averroës devoted his life to a study of Aristotle, whom he regarded as the greatest of philosophers, and wrote many commentaries which exercised much influence upon the scholastic school in Europe. Died, 1198.

Avery, Elroy McKendree, author; born in Erie, Monroe County, Mich., July 14, 1844; graduate of University of Michigan, Ph. B., 1871; served in Civil War; mustered out at close as sergeant-major of 11th Michigan Volunteer Cavalry. Principal of high school, Battle Creek, Mich., 1869, and high and normal schools, Cleveland, O., 1871-79. Member of Cleveland City Council, 1891-92; of Ohio Senate, 1893-97; member of many historical and economic societies. Author: "Elementary Physics," "Elements of Natural Philosophy," "Physical Technics," "Teachers' Hand Book of Natural Philosophy," "Elements of Chemistry," "Teachers' Hand Book of Chemistry," "Complete Chemistry," "First Principles

of Natural Philosophy," "Words Correctly Spoken," "Columbus and the Columbia Brigade," "School Physics," "First Lessons in Physical Science," "School Chemistry," "The Town Meeting," "History of the United States and Its People," 16 vols.

Avicenna, Ibn Sina, born in 980; celebrated Arab physician, a native of Bokhara; author of the world-famed "Book of the Canon of Medicine." Died, 1037.

Baba, Ali, was elected dey of Algiers in 1710, after the revolution in which Ibrahim Dey was killed. At great sacrifice of life, Baba liberated Algiers from the dominion of Turkey, and its independence was maintained until the French invasion in 1830. Died, 1718.

Bach (bäk), **Johann Sebastian,** an eminent German musical composer, born in 1685; became court organist at Weimar, and finally director of music at the school of St. Thomas, Leipzig. Bach was almost unrivaled as an organist. His works are thoroughly original, profoundly scientific, and most difficult of execution. Died, 1750.

Bacon, Augustus Octavius, United States senator from Georgia; born in Bryan County, Georgia, October 20, 1839; graduate of University of Georgia, 1859, law department of same, 1860. Served as regimental adjutant and staff captain in Confederate States Army; in law practice in Macon, 1866–1914; member several Democratic state conventions (president, 1880); delegate Democratic national convention, 1884; several times candidate for Democratic nomination for governor of Georgia; presidential elector, 1868; member, 1870–82, 1892, and 1893, speaker, 1873–74 and 1877–82, Georgia House of Representatives. Elected to the United States Senate, 1894; reëlected, 1900, 1907, and 1913, the last time by direct vote of the people. He was the first senator to be elected in accordance with the XVII amendment. Died, 1914.

Bacon, Francis, Lord Verulam and Viscount St. Albans, one of the greatest of modern philosophers, was born in London in 1561. Entering parliament in 1593, he was knighted in 1603, and in 1613 became attorney-general and privy-councillor. The office of lord keeper was given him in 1617, and he was soon afterwards made lord chancellor. But from this time dates the beginning of his miserable fall. Complaints were made of his venality as a judge, which on inquiry by a parliamentary committee were verified; Bacon then made full confession, was deprived of his offices, fined, and imprisoned during the royal pleasure. He was ultimately pardoned, but continued to live in retirement, devoting himself to his favorite studies. The great aim of this extraordinary man was to reform the methods of philosophy; he recalls men from blindly following authority to the observation and examination of nature. His "Essays" were published in 1597, but his greatest works are the "Novum Organum" and the "De Augmentis Scientiarum." Died, 1626.

Bacon, Roger, an English scientist and publicist of the thirteenth century, the most learned of his day, is reputed to have advocated the change since made in the calendar, to have invented gunpowder, and is known to have manufactured magnifying glasses. His great work, "Opus Majus," urges philosophical reform, and is a marvel of learning and prophecy.

Bailey, Joseph Weldon, United States senator, 1901–13; born in Copiah County, Mississippi, October 6, 1863; admitted to bar, 1883; presidential elector, 1884; removed to Texas, 1885, and began practice of law at Gainesville; presidential elector at large, 1888; member of congress from 1891–1901; caucus nominee of his party for speaker and minority member; one of committee on rules of 55th congress.

Bailey, Liberty Hyde, director of College of Agriculture at Cornell, 1903–13; born in South Haven, Mich., March 15, 1858; graduated at Michigan Agricultural College, 1882, M. S., 1886; assistant to Asa Gray, Harvard, 1882–83; professor of horticulture and landscape gardening at Michigan Agricultural College, 1883–88; professor of horticulture, Cornell, 1888–1903. Author: "Survival of the Unlike," "Evolution of our Native Fruits," "Lessons with Plants," "Botany, an Elementary Text for Schools," "Principles of Fruit Growing," "Principles of Vegetable-Gardening," "Plant-Breeding," "Garden-Making," "Horticulturist's Rule-Book," "Principles of Agriculture," "Nursery-Book," "Forcing-Book," "Pruning-Book," "Practical Garden-Book," "The Nature-Study Idea," "Outlook to Nature." Editor: "Cyclopedia of American Horticulture," four volumes; "Rural Science Series," "Garden-Craft Series," "Cyclopedia of Agriculture"; contributor to technical journals and popular magazines.

Bajazet I., born in 1347; emperor of the Turks, son of Murad I., whom he succeeded in 1389; began his reign with a series of conquests, crossing the Danube and finally defeating Sigismund of Hungary and his army of 100,000 men. Ill health alone prevented his crossing the Alps, and he next turned to the conquest of Constantinople. Bought off for the moment, he was diverted from the ultimate accomplishment of his design by war with Tamberlaine the Great, by whom, in 1402, he was totally defeated and taken prisoner, dying shortly afterwards in 1403.

Baker, Newton Diehl, appointed secretary of war by President Wilson, March 7, 1916; was born at Martinsburg, W. Va., 1871. He graduated from Johns Hopkins university, 1892, and from the law school of Washington and Lee university, 1894. After practising law in his native town, he was city solicitor of Cleveland, Ohio, 1902-12, and mayor of Cleveland, 1912-16. American participation in the world war placed great responsibilities upon the war department during Baker's secretaryship. The strength of the army was increased from 190,000 when war was declared against Germany, April 6, 1917, to 3,664,000 at the time of signing the armistice, Nov. 11, 1918. At the latter date 2,045,000 men had been embarked overseas of whom 1,950,000 were in France. During the four months ending with August, 1918, 1,121,000 men were transported abroad. In magnitude, variety, and difficulty of the tasks involved this organization and movement of armed forces far exceeds any similar achievement in military history. In March, 1918, Secretary Baker visited the battle fronts of the Allies in France and Italy. In September, 1918, he was present when the American army, after expelling the Germans from their supposedly impregnable positions in the vicinity, liberated the historic town of St. Mihiel.

Balboa (*bal-bo'-a*), **Vasco Nunez de,** a Spaniard, and one of the first Europeans to visit the West Indies, was born 1475. He established a colony on the Isthmus of Panama, and discovered the Pacific Ocean. He was accused of treasonable designs, and put to death by the Spanish governor of Darien, Pedrarias Davila, in 1517.

Baldwin I., younger brother of Godfrey of Bouillon, whom he succeeded as King of Jerusalem, 1100; reigned eighteen years. Died, 1118.

Baldwin I., son of Baldwin VIII., Count of Flanders; born 1171; succeeded his father, 1195; joined the Crusade; he led the successful attack on Constantinople, and was crowned first Latin emperor, 1204; defeated and captured by the Bulgarians, 1205. Died, 1206.

Baldwin, James Mark, psychologist; born in Columbia, S. C., January 12, 1861; graduate of Princeton, 1884; A. M., 1887; Ph. D., 1889; Sc. D., Oxford University, England, 1900; studied in Leipzig, Berlin and Tübingen. Instructor of French and German at Princeton, 1886; professor of philosophy, Lake Forest University, Illinois, 1887–89; same, Toronto University, 1889–93; professor psychology, Princeton, 1893–1903; professor philosophy and psychology, Johns Hopkins, 1903–09, National University of Mexico, 1909. Author: "Hand Book of Psychology," "Elements of Psychology," "Mental Development in the Child and the Race," "Social and Ethical Interpretations in Mental Development," "Story of the Mind," "Fragments in Philosophy and Science," "Development and Evolution." Editor-in-chief, "Dictionary of Philosophy and Psychology." His various books have been translated into French, German, Italian, and Spanish. Editor: "Psychological Review," "Princeton Contributions to Psychology," "Library of Historical Psychology."

Balfe, Michael William, born in 1808; musical composer; as a boy showed great musical talent, and at the age of 16, going to London, he was engaged in the Drury Lane orchestra. While there he attracted the attention of an Italian nobleman, Count Mazzara, who took him to Italy to study music. After singing at Paris in the Italian Opera under Rossini, Balfe returned to Italy and produced in 1830 several operas. In 1835 he went to England as a vocalist and composer of opera, and after five years of successful composition he produced two operas in Paris. In 1843 his most popular work, "The Bohemian Girl," appeared at Drury Lane, to be followed by several other operas before the fertility of Balfe's genius was checked by a fatal attack of bronchitis. Died, 1870.

Balfour, Arthur James, English statesman and author, was born in 1848. Educated at Eton and Trinity College, Cambridge; was private secretary to Lord Salisbury, 1878–80, and went with him to Berlin in 1878; member of the so-called "Fourth Party"; president local government board, 1885–86; secretary for Scotland, with a seat in the cabinet, and vice-president committee of council on education for Scotland, 1886–87; chief secretary for Ireland, 1887–91,

and carried the Crimes Act through Parliament; created the congested districts board for Ireland, 1890; first lord of the treasury and leader of the house on the death of W. H. Smith, 1891, and again in 1895–1906. On the retirement of Lord Salisbury in 1902, he became prime minister and lord privy seal, retaining the office of first lord of the treasury. He introduced the education act, 1902. When Chamberlain made his fiscal proposals, 1903, Balfour held that the country was not ripe for the taxation of food. In 1905 he and his cabinet resigned. Became first lord of the admiralty in coalition cabinet, 1915. Author of "A Defense of Philosophic Doubt," "Essays and Addresses," "The Foundations of Belief, being Notes Introductory to the Study of Theology," "Theism and Humanism."

Ballinger, Richard A., lawyer, cabinet-officer; born at Boonesboro, Iowa, July 9, 1858; preparatory education at University of Kansas and Washburn College; graduated at Williams College, 1884; studied law; practiced in State of Washington; United States court commissioner, 1890–92; judge of superior court, Jefferson County, Wash., 1894–97; mayor of Seattle, 1904–06; commissioner General Land Office, 1907–09; secretary of the interior, 1909–11. Author: "Ballinger on Community Property," "Ballinger's Annotated Codes and Statutes of Washington."

Ballou, Hosea, born in 1771; an American preacher and founder of the "Universalists." He attained considerable celebrity in the United States. Died, 1852.

Balmez (*bäl'měth*), **James Lucian,** a Spanish theologian, born in 1810; is the author of a valuable work entitled "Protestantism and Catholicism Compared in their Effects on the Civilization of Europe." This has been translated into several languages, and is one of the most elaborate contributions to modern theological literature. Died, 1848.

Balzac, Honoré de, born in 1799; French novelist, was intended for the law, but left the legal profession for literature, and under various assumed names produced rapidly. In 1826 he entered into partnership with a printer, but their publications were not successful; and Balzac, depending solely upon his pen for a livelihood, endured the greatest privations. He obtained no public recognition till the appearance of his "Physiologie du Mariage," but afterwards he continued to write with increasing success. In 1850 he married a Russian lady, and after visiting Russia returned to Paris in broken health, and shortly afterwards died (1850). His collected works are included in forty-five volumes.

Bancroft, George, American historian and diplomatist, was born at Worcester, Mass., 1800. He graduated at Harvard College, 1817; proceeded to Göttingen University, where he took the degree of LL. D., 1820; returned home and opened a school at Northampton. In 1845, he became secretary of the navy in the cabinet of President Polk. In 1846, he was sent to Great Britain as minister plenipotentiary, remaining in that country till 1849. In 1867, he received the appointment of minister at the Prussian court. His principal works are "History of the United States" and "History of the Revolution." Died, 1891.

Bancroft, Hubert Howe, historian; born in Granville, O., May 5, 1832. Entered bookstore of his brother-in-law, Geo. H. Derby, Buffalo, N. Y., 1848, and in 1852 went to establish a branch in San Francisco; collected for Pacific coast history 60,000 volumes, and with aid of a staff of collaborators, published a historical series of 39 volumes, covering the western part of North America. Died, 1918.

Baner (*bä'-ner*), **John,** a Swedish commander of a distinguished family, born in 1596. He was so much addicted to literary studies that Gustavus Adolphus styled him his "learned general." He gained many victories and was revered for his humanity. Died at Halberstadt in 1641.

Barbarossa, Horuk and **Khair-ed-Din.** The name of two brothers of Roumelian extraction, whose naval exploits against the Christian powers in the Mediterranean were famous in the early Sixteenth Century. After gaining possession of Algiers, Horuk was slain in battle against the Spaniards. Khair-ed-Din, entering the service of the Turkish Sultan, defeated the Spaniards, and afterwards the Genoese fleet, ravaged the coasts of Italy, took Tunis, and in 1538 decisively defeated the combined fleets of the Pope, Venice, and Spain. Died, 1546.

Barham, Richard Harris (better known by his pseudonym of Thomas Ingoldsby), an English poet and humorist, born 1788, entered holy orders, and became celebrated for his popular lyrics, published under the title of the "Ingoldsby Legends." Died, 1845.

Barker, George Frederick, professor physics, University of Pennsylvania, 1873–1900, later emeritus professor; born in Charlestown, Mass., July 14, 1835; graduate Sheffield Scientific School, Yale (Ph. B.), 1858; M. D., Albany, 1863; was assistant in chemistry and later professor physiology, chemistry, and toxicology, Yale; taught in other colleges; United States Commissioner, Paris Electrical Exhibition, 1881; delegate to electoral congress and vice-president jury of awards; received decoration commander Legion of Honor of France; United States Commissioner Electrical Exhibition, Philadelphia, 1884; on jury of awards World's Columbian Exposition, 1893. Expert in poisons, criminal cases; expert in Edison, Berliner, and other patent suits. Member many American and foreign scientific societies. For several years associate editor "The American Journal of Science." Author: "Textbook of Elementary Chemistry," "Physics." Died, 1910.

Barnabas, Saint, a teacher of Christianity, contemporary with the apostles, was a Levite and a native of Cyprus. His original name is believed to have been Joseph, that of Barnabas, or "Son of Consolation," being subsequently conferred on him by the disciples. He was one of those who, after the resurrection, sold their property, and laid the price of it at the apostles' feet. It was by him that St. Paul was presented to the other apostles, three years after his conversion. He is described by St. Luke as a good man, full of the Holy Ghost, and of faith. It is said that he was stoned to death by the Jews of Cyprus, where, it is added, in the reign of the Emperor Zeno, about 488, his body was discovered with the gospel of St. Matthew, written in Greek, upon his breast.

Barnard, Edward Emerson, professor of astronomy, University of Chicago, and astronomer Yerkes Observatory; born in Nashville, Tenn., December 16, 1857; graduate of Vanderbilt University, 1887; astronomer Lick Observatory, California, 1887–95. His principal discoveries are the fifth satellite of Jupiter (1892), and sixteen comets; has also made many other discoveries and done much work in celestial photography, making photographs of the Milky Way, the comets, nebulæ, etc. Received Lalande gold medal, French Academy of Sciences, 1892; Arago gold medal, same, 1893; gold medal Royal Astronomical Society of Great Britain, 1897; Janssen gold medal, French Academy of Sciences, 1900; elected foreign associate Royal Astronomers Society, 1898; member many American and foreign societies; contributor to many astronomical journals.

Barnum, Phineas Taylor, born in 1810; an American showman and proprietor of "the greatest show on earth." He was engaged in several professions, made and lost several fortunes, and his show was twice destroyed by fire. He brought out Tom Thumb, and introduced Jenny Lind to the American public. He twice visited Europe. Died, 1891.

Barrett, John, diplomat; born in Grafton, Vt., November 28, 1866; graduate of Dartmouth College, 1889. Taught Hopkins Academy, Oakland, Cal.; assistant editor Statistician, San Francisco; on editorial staff newspapers San Francisco, Tacoma, Seattle; associate editor "Telegram," Portland, Ore., 1891–94; American minister to Siam, 1894–98, settling by arbitration claims involving $3,000,000 and securing first exact interpretation foreign extra-territorial jurisdiction Asiatic countries; undertook special diplomatic and commercial investigations Japan, Siam, Corea, Siberia, and India; war correspondent in Philippines, 1898–99; elected honorary member American Asiatic Association for services in development American commercial and political interests in Asia; American plenipotentiary to International Conference American Republics, Mexico, 1901–02; commissioner-general of foreign affairs for St. Louis Exposition, 1902–03; offered post American minister to Japan by President Roosevelt, but declined, December 10, 1903; American minister to Argentina, 1903–04; American minister to Panama, 1904–05; American minister to Colombia, 1905–06; director-general, Pan-American Union, 1906–1920. Contributor of articles for magazines and reviews on Asiatic and Latin American subjects. Author: "Admiral George Dewey," and several books on foreign affairs.

Barrie, J. M., created baron, 1913; also known as "Gavin Ogilvy"; was born at Kirriemuir, Scotland, 1860; educated at Dumfries Academy; graduated at Edinburgh University in 1882. After holding a journalistic position in Nottingham he went to London and wrote for the "British Weekly," "St. James's Gazette," "Speaker," and "National Observer." His first volume, "Better Dead," appeared in 1887; "Auld Licht Idylls," "When a Man's Single" and "An Edinburgh Eleven" in 1888; "A Window in Thrums" in 1889; "My Lady Nicotine" in 1890; "The Little Minister" in 1891; "Sentimental Tommy" and "Margaret Ogilvy, a Memoir," in 1896; "Tommy and Grizel" in 1900, and in

1902 "The Little White Bird." Mr. Barrie's work for the stage includes "Walker, London," in 1892; "Jane Annie," written with Conan Doyle, and brought out in 1893; "The Professor's Love Story," "The Little Minister," 1897; "The Wedding Guest," 1900; "Quality Street," "The Admirable Crichton" and "Little Mary," 1903; "Peter Pan," 1904; "Alice Sit-by-the-Fire," 1905; "What Every Woman Knows," 1908; "Half an Hour," 1913; "Rosy Rapture," 1915; "A Kiss for Cinderella," 1916; "The Old Lady Shows Her Medals," 1917.

Barrows, David Prescott, educator, was born at Chicago, 1873. He graduated at Pomona College, 1894, and studied at the University of California, A. M., 1895, at Columbia University, 1896, and at the University of Chicago, Ph. D., in anthropology, 1897. Going to the Philippines, he became superintendent of schools, Manila, 1900, and, 1903-9, was director of education for the islands. He was made professor of education, 1910, and professor of political science, 1911, in the University of California, of which, in 1919, he was chosen president. During 1917-19 he was in active military service in the Philippines and in Siberia as major and lt.-colonel of cavalry. Author: "A History of the Philippines," "The Ethno-Botany of the Coahuila Indians," "A Decade of American Government in the Philippines," also reports of ethnology and education of the Philippines.

Barrows, Samuel June, congressman, clergyman; born in New York, 1845; graduate of Harvard Divinity School, 1875. Pastor First Church (Unitarian), Dorchester, Boston, 1876–80; editor "Christian Register," 1881–97; member Congress, 1897–99; represented United States on International Prison Commission, 1896. Author: "Shaybacks in Camp," "Isles and Shrines of Greece," "A Baptist Meeting House," "Crimes and Misdemeanors in the United States." Died, 1909.

Barrymore, Ethel, actress; born in Philadelphia, August 15, 1879; daughter of Maurice and Georgiana (Drew) B.; niece of John Drew; educated at Convent of Notre Dame, Philadelphia. Made début in John Drew's Company, 1896; starred under management of Charles Frohman; married Russell G. Colt.

Bartholdi, Frederic Auguste, a famous French artist and sculptor; born in Alsace, 1834. In 1887, he received the Cross of the Legion of Honor. Chief among his works are the "Lion of Belfort," the statue of La Fayette in Union Square, New York, and the colossal figure in New York Harbor of "Liberty Enlightening the World." Died, 1904.

Bartholdt, Richard, congressman; editor "St. Louis Tribune," 1885–92; born in Germany, November 2, 1855; came to United States in boyhood; classical education; learned printing trade; since then in journalism. Was member board of public schools, St. Louis, and its president, 1891; member Congress, Tenth Missouri district, 1893–1915. President Interparliamentary Union for Promotion of International Arbitration.

Bartholomew, Saint, one of the twelve apostles of Jesus. He preached the gospel in the Indies, in Ethiopia, and elsewhere. His labors are said to have been terminated by a cruel death, by his being brutally flayed alive in Armenia. The correctness of this statement, however, has been doubted. The Church of Benevento at Rome claims to possess some of his bones among its relics.

Barton, Clara, founder and organizer of National Red Cross in United States, president 1881–1904; born in Oxford, Mass., 1821; graduate of Clinton Liberal Institute, New York. Taught school ten years; organized system of public schools, Bordentown, N. J. During Civil War did relief work on battlefields and organized search for missing men (for the carrying on of which work Congress voted $15,000); laid out grounds national cemetery, Andersonville, 1865; associated with International Red Cross of Geneva and worked through entire Franco-Prussian War, 1870–71; distributed relief in Strassburg, Belfort, Montpellier, Paris, 1871; secured adoption of treaty of Geneva, 1882; first president American Red Cross (official); appointed to represent United States in all international conferences: Geneva, 1884; Carlsruhe, 1887; Rome, 1892; Vienna, 1897; Petrograd, 1903; inaugurated American amendment of Red Cross, to provide relief for great calamities; distributed relief, Johnstown flood, 1889; Russian famine, 1892; Armenian massacre, 1896; at request of President of United States, carried relief to Cuba, 1898; did personal field work, Spanish-American War; conducted Red Cross Relief at Galveston, Tex., after great disaster, August, 1900; president National First Aid Association, 1905–12. Held decorations or diplomas of honor from Germany, Baden, Austria, Servia, Turkey, Armenia, Switzerland, Spain, Russia, Belgium. Author: "History of Red Cross," "America's Relief Expedition to Asia Minor," "History of the Red Cross in Peace and War," "Story of Red Cross." Died, 1912.

Basil, St., commonly called the "Great"; was born in Cappadocia about A. D. 329. He studied at Antioch, Cæsarea, Constantinople, and Athens. Having gained distinction as a professor of rhetoric, he visited the monasteries of Egypt and Libya, and in consequence embraced the monastic life. He was ordained priest by Eusebius, bishop of Cæsarea, and on the death of Eusebius, was elected to his see. He was much engaged in theological controversy, and boldly defended his opinion against the Emperor Valens. He died about 380. An order of monks was named after this saint.

Bazaine, François Achille, marshal of France, born at Versailles, 1811; distinguished himself in Algiers, the Crimea, and Mexico; did good service as commander of the army of the Rhine, in the Franco-German War, but after the surrender at Sedan was shut up in Metz, surrounded by the Germans, and obliged to surrender, with all his generals, officers, and men; was tried by court-martial, and condemned to death, but was imprisoned instead; made good his escape one evening to Madrid, where he lived to write a justification of his conduct. Died, 1888.

Beatty, Sir David, British admiral, was born in 1871. Entering the navy in 1884, he served with distinction in Sudan operations, 1896-98, and in China, 1900, rising to the rank of captain. In 1901 he married Ethel Field, only daughter of Marshall Field, the noted Chicago merchant. In 1910 he was made rear-admiral and in 1912 was placed in command of the first British battle-cruiser squadron. On January 24, 1915, Beatty's squadron encountered a German squadron of fast cruisers. After sinking the German cruiser "Blücher," Beatty drove the remaining enemy vessels to the shelter of their mine fields. On May 31, 1916, Beatty led his squadron against the entire German high seas fleet in the great battle of the Skager-rak, off the coast of Jutland, bearing the brunt of that tremendous action for three hours, suffering and inflicting terrible losses, until the arrival of the main British fleet. Following this action which forced the German fleet to disastrous flight to its protected base, never to reappear in battle formation, Beatty was made vice-admiral and placed in command of the grand fleet. On November 21, 1918, Admiral Beatty received, off the coast of Scotland, the surrender of all the important components of the German navy, 90 ships in all, besides 87 U-boats, the greatest naval surrender of modern times. Beatty's exploits, particularly in the battle off Jutland, entitle him to a high place in naval history.

Beauharnais, (*bō'-ar'-nĕ'*), **Eugène de,** son of Josephine, wife of Napoleon I., adopted by the latter; born in 1781; served with distinction in the Napoleonic wars, and was appointed Viceroy of Italy. After Napoleon's fall he retired to Munich, and married the daughter of the king of Bavaria. Died, 1824.

Beauharnais, Hortense Eugénie de, daughter of Josephine; born in 1783; was married against her will to Louis, youngest brother of Napoleon Bonaparte, from whom she separated in 1810, after he was driven from the throne of Holland. Her son by him was Napoleon III. Died, 1837.

Beaumarchais (*bō-măr'shay*), **Pierre Augustin Caron de,** born in 1732; a man of many-sided genius, was the son of a watchmaker. His musical accomplishments procured him a place in the royal concerts, and he became rich by the fortunes of two widows whom he married, and by successful financial speculation. He made another fortune by supplying arms and provisions to the Americans during the war of Independence, and then turned to dramatic writing, producing several highly successful pieces. In 1793 he was accused of treason to the state, and fled to England. Returning to France, he was for a time imprisoned, and died in poverty, 1799.

Beauregard, Pierre Gustave Toutant, born in 1818; a general of the Confederate Army. He took up the cause of the Southern States, on their secession, and captured Fort Sumter. He defeated McDowell at Bull's Run, and afterwards commanded the army of the Mississippi. His obstinate defense of Charleston is one of the remarkable episodes of the Civil War. Died, 1893.

Becket (*ah-bĕk'-ĕt*), **St. Thomas à,** Archbishop of Canterbury; born in 1118; was the son of a London merchant, his mother being a convert from Mohammedanism. After entering the Church, Henry II. made him chancellor of England, and in 1162 he was elected to the primacy. Dissensions, however, soon broke out between the king and Becket, the latter asserting the independence of the Church, and refusing to sign the "Constitutions of Clarendon." Becket, having been condemned and suspended from his office by parliament, escaped to France, and a war with the latter country followed. In 1170, an apparent reconciliation was entered into, and Becket returned to England. Shortly after his arrival he was assassinated by the supposed

order of the king, on the steps of his own altar, 1170. The king denying all share in the murder was absolved; but in 1174 did penance at his tomb. Becket was canonized by Alexander III. in 1172.

Beckford, William, born in 1759; an English millionaire and distinguished author. When only twenty he published a clever satire, "Biographical Memoirs of Extraordinary Painters." After some foreign travel he entered parliament, and published his great work, "The Romance of Vathek," in the French language, a book which excited the widest admiration. Died, 1844.

Bede, J. Adam, ex-congressman, journalist; born in Lorain County, O., 1856; educated in Ohio public schools; learned printer's trade; taught school; did work as reporter on newspapers in the West and South. Originally Republican, but supported Cleveland in 1888 and 1892; appointed United States Marshal for district of Minnesota but resigned within a year; returned to Republican party on financial issue, 1896; campaigned in several States, 1896, 1898, 1900. Member Congress, eighth Minnesota district, 1903-09.

Beecher, Henry Ward, son of Lyman Beecher, an eminent New England Congregational preacher and theologian; born in 1813; entered the Congregational ministry in 1834, and in 1847 became pastor of Plymouth Church, Brooklyn, which place he held till his death in 1887. Beecher was considered by many as the most eloquent divine of the nineteenth century, and was distinguished as a writer and lecturer on popular subjects.

Beethoven (*bā'-tō-ven*), **Ludwig van,** eminent German composer, born at Bonn in 1770. He studied under Haydn. His numerous symphonies, of which the finest are the "Battle Symphony," and the "Pastoral Symphony"; his operas, of which "Fidelio" is the most admired, and his other works, abounding in originality and genius, have given him lasting fame. Died, 1827.

Belasco, David, dramatic author; born in San Francisco, 1859; educated at Lincoln College, Calif. Author: (plays) "Zaza," "The Heart of Maryland," "The Wife," "The Charity Ball," "Lord Chumley," "May Blossom," "Men and Women," "La Belle Russe," "The Girl I Left Behind Me," "Valerie," "Hearts of Oak," "The Darling of the Gods," "Du Barry," "Sweet Kitty Bellairs," "Adrea," "The Return of Peter Grimm."

Belisarius (*bel-e-sar'-e-us*), a Roman general, who served the Emperor Justinian with skill, valor, and success. In his old age he is said to have become blind, and to have suffered much from poverty; but there are reasons for doubting these representations. Died, 565.

Bell, Alexander Graham, scientist, inventor; born in Edinburgh, 1847; educated there and at London University; went to Canada, 1870, and to Boston, 1871, becoming professor of vocal physiology, Boston University. Invented telephone, for which patent was granted, 1876. Also invented photophone, induction balance, and telephone probe for painless detection of bullets in the human body. With C. A. Bell and Sumner Taintor invented the graphophone, 1883. Has investigated laws of flight and education of the deaf. Is regent of the Smithsonian Institution; officer of the French Legion of Honor; member U. S. naval advisory board, 1915. In 1917 a memorial was unveiled at Brantford, Ont., commemorating the earliest actual transmission of the human voice over wire between points miles apart. The fundamental idea of the invention was conceived by Dr. Bell at Brantford, 1874, and, after further development in Boston, 1875, was first effectively applied by him to the telephonic transmission of speech in communications made between Brantford and Paris, Ont., in August, 1876.

Bellew, Harold Kyrle-Money, actor, born in Calcutta, 1857; was cadet English Navy, serving seven years, then went to Australian gold fields; worked on Melbourne newspapers; returned to England; made stage début at Theater Royal, Brighton; became leading man and star in London; came to United States, October, 1885; subsequently starred jointly with Mrs. James Brown Potter, taking leading rôles with her in all English-speaking countries. Author: "Yvonne," "Iolande," "Hero and Leander," "Charlotte Corday." Died, 1911.

Bellini, Giovanni, born about 1426; Venetian painter, son of Jacopo Bellini, himself a painter of note, and the teacher of Titian, who finished several of his works. He began by portrait painting; and he afterwards executed some great historical pieces for the hall of the Great Council of Venice, which were burned in 1577. Died, 1516.

Bellini, Vincenzo, born in 1802; an Italian musical composer, and a disciple of Rossini. The son of a Sicilian organist, he proceeded to the royal music school of Naples where he produced his first opera. He attracted attention with "Il Pirata," brought out at Milan and played successively in all the European capitals, and in 1831 the production of his greatest opera, "La Sonnambula," established his high reputation. This was followed by the tragic opera "Norma," and in 1835 by "I Puritani," the composer's last work. He died in 1835.

Bellman, Karl Michael, born in 1740; a Swedish lyrical poet of considerable popularity. The nature of his verse is indicated by the name given to him—the Swedish Anacreon. Died, 1795.

Bem, Joseph, born in 1795; a brave and skillful Polish general. He served as general of artillery in the Polish Revolution of 1830, and afterwards traveled in Europe. He joined Kossuth in 1848 in the revolt against Austria, and won several battles for the national cause. Later he entered the service of the Turkish Sultan, adopting the Mohammedan religion. Died, 1850.

Bembo, Pietro, born in 1470; an eminent Italian cardinal, and a profound scholar. His early life he spent studying in one city and another, and he attained such a reputation for culture that when, in 1512, he went to Rome he was appointed one of the pontifical secretaries, and in 1539 he was created cardinal. He wrote prose and verse, both in Italian and in Latin; his compositions are remarkable for purity of style. Died, 1547.

Benedict XV., Pope, Giacomo della Chiesa, successor of Pius X., was born in Pegli, near Genoa, 1854. He was the son of a nobleman of wealth and was educated at Genoa and at Rome. Ordained to the priesthood, 1878, he became secretary to Cardinal Rampolla, with whom he was associated at Madrid, 1883–87, and later at Rome. In 1901 Giacomo della Chiesa became consultor to the holy office at Rome; in 1907 he was appointed archbishop of Bologna, and, May 25, 1914, was made cardinal. On Sept. 3, 1914, he was elected pope. During the World War Pope Benedict made repeated efforts to bring about peace among the warring nations. Died, 1922.

Benedict, St., a monk who founded the first religious order in the West; was born at Nursia, in the Duchy of Spoleto, in 480. At an early age he retired to a cavern to devote himself to study; this austerity gained him fame. By him the monastery of Monte Cassino, near Naples, was established in 529. One leading principle which he laid down was that the order should maintain themselves by the labor of their hands. Died, 543.

Benjamin, Judah Philip, born in 1811; an American politician, who later became a distinguished member of the English bar. He was born in the West Indies, and practiced as a barrister at New Orleans. He sat in the senate, and became attorney-general and secretary of state to the Confederacy under Jefferson Davis. When the cause of the South was lost, he fled to England, and was at once called to the bar, where he gained a large and influential practice. Died, 1884.

Bennett, James Gordon, proprietor of "New York Herald"; born in New York, May 10, 1841; son of journalist of same name; educated by private tutors; inherited "The Herald" and a large fortune, 1872; for a time issued a London edition and a Paris edition of "The Herald"; inaugurated publication in England of storm warnings transmitted from the United States; sent Henry M. Stanley to Africa to find Livingstone, 1874-77; fitted out Jeannette polar expedition, 1879; established, 1883 (with John W. Mackay), the Commercial (Mackay-Bennett) Cable Company; was a prominent yachtsman; lived most of his time in Paris, but kept active management of "The Herald" by cable. Died, 1918.

Bentham (*bĕnt'ham*), **Jeremy,** a distinguished English writer on political economy and jurisprudence; was born in 1748, and died in 1832.

Benton, Thomas H., an eminent American statesman, born in North Carolina in 1782; died in 1858, after holding a seat in congress from Missouri for thirty years. He was a consistent Jackson Democrat in politics. His "Thirty Years' View," a history of the government from 1820 to 1850, is recognized as a standard authority.

Bergson, Henri, philosopher, born at Paris, 1859; was educated at Lycée Condorcet, École Normale. Professor of philosophy, Lycée d' Angers, 1881-83; Lycée de Clermont, 1883-88; professor at the Collège Rollin, 1888-89; Lycée Henry IV, 1889-96; at the École Normale superieure, 1897-1900; at the college of France since 1900. Elected to the French academy, 1914. Author: "Matter and Memory," "Creative Evolution."

Berkeley, George, an English divine, famous for the keenness of his intellect and the greatness of his nature. He was born in Ireland, 1685, and educated at Trinity College, Dublin. In 1709 he published his "Theory of Vision," and in 1710 his "Principles of Human Knowledge." In England he met the great literary men of the day, and in 1724 was made Dean of Derry. In 1725 he published "A Scheme for Converting the Savage Americans to Christianity." This scheme involved the erection of a college at the Bermudas; the government granted a charter, and promised a grant

in aid. Berkeley set out for the Bermudas, but the money not being forthcoming, the scheme had to be abandoned. In 1734, he was made Bishop of Cloyne, and in 1752 retired to Oxford. His last publication was a treatise on "The Virtues of Tar Water." Died, 1753.

Berlioz, Hector (*bair'le-o*), a French composer, was born at La Côte St. André, 1803, and died in 1869. His best productions are the symphonies "Harold" and "Romeo and Juliet."

Bernadotte, Jean Baptiste Jules, a marshal of France, under Napoleon I.; born in 1764; was elected King of Sweden and Norway on the death of Charles XIII., assumed the throne under the title of Charles John XIV., and in 1813 commanded the united armies of Germany against Napoleon. Died in 1844, after a wise and prosperous reign.

Bernard, St., born in 1091 of noble Burgundian birth; was educated at Paris University. He entered the Cistercian monastery at Citeaux, and there acquired a high reputation as a preacher. At the head of a band of monks he was sent to found a new monastery, which he established at Clairvaux, and from which his fame and influence spread far and wide. Kings, popes, and nobles all appealed to him for advice on the weightiest matters, and accepted his decisions. He procured the condemnation of several heterodox writers, including Abélard and Arnold of Brescia. His great work was the preaching of a new crusade in France and Germany. He excited the greatest enthusiasm, and prophesied the triumph of the expedition. But it failed notably, and Bernard died soon afterwards (1153). He was canonized in 1174, and bears the title of "The Last of the Fathers."

Bernardin de St. Pierre (*der-sant-pe-are*), **Jacques Henri,** the admired author of "Paul and Virginia," "Studies of Nature," etc., was born at Havre in 1737. He became professor of morals at the normal school, and a member of the institute, and died in 1814.

Bernhardi, Friedrich A. J. von, general, born in Petrograd, 1849. Educated at Berlin and Hirschberg. Entered German army, 1869; became colonel, 1897, major-general, 1900, lieut-general, 1904, general of cavalry, 1908. Author: "Germany and the Next War," "How Germany Makes War," "Cavalry," "Britain as Germany's Vassal," etc.

Bernhardt (Bernard), Rosine Sarah, French tragic actress, was born in Paris, 1845, of French-Dutch parents of Jewish descent, but educated in a convent at Versailles and at the Paris Conservatoire. She first appeared at the Théâtre Français in 1862 as Iphigénie. In 1867 at the Odéon, in the rôle of the queen, in Victor Hugo's "Ruy Blas," she gained her first striking success. The war of 1870-71 interrupted her career, and she became, for a while, a nurse. She then won a position in the Théâtre Français, the troupe of which she accompanied in 1879 to London, where she married M. Damala, who died in 1889. She left the Français in 1880 and made several tours of Europe and America. She now directs a theater of her own in Paris; is also a painter and sculptor. Her "Memoirs" were published by Heinemann in 1907. Made member legion of honor, 1914.

Bernini (*ber-ne'-ne*), **Giovanni Lorenzo,** known as the Cavaliere Bernini, was born in Naples in 1598. He was eminent as painter, architect, and sculptor; and his merit entitled him to the rewards which he received from Louis XIV. His "Apollo and Daphne," produced from a single block, when he was but 18, was considered a masterpiece, but his finest works are found in the colonnade at Rome. He died in 1680.

Bernouilli (*ber'-nool-ye*), **James,** a celebrated mathematician, was born in Basel in 1654. He died in 1705. John Bernouilli, brother to James, and not less celebrated as a mathematician, was born in Basel in 1667. He died in 1748. Nicholas Bernouilli was born at Basel in 1687. He became a professor of mathematics at Padua. He died in 1759. Daniel Bernouilli, son of John, was born in Gröningen in 1700. He studied mathematics, and became a professor of anatomy and botany. He died in 1782. John Bernouilli, brother of the last-named, born in Basel in 1710, was a professor of eloquence and mathematics. He died in 1790. James Bernouilli, his son, was born in Basel in 1759. Though a lawyer by profession, he studied mathematics with success. He died in 1789.

Berosus (*be-ro'-sus*), an eminent historian, born in Babylon, was a priest in the temple of Belus, and flourished in the time of Alexander the Great, and in that of several of his successors. His writings are said to have strongly corroborated various parts of Scripture.

Berthier (*bare'-te-a*), **Louis Alexandre,** Prince, a distinguished French general, born 1753. He received honors from Bonaparte in acknowledgment of his great services, for though he won no battle himself, he largely contributed towards the gaining of many. On the return of Louis XVIII., Berthier sent in his adhesion, and was made captain of the guards of the restored monarch. When Napoleon reappeared, having escaped from Elba, Berthier withdrew to Bamberg with his family, where he terminated his existence by throwing himself from a window, it was supposed, in a fit of apoplexy, in June, 1815.

Berzelius, Johann Jakob, born in 1779, Swedish chemist, was professor for many years at Stockholm University, and acquired a great reputation by his memoirs and his invaluable work in chemical analysis and mineralogy. Died, 1848.

Bessemer, Sir Henry, civil engineer and inventor, born at Charlton, Herts., in 1813; of his many inventions the chief is the process, named after him, of converting pig-iron into steel at once by blowing a blast of air through the iron while in fusion till everything extraneous is expelled, and only a definite quantity of carbon is left in combination, a process which has revolutionized the iron and steel trade all over the world, leading, as has been calculated, to the production of thirty times as much steel as before and at one-fifth of the cost per ton. Died, 1898.

Bessey, Charles Edwin, professor of botany in University of Nebraska, 1884-1915; born on a farm, in Milton, Wayne County, O., May 21, 1845; graduate (B. Sc.) of Michigan Agricultural College, 1869; studied with Dr. Asa Gray at Harvard, 1872-73 and 1875-76; married, on December 25, 1873, Lucy Athearn, West Tisbury, Martha's Vineyard, Mass. Professor of botany in Iowa Agricultural College, 1870-84 (acting president, 1882); acting chancellor of University of Nebraska, 1888-91, 1899-1900 and 1907. Botanical editor of "American Naturalist" (Philadelphia), 1880-97; of "Science" (New York), 1897-1915; of Johnson's Cyclopedia, 1893-1915. Author: "Geography of Iowa," "Botany for High Schools and Colleges," "The Essentials of Botany," "Elementary Botanical Exercises," "Elementary Botany," "Plant Migration Studies," also many scientific papers. Edited McNab's "Morphology, Physiology, and Classification of Plants." Died, 1915.

Beveridge, Albert Jeremiah, was born on a farm in Highland county, Ohio, October 6, 1862; his father and brothers were soldiers in the Union Army; was graduated at De Pauw University, Greencastle, Ind., in 1885; was admitted to the bar in 1886, and then devoted himself to his profession; was married, first to Katherine M. Langsdale, in 1887, who died in 1900; second, in 1907, to Katherine Eddy, of Chicago; was elected to the Senate of the United States in 1899, for the term beginning March 4 following; was reëlected in 1905. He is the author of "The Russian Advance," "The Young Man and the World," and has been a frequent magazine contributor.

Bewick, Thomas, born in 1753; English engraver, entered into partnership with a Newcastle wood engraver, Ralph Beilby, with whom he published his "History of Quadrupeds," which proved an immense success. After some more fine work, he produced "The History of British Birds," and later, "Æsop's Fables," the two best examples of his art. Died, 1828.

Bichat (*bē'shȧ*), **Marie François Xavier,** born in 1771; physiologist and anatomist, was adopted by Desault, whose works he edited, and after his death devoted himself to research in anatomy and surgery with such incessant industry as to undermine his constitution. He left numerous works of the highest value. Died, 1802.

Biddle, John, born in 1615; religious controversialist, known as "the father of the English Unitarians"; was sent to prison for heresy, and his book was ordered by the House of Commons to be burnt. In 1648, for the publication of his "Confession of Faith," he was condemned to death, but the sentence was commuted; he was released in 1652, only to be again imprisoned by order of the House of Commons. Cromwell subsequently banished him to the Scilly Isles, but in 1662 he returned to London, and was again sent to prison, where he died (1662).

Bierce, Ambrose, author, journalist; born in Ohio, 1842; served as line officer during Civil War; brevetted major for distinguished services; went to California, 1866; went to London, 1872, contributing to "Fun" fables purporting to be translations from Zambri, the Parsee (published in volume, "Cobwebs from an Empty Skull," 1874); returned to California and contributed to "Overland Monthly," edited "Argonaut" and "Wasp"; for many years contributed to "Prattle" columns in San Francisco "Examiner." Author: "Cobwebs from an Empty Skull," "The Monk and the Hangman's Daughter" (with Dr. A. Danziger), "Black Beetles in Amber," "Can Such Things Be?", "In the Midst of Life" (former

title, "Tales of Soldiers and Civilians"), "Fantastic Fables," "Shapes of Clay." Died in Mexico, 1914.

Biot, Jean Baptiste (*bē'o*), an eminent French astronomer, optician, and natural philosopher, born in Paris, 1774. He is especially celebrated as the discoverer of the circular polarization of light. Died, 1862.

Bishop, Sir Henry Rowley, born in 1786; English composer, early devoted himself to the composition of dramatic music; and in 1809 produced his "Circassian Bride," which was a great success. In 1810 he became connected with Covent Garden Theater, and produced many operas during this time, including "The Lady of the Lake," "Guy Mannering," and "The Slave." In 1825, Bishop broke his connection with Covent Garden to go to Drury Lane, and he was succeeded at the former theater by Weber. It was in rivalry with Weber's "Oberon" that Bishop produced the unsuccessful "Aladdin." In 1840, his last dramatic piece, "The Fortunate Isles," was produced at Covent Garden in honor of the queen's wedding; in 1842, he was knighted; and in 1848 he became professor of music at Oxford. Died, 1855.

Bismarck-Schönhausen, Otto Eduard, Prince Von (*bĭs'-märk*), one of the greatest statesmen of the Nineteenth Century, was born in Brandenburg, 1815. After studying law at the universities of Göttingen and Berlin, Bismarck-Schönhausen filled important diplomatic positions, and was nominated prime minister of Prussia in 1862. His reactionary policy gave great offense to, and provoked many collisions with, the Liberal party; and, ere long, he dissolved the Representative Chamber, and declared that the ministry would act independent of popular suffrage. Bismarck-Schönhausen instigated the war against Denmark in 1864, which resulted in the acquisition of the Schleswig-Holstein duchies by Prussia. The rivalry which had long existed between Austria and Prussia, as the leading German powers, was terminated by the latter kingdom seceding from the Bund in 1866, and forming an alliance with Italy against Austria. War was declared in June, and the result of a six weeks' campaign was the exclusion of Austria from German councils and interests. Bismarck-Schönhausen next set about annexing the smaller states of Hanover, Hesse, etc., and succeeded in negotiating a secret treaty, in August, 1866, with the South German powers, by virtue of which their armies were placed under control of the King of Prussia. In 1867, Bismarck-Schönhausen was made chancellor of the German Confederation, and, in 1870, brought about a coalition of the German powers against France, in consequence of a declaration of war having been made by Napoleon III. against Prussia, on account of her interference in the succession to the Spanish Crown. The German armies crossed the Rhine in August, and, after defeating the French in several obstinately fought battles, compelled the capitulation of the French Emperor with his army at Sedan, and ultimately besieged Paris, which city capitulated in the early part of 1871. For his services in the successful carrying out of this war, which resulted in the elevation of his master, William I., to the imperial Crown of Germany, Bismarck-Schönhausen was created a prince of the empire in May, 1871. Died, 1898.

Bispham, George Tucker, lawyer, author; born in Philadelphia, May 24, 1838; graduate of University of Pennsylvania, 1858; law department, same, 1862; admitted to bar, 1861; practiced in Philadelphia; later admitted to bar of United States Supreme Court. One of solicitors of Pennsylvania Railroad Company; solicitor of Philadelphia Saving Fund Society, Girard Trust Company, and other corporations; professor of equity jurisprudence, law department, University of Pennsylvania. Author: "Principles of Equity," and other books on law. Died, 1906.

Bjoernstjerna (*byern'-sher-nä*), **Magnus,** born in 1779; Swedish general and diplomatist, served in the Finnish War; in 1809 was sent on a mission to France, and in 1812 arranged for the sale of Guadeloupe. He fought in the Danish War, and assisted at the negotiations which brought about peace with the transference of Norway to Sweden. In 1828 he was appointed minister in London. He left several works on political and fiscal matters. Died, 1847.

Björnson (*byern'son*), **Bjornstjerne,** born in 1832, the national poet of Norway. In early life an historical drama of his, called "Valborg," was accepted by the Royal Theater, but its author withdrew the piece. In 1856 the International Students' Reunion at Upsala stimulated him again to an effort to produce a national poetry, free from foreign influences. He began with "Synnöve Solbakken," a story of peasant life, which was followed by "Arne" and many other pieces. In 1858, he became director of the theater at Bergen, and produced quickly two dramas, "Mellem Slagene" and "Halte Hulda," both treating of national subjects. "Marie Stuart" and "Sigurd Slembe" are both well-known plays, and he wrote, besides his dramas, a series of folk plays, an epic, and much beautiful lyric poetry. He received a government pension, but lived abroad. Died, 1910.

Black, Frank Swett, governor of New York; born in Limington, Me., March 8, 1853; graduated at Dartmouth, 1875; was editor Johnstown, N. Y., "Journal"; later reporter Troy, N. Y., "Whig"; clerk in registry department, Troy post office; admitted to bar, 1879; member of Congress, 1895–97; governor of New York, 1897–99; practiced law in New York city from 1898 to 1912. Died, 1913.

Black, William, born in 1841; English novelist; spent some years in the study of art, but, regarding himself as a failure in the artistic profession, he turned to literature. His first novel, "Love or Marriage," was published in 1868, being followed in 1869 by "In Silk Attire," and in 1871 by "A Daughter of Heth," which was a pronounced success. "The Strange Adventures of a Phaeton" and "A Princess of Thule" were published soon after, and his reputation as one of the best novelists of the day was established. For four years he acted as assistant-editor of the "Daily News," but abandoned journalism long before his death in 1898.

Blackburn, Joseph Clay Styles, lawyer, legislator; born in Woodford County, Ky., October 1, 1838; graduate of Centre College, Danville, Ky., 1857; admitted to bar, 1858; practiced in Chicago until Civil War broke out; served in Confederate States Army; after war, practiced law in Kentucky; member Kentucky legislature, 1871–75; member of Congress, 1875–85; United States senator, 1885–97; again elected, January, 1901, for term 1901–07; member of the Isthmian Canal Commission, 1907–10. Died, 1918.

Blackmore, Richard Doddridge, born in 1825, modern British novelist; in 1852, was called to the bar, and practiced for a short time. Turning to literature, he produced his first novel, "Clara Vaughn," in 1864. His first distinct success was "Lorna Doone, a Romance of Exmoor," which reached many editions. Of his many subsequent books, perhaps the best was "The Maid of Sker." Died, 1900.

Blackstone (*black'-ston*), **Sir William.** A celebrated jurist, born in London in 1723. He was a judge, a member of parliament, and author of "Commentaries on the Laws of England." At the bar, after seven years' practice, his prospects were so indifferent, that he retired to Oxford on his fellowship, and there gave public lectures on English law. Their success is supposed to have suggested to Mr. Viner the propriety of establishing a professorship of law in the university, to which office Blackstone was elected, being the first Vinerian lecturer, in 1758. Subsequently, having married, he vacated his fellowship, and was appointed principal of New-Inn Hall. That office, with his Vinerian professorship, he resigned in 1766. In 1770, he became one of the judges of the Common Pleas. Died, 1780.

Blackwell, Elizabeth, M. D.; born in Bristol, England, February 3, 1821; emigrated to the United States in 1832; educated in private schools in Bristol and New York; taught school in Kentucky and the Carolinas; sought admission to several medical colleges, but was refused until she entered the medical school at Geneva, N. Y., 1847. First woman in United States to receive the degree of M. D. Established practice in New York, 1851; founded a hospital and, in 1867, in conjunction with her sister, Dr. Emily Blackwell, organized Woman's Medical College of New York Infirmary; lectured in England, 1858–59; registered as a physician in England, 1859, and after 1869 practiced in London and Hastings. Author: "Physical Education of Girls," "Religion of Health," "Counsel to Parents on Moral Education," "Pioneer Work in Opening the Medical Profession to Women," "The Human Element in Sex," "Decay of Municipal Representative Institutions." Died, 1910.

Blaine, James Gillespie, "the Plumed Knight," was born in Pennsylvania, 1830; removed to Maine, where he edited the "Portland Advertiser"; served four terms in the legislature; in Congress from 1862 to 1876, and speaker for three years; prominent candidate for the Republican nomination for the presidency in 1876, 1880, and 1892, and successful candidate in 1884, but was defeated for President. United States senator in 1877; secretary of state under Garfield; secretary of state under Harrison, but resigned just before the Republican Convention of 1892. Died, 1893.

Blanc, Jean Joseph Louis (*blŏng*), a French historian and socialistic writer, born in Madrid, 1811, started as a journalist; founded the "Revue du Progrès, and pub-

lished separately in 1840, "Organization of Labor," which had already appeared in the "Revue," a work which gained the favor of the working classes; was member of the Provisional Government of 1848, and eventually of the National Assembly; threatened with impeachment, fled to England; returned to France on the fall of the empire, and was elected to the Chamber of Deputies in 1871. Blanc wrote an elaborate "History of the French Revolution." Died, 1882.

Blanche of Castile (*blänsh*), Queen of Louis VIII. of France, and daughter of Alphonso IX., King of Castile, was born about 1187. On the death of her husband, in 1226, she was declared Regent of France, in which capacity she displayed great energy and address. After carrying on the government during the absence of her son Louis IX. in the Holy Land, she died in 1252.

Blashfield, Edwin Howland, artist; born in New York, December 15, 1848; educated at Boston Latin School; studied at Paris, 1867, under Léon Bonnat, also receiving advice from Gérôme and Chapu; exhibited at Paris Salon, yearly, 1874–79, 1881, 1891, 1892; also several years at Royal Academy, London; returned to United States in 1881; has exhibited genre pictures, portraits, and decorations. Among his paintings are "Christmas Bells" and "Angel with the Flaming Sword." Decorated Collis P. Huntington's drawing room, and great central dome, Library of Congress. Has lectured on art at Columbia, Harvard, and Yale. Author: (with Mrs. Blashfield) "Italian Cities," co-editor (with Mrs. Blashfield and A. A. Hopkins): "Vasari's Lives of the Painters."

Blavatsky, Mme., a theosophist, born in Russia, 1831, was a great authority on theosophy, the doctrines of which she professed she derived from the fountainhead in Thibet. Died, 1891.

Blind, Karl, born in 1826, German revolutionist, began his agitation when still a student, and in 1847 was imprisoned for a short time. He took part in the rising of 1848, and then fled to Alsace, from whence the French Government sent him to Switzerland. He joined Struve in the second Black Forest insurrection, and was condemned to a long term of imprisonment, but was liberated by the people. Being banished from France, and a fugitive from Germany, he went to Belgium, and afterwards to England, where he wrote industriously in support of his political ideas. It was Blind's stepson who attempted Bismarck's life in 1866. Died, 1907.

Bliss, Tasker Howard, American general, was born at Lewisburg, Pa., 1853. He was educated at Lewisburg academy, Lewisburg university (now Bucknell), and at the United States military academy at West Point, from which he graduated in 1875. Entering the army, he rose steadily, becoming divisional chief of staff in the Porto Rican campaign, 1898. He was collector of customs, Havana, 1898-1902. He was then promoted brigadier-general and made member of the army war college board. After serving on the general staff, 1903-05, he commanded departments in the Philippines until 1909 when he became assistant chief of staff. Following service in various commands, including the Mexican border, 1911, he was made major-general, 1915, chief of staff, 1917, and general of the United States army, 1917. He was also made member of the supreme war council in France, and in 1919 served as military delegate of the United States to the peace conference at Versailles.

Bloomfield (*bloom'-fēld*), **Robert,** an English poet; was born in 1766. Reared in humble life, his genius found development in the poem entitled the "Farmer's Boy," which attained very great popularity. Died, 1823.

Blücher, Gebhard Leberecht von, born in 1742. Prussian field marshal and Prince of Wahlstadt, first entered the Swedish, but soon passed to the Prussian army, in which he served during the Seven Years' War. He went through the Polish campaign of 1772, and gained rapid promotion during the struggle with the French invaders begun in 1792. In the campaign of 1814, Blücher held high command, and though defeated by Napoleon, he beat Marshal Marmont, and entered Paris with the Allies. In the Waterloo campaign he commanded the Prussian army in Belgium, and was severely defeated by Napoleon at Ligny. However, by out-manœuvring Grouchy, he was able to arrive at Waterloo in time to decide the victory for the Allies and pursue the routed French army. He then retired from active service and died four years later, 1819.

Boccaccio (*bok-kă-tshe-o*), **Giovanni,** a much-admired Italian novelist, born at Paris in 1313. His works are prized for their tenderness, but they often offend decorum. His most celebrated work is the Decameron, a collection of one hundred stories, supposed to have been recited in ten days by a company of ladies and gentlemen, who had withdrawn to the country to escape the plague which raged at Florence in 1348. Died, 1375.

Bodley, Sir Thomas, a diplomatist in the time of Queen Elizabeth, was born in Paris in 1545. The university library of Oxford was rebuilt by him, and he bequeathed his fortune to support it. It has ever since been called the Bodleian Library. He died in 1613.

Boerhaave (*bo'-er-hăv*), a celebrated physician, born in 1668, in Voorhout near Leyden. He studied much, successfully labored in his profession, and was universally esteemed by his contemporaries. His numerous writings were much admired. Died, 1738.

Bogardus, James, born in 1800; American inventor of great fecundity, who worked for some time as a watchmaker and engraver in New York. Among his inventions were the ring-flyer for cotton spinning (1828); the eccentric mill (1829); the dry-gas meter (1832); a dynamometer, and a pyrometer (1848). In 1847 he built the first structure of cast iron in the United States. Died, 1874.

Boileau-Despréaux (*bwah-lo-day-pray-ō*), **Nicolas,** a critic, poet, and satirist, who lived in the time of Louis XIV., was born in 1636. His "Art of Poetry," his epistles, and his satires gained him the title of "Master of Parnassus." He was the friend of Molière, La Fontaine, and Racine. With the last he was appointed historiographer of France, and received a pension of 2,000 livres. He died in 1711. His brothers Giles and James were also much esteemed writers. The former died in 1669; the latter in 1716.

Bok, Edward William, editor of "The Ladies' Home Journal," 1889–1919; vice-president "The Curtis Publishing Co."; born in Helder, Holland, 1863; came to the United States at the age of 6; educated at Brooklyn public schools; stenographer with Western Union Telegraph Co.; Henry Holt & Co., 1884-85; Scribner's 1885-88; Author: "The Young Man in Business," "Successward."

Boker, George Henry, born in 1823, American poet; his first published poem was "The Lesson of Life" (1847), and this was followed by two tragedies, which were produced on the stage. For ten years he was secretary of the Union League, Philadelphia, and his "Poems of the War" proved very popular. In 1871 he went as United States Minister to Constantinople. He published in 1882 an elegy, "The Book of the Dead." Died, 1890.

Bolingbroke (*bol'-ing-brook*), **Henry St. John, Viscount,** an English statesman, born in Battersea in 1678. Having studied at Oxford, he entered parliament in 1701, and in 1704 became secretary of war. He afterwards became secretary of state for foreign affairs, and negotiated the Treaty of Utrecht. In 1712, he was raised to the peerage. On the accession of George I. he was impeached of high treason, when he fled the country, and became secretary of state to the first pretender. He was attainted, and his estate seized; but in 1723 he was permitted to return. His estates were restored, but he was not allowed to sit in parliament. He wrote against the ministry, and his productions were admired for their eloquence and vigor. He again withdrew to France in 1735, but returned to England on the death of his father, and died in 1751.

Bolivar, Simon, the founder and first president of the Republic of Colombia, known as "The Liberator of South America." Born in Venezuela, 1783, he was educated in Madrid, and traveled in Europe and the United States. When the revolt against the Spanish yoke broke out in Venezuela, he joined it, but had to flee. In 1813 he returned, and, gathering a force together, defeated General Monteverde at Carácas. The tide then turned, and Bolivar fled to Jamaica, but he shortly returned, and after varying fortune in 1819 won the battle of Bojaca, resulting in the inauguration of the Republic of Venezuela in the same year, to which was afterwards united New Granada. In 1822 Bolivar went to help the Peruvians in their struggle for liberty, and was given the chief command. After a long campaign he won the great battle of Ayacucho. Upper Peru was constituted a separate republic with the title of Bolivia. As President of Colombia he had to endure much factious hostility; but though he tendered his resignation more than once it was never accepted, the supreme power being confirmed in him in 1828. Died, 1830.

Bonapartes, The. The family to which the Emperor Napoleon I. belonged came from Corsica. The father, Carlo Maria Bonaparte, born in 1746, was a lawyer and an adherent of Paoli, the insurgent. Died, 1785. The mother, Letizia Ramolino, born in 1750, was celebrated for her beauty; and with the title, "Madame Mère," lived in Paris during the rule of Napoleon. Died, 1836. (1) Joseph, born in 1768, the eldest son, practiced as an advocate, and married a merchant's daughter at Marseilles. He was commissary-general to the army in Italy under Napoleon, and in 1797 was sent as ambassador to the pope. An able diplomatist, he negotiated

the treaties of peace at Lunéville (1801), and at Amiens (1802). When his brother was proclaimed Emperor, he was placed upon the throne of Naples, but being a merely nominal ruler, his good judgment and better instincts had no play. In 1808, he was transferred to the throne of Spain, where his position was still more unfortunate. He was twice compelled to flee from Madrid, and finally abandoned the throne after the battle of Vittoria. He was lieutenant-general of the empire during the 1814 campaigns and the Hundred Days; and after Waterloo he lived for some years in the United States as the Comte de Survilliers. He died in Florence in 1844, and left his highly interesting "Memoirs and Correspondence." (2) Napoleon, the second son. (Napoleon I.) (3) Lucien, born in 1775, in 1795 became commissary to the army of the North. In 1798, he was elected to the council of the Five Hundred, and played an important part in the revolution which destroyed the Directory and made Napoleon First Consul. After becoming minister of the interior, he went as ambassador to Madrid; but his marriage with Mme. Jouberthon brought about an estrangement between him and the emperor, and in 1804 he retired to his estates in Italy, as Prince of Canino, where he cultivated his tastes for literature and the fine arts. After the peace of Tilsit he was offered the crown of Italy, but he refused it; and in 1810 set out for the United States. Captured by a British cruiser, he was kept a prisoner in England till 1814. After Waterloo he induced Napoleon to abdicate in favor of his son; and he himself retired to Italy. He wrote an epic, "Charlemagne." Died, 1840. (4) Marie Anne Elisa, born in 1777, married Felix Pascal Bacciochi, and was created Princess of Piombino and Lucca, and Grand Duchess of Tuscany. She retired from France in 1815, and died in Trieste in 1820. (5) Louis, born in 1778, the father of Napoleon III. He served in the Italian and Egyptian campaigns; and in 1802 he was compelled to marry Hortense Beauharnais, from whom he was afterwards separated. Under the empire he was created a prince and constable of France, and after occupying Holland he was proclaimed king of the country. He became extremely popular with the people, but offended the emperor, and in 1810 he abdicated, the country being absorbed in France. He spent most of his life after Napoleon's banishment in Italy, and wrote several books, of which the "Documents Historiques" is the most important Died, 1846. (6) Marie Pauline. (Pauline Borghese.) (7) Caroline Marie Annonciade, born in 1782, married Marshal Murat in 1800. Died, 1839. (8) Jérôme, born in 1784. He was given a command in the navy, and while on the American station married a Miss Patterson, a marriage which he was forced to renounce by the emperor. In 1807 he was made king of Westphalia, and married a daughter of the King of Württemberg, who became the mother of Prince Napoleon. In 1812 he proved so incapable a general during the Russian campaign that he was removed from command; but he commanded a division at Waterloo. After Napoleon's abdication he lived in exile, until 1847. In 1850 Napoleon III. made him a marshal of France and he later became president of the senate. Died, 1860. Of the second generation: (1) Napoleon, son of Louis. (Napoleon III.) (2) Napoleon, Joseph, born in 1822, commonly known as Prince Napoleon, and son of Jérôme Bonaparte. His early life was spent in travel, but after the 1848 revolution he was elected to the assembly. In 1849, he held for a year the post of ambassador at Madrid; and in 1854 he commanded a division of the army in the Crimea. He threw up his command suddenly, and in 1858 became president of the ministry for Algiers. In 1859, he held a command in Italy, and married the Princess Clotilde, a daughter of Victor Emmanuel. In 1861, he created a sensation in the senate by a fine oration in support of democratic principles, provoking a challenge from the Duc d'Aumale. His loudly-expressed approval of the Polish revolution brought him into disgrace with the emperor more than once, and compelled his resignation of the presidency of the Commissioners for the Universal Exhibition. After the fall of Napoleon III., and the death of Prince Louis Napoleon, he was recognized as head of the Napoleon family. In 1883, he was imprisoned for a pronunciamento, and in 1886 he was banished from France, and died in exile in 1891. (3) Charles Lucien Jules, Prince de Canino, born in 1803, the son of Lucien Bonaparte, a distinguished naturalist; in 1822, married his cousin, Zenaide, the daughter of Joseph Bonaparte, and soon after went to America, where he devoted himself to the study of science, and published his valuable "American Ornithology." In 1828, he returned to Italy; in 1833 he published his "Italian Fauna," and in 1847 he succeeded to the title of prince. He was for a short time active in Italian politics, but finally settled at Paris, where he died in 1857. His son, Lucien, born in 1828, is a cardinal. (4) Louis Lucien, born in 1813, the third son of Lucien Bonaparte. He passed his youth in scientific and linguistic study. In 1848, he was elected to the constituent assembly as deputy for Corsica, but the election was annulled. In 1852, he was made a senator, and in 1860 grand officer of the Legion of Honor. He wrote a great deal, much of his work being translations. Died, 1891. (3) Pierre Napoleon, prince, born in 1815, fourth son of Lucien. After getting into disfavor in Italy and America, he went to Paris in 1848, and sat in the assembly. In 1849 he served in Algeria, and finally settled in England. Died, 1881. Of the third generation: Prince Louis, better known as the Prince Imperial, born in 1856, the only child of Napoleon III. and the Empress Eugénie. He accompanied his father at the opening of the Franco-German War, but after Sedan he went to England. He entered the Woolwich Military Academy, and in 1879 went to Zululand where he died the same year.

Bonheur, Rosa (*bō-nŏr'*), a French painter, born at Bordeaux, 1822; is unrivaled among her own sex for the minute and spirited delineation of the various forms of animal life. Her most celebrated pieces are "The Nivernais Ploughing," "The Horse-Fair," "The Three Musketeers," and "Cows and Sheep in a Hollow Road." Through the Empress Eugénie, she received the Cross of the Legion of Honor. During the siege of Paris, her studio was spared. Died, 1899.

Boone, Daniel (*boon*), the pioneer of Kentucky, born in Bucks County, Pennsylvania, 1735, was one of the most successful of the enterprising American pioneers of the Eighteenth Century. He died in 1820.

Booth-Tucker, Frederick St. George de Lautour, commissioner in Salvation Army; born in Monghyr, Bengal, India, March 21, 1853; educated at Cheltenham College, England; passed Indian civil service examinations, 1874; studied in London until 1876; appointed to Punjab and held positions of assistant commissioner, magistrate, and treasury officer; resigned to join Salvation Army, 1881; inaugurated Salvation Army work in India, 1882; had charge there until 1891; secretary for international work, Salvation Army, London, 1891–96; commander of Salvation Army forces in United States until 1904; returned to India as special commissioner 1907. Author: "The Life of Catherine Booth," "Life of General William Booth," "In Darkest India and the Way Out," "Favorite Songs of the Salvation Army," "Monograph for the Paris Exposition on the Work of the Salvation Army in the United States."

Bopp, Franz, a celebrated German philologist and Sanskrit scholar, born at Mayence, 1791; was professor of Oriental Literature and General Philology at Berlin; his greatest work, "A Comparative Grammar of Sanskrit, Zend, Greek, Latin, Lithuanian, Old Slavic, Gothic, and German." Died, 1867.

Borden, Robert Laird, lawyer, legislator, was born at Grand Pré, Nova Scotia, 1854; educated at Acacia Villa Academy, Horton; began study of law in 1874; admitted to bar 1878; Q. C. 1891. He had extensive practice in Supreme Court of Nova Scotia and in Supreme Court of Canada, and was engaged in several cases before the judicial committee of the privy council; was president of Nova Scotia Barristers' society, 1893–1904; Hon. D. C. L., Queen's University, Ontario, 1903; LL. D., St. François Xavier University, 1905; member for the city and county of Halifax, 1896–1900; member for Carlton, 1905; member for city and county of Halifax, 1908–12; took a leading part in many important debates between 1896 and 1900; in 1901, upon the resignation of Sir Charles Tupper, elected leader of Conservative party in the House of Commons. He was elected premier of Canada in 1911 and resigned the premiership in 1920.

Borghese (*bŏr-gā'zā*). The name of a family of high position and great wealth in Rome. Camillo (1552–1621) became pope in 1605, under the title of Paul V. Prince Borghese, who married Pauline Bonaparte, sister of Napoleon, and separated himself from her on the fall of her brother, was born in 1775; died, 1832.

Borgia, Cesare, born in 1476, Italian master of statecraft of great but evil fame, was the fourth son of Pope Alexander VI., by Rosa Vanozza, and was created a cardinal, though he divested himself of the office in later years to suit his purposes. He compassed the death of his brother Giovanni, who was Duke of Gandia, in order to gain complete ascendancy in the papal government; and in 1498, having been sent as nuncio to Louis XII. of France, he was created Duke of Valentinois and married the daughter of Jean d'Albret, King of Navarre. After accompanying Louis XII.'s Italian campaign, he conceived the idea of a kingdom in Central Italy, and by force, treachery, and murder he had nearly succeeded in obtaining ascendancy throughout the Roman states, when the death of his father deprived him

of his great source of power. He was sent in 1504 a prisoner to Spain by Pope Julius II., but escaped, and joined the King of Navarre's army against Castile. In this campaign he was killed in 1507.

Borgia, Lucrezia, born in 1480, sister of the preceding, and like him the possessor of an infamous reputation. Her father compelled her twice to marriage and divorce before she became the wife of the Duke of Bisceglia. After her third husband had been murdered by Cesare Borgia, she married Alfonso of Este, and passed her life in the court of Ferrara, cultivating literature and art. Died, 1519.

Borgiano (*bor-je-ä′-no*), **Horazio,** an artist of eminence, a painter of historical subjects, of portraits, and also an engraver, was born in Rome in 1630. His style was considered masterly, and his "Dead Christ," a composition wholly his own, was especially admired. He died in 1681.

Borglum, John Gutzon de la Mothe ("Gutzon Borglum"), sculptor, painter, born in Idaho, March 25, 1867; educated at public schools, Fremont and Omaha, Neb., and St. Mary's College, Kansas; studied art in San Francisco; went to Paris, 1890, worked and studied in Académie Julien and École des Beaux Arts. Exhibited as painter and sculptor in Paris Salon; in Spain, 1892; in California, 1893–94; returned East; was in London and in Paris from 1896 until 1901; in New York since 1902. Exhibited in London and Paris, 1896–1901; held successful "one-man" exhibition in London; received gold medal sculpture at Louisiana Purchase Exposition; sculptor for work on Cathedral of St. John the Divine, New York. Work includes, in painting, figures and animals, portraits and mural painting; in sculpture figures and horses and groups in bronze; executed the gargoyles on the Princeton Dormitory, class of 1879 (about sixty devices).

Borromeo, St. Carlo (*bŏr-rō-mā′-ō*), cardinal and archbishop of Milan, a prominent member of the Council of Trent, contributed to the Tridentine Catechism, and was conspicuous by his self-sacrificing offices during a plague in the city of which he was the archbishop. Born in 1538, died in 1584.

Bossuet (*bo-swā′*), **Jacques Benigne,** born in Dijon, France, September 27, 1627; a distinguished orator and prelate of the Roman Catholic Church, bishop successively of Condom and of Meaux, and tutor to the Dauphin, the son of Louis XIV. Bossuet was the author of several controversial works, all in defense of the Roman Catholic doctrine; but his fame rests chiefly on his "Sermons," which, of their kind, are of unrivaled eloquence, though they are too dramatic for the majority of English readers. Several of his compositions, written in the first instance for the use of the Dauphin, and especially his "Discourse on Universal History," printed in 1681, long retained a high reputation. Died, 1704.

Boswell, James, the biographer of Dr. Samuel Johnson, born in Edinburgh, showed early a penchant for writing and an admiration for literary men. He fell in with Johnson on a visit to London in 1763, and conceived for him the most devoted regard; made a tour with him to the Hebrides in 1773, the "Journal" of which he afterwards published; settled in London, and was called to the English bar; succeeded, in 1782, to his father's estate, Auchinleck, in Ayrshire, with an income of £1,600 a year. Johnson dying in 1784, Boswell's "Life" of him appeared seven years after, a work unique in biography, and such as no man could have written who was not a hero-worshiper to the backbone. He succumbed in the end to intemperate habits, aggravated by the death of his wife. Born in 1740, died in 1795.

Bothwell (*both′-wel*), **James Hepburn, Earl.** The head of a powerful family in East Lothian. He became the second husband of Mary, Queen of Scots, having compassed the death, as was generally believed, of Darnley, her first husband. By Mary he was created Duke of Orkney, but a confederacy of nobles having compelled him to leave Scotland, he engaged in piratical enterprises, was taken by the Danes, and died in confinement in 1578. Born, 1536.

Botta, Carlo Giuseppe Guglielmo, born in 1766, Italian historian, studied medicine, and was imprisoned in 1792 as a revolutionary. He took an active part in the government of Piedmont, set up by Napoleon, but after the emperor's overthrow he devoted himself entirely to literature. He wrote "The History of Italy between 1789 and 1814," and a "History of the American War of Independence." Died, 1837.

Botticelli (*bot-tē-chel′-lē*), **Alessandro,** born in 1447. Italian painter, in response to the invitation of Pope Sixtus IV. went to Rome and executed some fine paintings for the chapel of the Vatican. On returning to Florence he became a devoted follower of Savonarola. Died, 1515.

Boughton, George Henry, 1834–1905; artist, a member of the National Academy of New York, and an associate of the Royal Academy after 1879. Among his paintings are "The Return of the Mayflower," "Evangeline," and "Milton visited by Andrew Marvell."

Bouguereau (*bög-ro′*) **Adolphe Guillaume,** born in 1825; French painter. In 1855 his "Triomphe du Martyre" was bought by the state, and previously he divided the honors of the Grand Prix de Rome with Baudry. Two of his later pictures which are well-known are "The Youth of Bacchus" and the "Adoration of the Magi and the Shepherds." Died, 1905.

Boulanger (*bö-lon-zhā′*), **George Ernest Jean Marie,** born in 1837, French general and politician, was made colonel during the siege of Paris, general of brigade in 1880, and minister of war in 1886. He achieved great popularity, and was elected in 1889 by the Nord, Somme, Charente Inférieure, and a division of Paris. A threat of prosecution drove him into exile, and he committed suicide at Brussels in 1891.

Bowles, Samuel, a distinguished American journalist; was born at Springfield, Mass., February 9, 1826, and from 1844 until his death in 1878 was editor of the "Springfield Republican," founded by his father. Under his management the paper became one of the foremost journals in the country, and is now noted for its comprehensive news, its literary taste, and its intelligent views of public affairs. In recent years it has labored to free the press from the bias of political party. Bowles is author of "Across the Continent" "Our New West," and "The Switzerland of America."

Braddock, Edward, born in 1695, British general; served in the Peninsula and Germany, and in 1754 was appointed to the command of the forces in Virginia. In 1755 he led an expedition against Fort Duquesne, where his troops fell into an ambush and were routed, and himself killed.

Braddon, Mary Elizabeth, born in 1837, novelist, after contributing to the provincial press, succeeded in getting a comedy, "Loves of Arcadia," accepted at the Strand Theater. In 1861 she produced a volume of poems, "Garibaldi," and then turning to fiction, published rapidly "Lady Lisle," "Lady Audley's Secret," "Aurora Floyd," and "Henry Dunbar." These books established her as one of the most popular novelists of the day, and later works, which she published in large number, did not diminish her reputation. Died, 1915.

Bradlaugh, Charles, born in 1833, politician, after working in several humble capacities, enlisted in the army. In 1853 he entered a solicitor's office; and then he achieved a great influence with working men as a Radical, and an antagonist of the Christian religion. His lectures in the Hall of Science, London, on social, political, and religious questions, were very popular; and in 1860 he started the "National Reformer," against which a futile government prosecution was instituted. In 1870, he secured a judicial decision in favor of affirmation in courts of law, but the expenses of the trial made him bankrupt. In 1872, he published his "Impeachment of the House of Brunswick," and the question of perpetual pensions always formed one of his favorite subjects. In 1880, he was returned for Northampton to Parliament, but refusing to take the oath, he was not allowed to take his seat until after the general election of 1885, although he was repeatedly returned by the constituency. Afterwards he earned a high reputation in the House of Commons, and though a thorough Radical, opposed the advocates of socialism. In 1889, he visited India, his interest in Indian affairs having always been pronounced. Died, 1891.

Brady, Cyrus Townsend, Protestant Episcopal clergyman, author; born in Allegheny, Pa., December 20, 1861; graduate of United States Naval Academy, 1883. Railroad service with the Missouri Pacific and Union Pacific roads for several years; studied theology under Bishop Worthington, Nebraska; ordained deacon, 1889; priest, 1890. Was rector of Protestant Episcopal churches in Missouri and Colorado and archdeacon of Kansas until 1895, and archdeacon of Pennsylvania till 1899; rector of St. Paul's Church, Overbrook, Philadelphia, 1899–1902, resigning to engage in literary work; chaplain of 1st Pennsylvania Volunteer Infantry in Spanish-American War. Member of American Academy of Political and Social Science. Author: "For Love of Country," "For the Freedom of the Sea," "The Grip of Honor," "Stephen Decatur," "Recollections of a Missionary in the Great West," "American Fights and Fighters," "Commodore Paul Jones," "Reuben James," "When Blades are Out and Love's Afield," "Under Tops'ls and Tents," "Colonial Fights and Fighters," "Hohenzollern," "Woven With the Ship," "In the Wasp's Nest," "Border Fights and Fighters," "The Southerners," "The Bishop," "Sir Henry Morgan, Buc-

caneer," "The Doctor of Philosophy," "In the War with Mexico," "The Corner in Coffee," "The Records," "A Little Traitor to the South," "A Midshipman in the Pacific," "Indian Fights and Fighters," "The Conquest of the Southwest," "The Two Captains." Died, 1920.

Brahe, Tycho (*brăh*), the most distinguished astronomer of the Sixteenth Century, was born in 1546, and died in 1601. A native of Denmark, his active life was passed in Germany.

Brahms, Johannes, born in 1833; German musical composer. Schumann early expressed the highest opinion of Brahms' genius, but for many years he was not appreciated in Germany. In 1862 he went to Vienna, where he acquired a high reputation, and held several important musical posts. In 1868 he composed the "Deutsches Requiem," which, after the Franco-German War, was performed throughout Germany. His compositions have been very highly valued. Died, 1897.

Brant, Joseph (*brănt*). An Indian chief of the Mohawk nation, born in Ohio, about 1742, held a commission in the British service, and fought against the American colonists in the Revolution. He went, afterwards, to England, where he published the Gospel of St. Mark in Mohawk. Died, 1807.

Breckenridge, John Cabell, born in 1821; American politician; in 1851 entered Congress, and in 1856 was elected vice-president under Buchanan. In 1860 he was a candidate for the presidency in the Southern interest, but was defeated by Lincoln; and having denounced Lincoln's address as a declaration of war, he was expelled from the House of Representatives. He was given a command in the Confederate army. Died, 1875.

Brewer, David Josiah, associate justice in United States Supreme Court, 1889–1910; born in Smyrna, Asia Minor, June 20, 1837; graduate of Yale, 1856; Albany Law School, 1858. Began practice, Leavenworth, Kan., 1859; United States commissioner, 1861-62; judge in probate and criminal courts, Leavenworth County, 1863-64; judge in district court, 1865–69; county attorney, 1869-70; justice supreme court, Kansas, 1870–84; judge circuit court of United States, 1884–89. Appointed by President Cleveland, 1896, member Venezuelan Boundary Commission; member of British-Venezuelan Arbitration Tribunal, 1899; President of Universal Congress of Lawyers and Jurists, Louisiana Purchase Exposition, St. Louis, 1904. Author: "The Pew to the Pulpit," "The Twentieth Century from Another View Point," "American Citizenship." Died, 1910.

Brewster (*broo'stur*), **Sir David,** an English philosopher and author, born in 1781, and educated at Edinburgh. From 1808 to 1829, he was editor of the "Edinburgh Encyclopedia." In 1815, he was elected F. R. S., and the next year invented the kaleidoscope. Among his chief works are a "Treatise on Optics" and "Memoirs of the Life, Writings, and Discoveries of Newton." His researches on double refraction, and discovery of the law of the polarization of light are his chief titles to eminence. Died, 1868.

Brian Boru, Boroihme (*brī'an-bo-roo'*), a celebrated Irish chief, King of Munster, afterwards sovereign of all Ireland, was born in 926, and died in 1014. He defeated the Danes in many battles, his last victory being at Clontarf, where he was killed. He was equally distinguished for his patronage of learning and piety.

Bridget, St. (*brĭd'jet*), or **St. Bride,** the patroness of Ireland, born at Fochart, County of Armagh, who flourished in the beginning of the Sixth Century, was renowned for her beauty, and founded the monastery of Kildare, where she devoted herself to the education of young girls.

Briggs, Charles Augustus, clergyman, theologian; born in New York, January 15, 1841; studied in University of Virginia, 1857–60; Union Theological Seminary, 1861–63; University of Berlin, 1866–69. Pastor of Presbyterian Church, Roselle, N. J., 1870–74; professor of Hebrew, 1875–1900, Biblical theology, 1890–1904, Theological Encyclopedia and Symbolics, 1904-13, Union Theological Seminary. Editor "Presbyterian Review," 1880–90; was tried for heresy and acquitted by Presbytery of New York, 1892, but suspended by General Assembly, 1893; ordained priest by Protestant Episcopal bishop of New York, 1900. Author: "Biblical Study," "American Presbyterianism," "Messianic Prophecy," "Whither? A Theological Question for the Times," "The Authority of Holy Scripture," "The Higher Criticism of the Hexateuch," "The Bible, the Church, and the Reason," "The Messiah of the Apostles," "The Messiah of the Gospels," "The Case of Dr. Briggs," three parts, "General Introduction to the Study of Holy Scripture," "The Incarnation of the Lord," "New Light on the Life of Jesus," "Ethical Teachings of Jesus." Also (with F. Brown and S. R. Driver) New Hebrew Lexicon. Editor: "International Theological Library," "International Critical Commentary." Died, 1913.

Bright, John, born November 16, 1811; an eminent orator and Radical statesman. Of Quaker parentage, he entered his father's business at the age of 16. Though he had taken part in the Reform movement, he first became prominent along with his friend Cobden in the anti-corn law agitation; entered parliament for Durham, being afterwards returned for Manchester, and losing that seat through his opposition to the Crimean War. In 1857, he was returned for Birmingham, holding that seat till his death. He joined Mr. Gladstone's government which disestablished the Irish Church, but opposed his Home Rule policy in 1886, dying in the unshaken conviction that it was a fatal error. As a master of really pure Saxon English, in all its power and pathos, Mr. Bright was never surpassed, and his speeches are worthy attentive study on that account alone. Died, March 27, 1889.

Brock, Sir Isaac, a gallant British officer. In 1812, when an American army under General Hull invaded Canada, the measures adopted by Brock were so effectual that the Americans surrendered without striking a blow. He did not long enjoy the fame he had won. An affair occurred at Queenstown, in October the same year, in which he lost his life.

Brontë, Charlotte, born in 1816; English author, the eldest of the three Brontë sisters. After some experience as a governess she became engaged with her sisters in the writing of novels, and in 1846 published with them a small volume of poems under the names of Currer, Ellis, and Acton Bell. In 1847 she published the well-known story, "Jane Eyre." Its success was instantaneous and complete. Although adversely and severely criticised, it was and is admitted to be one of the most remarkable of English novels. Her second story, "Shirley," was published in 1849, and her third and last, "Villette," in 1853. Another story, "The Professor," which had been refused by the publisher before "Jane Eyre" had made its author famous, was published after her death. In June, 1854, she married the Rev. Mr. Nicholls, who had been for a time her father's curate. But soon after her marriage, consumption, which had carried off her sisters and brothers, settled on her, and she died in her fortieth year (1855).

Brooke, Rev. Stopford A., M. A., was born in 1832. Educated at Trinity College, Dublin, where he graduated (1856), winning the Downe prize and Vice-Chancellor's medal for English verse. He was formerly chaplain to Queen Victoria and to the princess royal of Germany. From 1876 to 1894 Brooke was minister of Bedford Chapel, Bloomsbury; because he could not accept the orthodox views on miracles, he seceded from the Church of England, 1880. In 1895, however, after a lengthy illness, he found himself compelled to retire from his post. He is the author of several works, among which are "Life and Letters of the late F. W. Robertson," a "Primer of English Literature," "The Early Life of Jesus," several volumes of sermons, a volume of poems, "History of English Poetry," a work on "Early English Literature," "The Old Testament and Modern Life," and a book on Browning. Died, 1916.

Brougham, Henry, Lord Brougham and Vaux (*brōō'ăm*), born in Edinburgh in 1778, and educated at the high school and university of that city, was admitted to the Scotch bar in 1800. Excluded from promotion in Scotland by his liberal principles, he joined the English bar in 1808, speedily acquired a reputation as a lawyer for the defense in Crown libel actions, and by his eloquence in the cause of Queen Caroline, 1820. Died, 1868.

Brown, Henry Billings, associate justice of United States Supreme Court, 1890–1906; born in South Lee, Mass., March 2, 1836; graduate of Yale, 1856; studied law in private office; attended lectures at Yale and Harvard law schools. Deputy United States marshal, 1861–63; assistant United States attorney for eastern district of Michigan, 1863–68; then for a few months, to fill a vacancy, judge State Circuit Court of Wayne County; practiced law in Detroit until 1875; United States judge for eastern district of Michigan, 1875–90. Compiler of Brown's Admiralty Reports. Died, 1913.

Brown, John, an American slavery abolitionist, born in 1800, settled in Kansas, and resolutely opposed the project of making it a slave State. In the interest of emancipation, with a small band, he seized on the State armory at Harper's Ferry in hope of a rising, entrenched himself armed in it, was surrounded, seized, tried, and hanged in 1859.

Brown-Séquard, Edward, born in 1818; American physician and physiologist, was appointed successively professor of pathology at Harvard, professor to the Faculty of Medicine at Paris, and succeeded Claude

Bernard in the chair of experimental medicine at the College of France. He published two important series of lectures on the "Paralysis of the Lower Extremities" and on "Nervous Affections." Died, 1894.

Browne, Charles Farrar, a humorist and satirist, known by the pseudonym of "Artemus Ward," was born in Maine, United States, in 1834. His first literary effort was as "showman" to an imaginary traveling menagerie. He traveled over America lecturing, carrying with him a whimsical panorama as affording texts for his numerous jokes, which he took with him to London, and exhibited with the same accompaniment with unbounded success. Browne spent some time among the Mormons, and defined their religion as singular, but their wives plural. Died, 1867.

Browne, Sir Thomas, a physician and religious thinker, born in London in 1605; resided at Norwich for nearly half a century, and died there in 1682. He was knighted by Charles II. Professor Saintsbury says, "the greatest prose writer perhaps, when all things are taken together, in the whole range of English." His principal works are "Religio Medici," "Inquiries into Vulgar Errors," and "Hydriotaphia, or Urn-Burial, a Discourse of the Sepulchral Urns Found in Norfolk," all of the very first importance in English literature.

Browning, Elizabeth Barrett, one of the greatest of English poets, born in 1806; she married the poet Robert Browning, with whom she took up her residence in Italy. Her principal works are "Aurora Leigh," "Lady Geraldine's Courtship," "Casa Guidi Windows," "Poems Before Congress." Died, 1861.

Browning, Robert, great English poet, born in 1812; educated by tutors and at London university. Among his works are "Paracelsus," "Sordello," "Bells and Pomegranates" (a series of plays, tragedies and lyrics—including "Pippa Passes"), "Men and Women," "Dramatis Personæ," "The Ring and the Book," "Dramatic Idyls." Browning is distinguished for depth of spiritual insight, dramatic energy, and extreme compactness of expression. He died in 1889, and was buried in Westminster Abbey.

Bruce, David, born in 1324; King of Scotland, and son and successor of Robert Bruce. The invasion of Scotland by Edward III. forced him to flee to France; but he returned during the war between France and England. He invaded England, was defeated and taken prisoner. He was ransomed for £100,000. Died, 1371.

Bruce, Edward, brother of Robert Bruce, fought with great bravery in the war against the English, and in 1315, being offered the crown of Ireland, he went to that country, maintaining his position with great success. He was killed in a battle against the English in 1318.

Bruce, Robert, king of Scotland, born in 1274; was the grandson of Balliol's rival in 1292. In 1306 he murdered the regent, Comyn, and was crowned at Scone, but was defeated by Edward I. the same year. After many years of hardship and ill-fortune he gained a final victory over Edward II. at Bannockburn, in 1314. By the treaty of Northampton (1328), the complete independence of Scotland was recognized. Died, 1329.

Brummel, Beau, born in London, in 1778; in his day the prince of dandies; was patronized by the Prince of Wales, afterwards George IV.; quarreled with the prince; fled from his creditors to Calais, where, reduced to destitution, he lived some years in the same reckless fashion. He settled at length in Caen, where he became insane, and died in 1840.

Brutus, Lucius Junius, a Roman consul. Tarquinius Superbus having put the father and brother of Brutus to death, Brutus feigned madness, until the rape of Lucretia, when he excited the populace to insurrection, and drove Tarquinius from the city. He and Collatinus were appointed consuls together, and in this capacity Brutus ordered the execution of his own sons for complicity in a conspiracy. He was killed by Tarquinius' son about 507 B. C.

Brutus, Marcus Junius, born in 85 B. C.; the nephew of Cato of Utica; sided with Pompey against Cæsar, and after the battle of Pharsalia retired to literary pursuits. Cæsar made him governor of Cisalpine Gaul, but he joined the conspirators who murdered the consul. After the assassination he collected troops in Macedonia, and assuming the title of imperator, ravaged Rhodes and Lydia. In 42 B. C. he and Cassius were defeated by Octavius Cæsar and Mark Antony, and Brutus committed suicide.

Bruyère (*bru-yare'*), **John de la,** a distinguished French writer, born in 1645. He wrote dialogues on quietism, and translated the characters of Theophrastus from the Greek. He died in 1696.

Bryan, William Jennings, editor and publicist; born in Salem, Ill., March 19, 1860; early education in public schools and Whipple Academy; graduate of Illinois College, Jacksonville, 1881; Union College of Law, Chicago, 1883. Practiced at Jacksonville, Ill., 1883-87; then at Lincoln, Neb.; member of Congress, 1891-95; received Democratic vote for United States senator in Nebraska Legislature, 1893; nominated in Democratic convention for United States senator, 1894, but was defeated in legislature by John M. Thurston; editor of Omaha "World-Herald," 1894-96; delegate to Democratic National Convention, 1896; wrote the "silver plank" in its platform, made a notable speech, and was nominated for president of United States; traveled over 18,000 miles during campaign, speaking at almost every stopping place; received 176 electoral votes against 271 for William McKinley. In 1897-98 he lectured on bimetallism; raised in May, 1898, the 3d Regiment of Nebraska Volunteer Infantry for war against Spain, becoming its colonel. Nominated for president in 1900 by Democratic, Populist, and Silver Republican conventions, but was again defeated by William McKinley. Established "The Commoner," 1900. He was again nominated for president in 1908, and, after a notable campaign, was defeated by W. H. Taft. In 1912 he took an active part in the Democratic National Convention, and was largely instrumental in securing the nomination of Wilson for president. Became secretary of state, 1913; resigned, 1915, because opposed to President Wilson's diplomatic policy toward Germany. Author: "The First Battle," "Under Other Flags," also many articles in magazines and newspapers.

Bryant, William Cullen, American poet and historian, born in 1794. When about nineteen he published his poem, "Thanatopsis," which attracted much attention; in 1825 he became editor of several periodicals in New York. Having several times visited Europe, he wrote his "Letters of a Traveler in Europe and America"; for more than thirty years he acted as editor of the "New York Evening Post," and wrote much poetry, as well as many other prose works. Died, 1878.

Bryce, James, viscount, was born in 1838; educated at Glasgow University and Trinity College, Oxford (Craven and Vinerian Scholar); Fellow of Oriel, 1862; Honorary Fellow of Trinity College; D. C. L., LL. D., F. R. S.; D. L., City of Aberdeen; member of Institute of France and of the Royal Academies of Turin, Stockholm, Naples, and Brussels, and of the Royal Accademia of the Lincei at Rome; P. C.; called to the bar, Lincoln's Inn, 1867; regius professor of civil law at Oxford University, 1870-93; M. P. for Tower Hamlets, 1880-85, and for South Aberdeen, 1885-1907; under-secretary for foreign affairs for five months in 1886; chancellor of the Duchy of Lancaster, 1892-94, and March to May, 1894; president of the Board of Trade, 1894-95; chief secretary for Ireland, 1905-07. He was appointed ambassador to the United States, 1906, and resigned, 1912. He took a deep interest in the condition of the Eastern Christians and their emancipation from Turkish misrule. He strongly opposed the war in South Africa, and the Education Act of 1902. Author of "The Holy Roman Empire," "Transcaucasia and Ararat," "The American Commonwealth," "Impressions of South Africa," "Studies in History and Jurisprudence," "Modern Democracies." Died, 1922.

Buchanan, James, fifteenth president of the United States, was born in Franklin County, Pa., April 23, 1791; admitted to the bar, 1812; member of Congress, 1821-31; minister to Russia, 1832-34; United States Senator, 1834-45; secretary of state, 1845-49; minister to England, 1853-56; signed Ostend Manifesto, 1854; president, 1857-61. His administration was on the whole unpopular. He died on June 1, 1868.

Buck, Dudley, organist, composer; born in Hartford, Conn., 1839; studied at Trinity College, Leipzig Conservatory of Music, and at Dresden and Paris; for several years organist Music Hall, Boston; organist Holy Trinity Church, Brooklyn; director and organist Apollo Club, twenty-five years; retired, 1903. Composer of orchestral, organ, and vocal music. Died, 1909.

Buckley, James Monroe, editor "New York Christian Advocate," 1880-1912; born in Rahway, N. J., December 16, 1836; educated at Pennington, N. J., Seminary, and one year at Wesleyan University; studied theology at Exeter, N. H.; joined New Hampshire conference, Methodist Episcopal Church, 1859; went to Detroit, 1863; Brooklyn, 1866; pastor in vicinity of New York until 1880. Author: "Oats or Wild Oats," "Faith Healing," "Christian Science and Kindred Phenomena," "Christians and the Theater," "The Land of the Czar and the Nihilist," "Travels in Three Continents—Europe, Asia, Africa," "History of Methodism in the United States," "Extemporaneous Oratory for Professional and Amateur Speakers." Died, 1920.

Buddha (*bŏd'da*), "the wise or enlightened," is the sacred name of the founder of Buddhism, who appears

to have lived in the Sixth Century B. C. He was born a Hindu, of an intensely contemplative nature, the son of a king, who did everything in his power to tempt him from a religious life, from which, however, in his contemplation of the vanity of existence nothing could detain him; retired into solitude at the age of 30, as Sakyamuni, *i. e.*, solitary of the Sakyas, his tribe; consulted religious books, could get no good out of them, till, by-and-by, he abstracted himself more and more from everything external, when at the end of ten years, as he sat brooding under the Bo-tree alone with the universe, soul with soul, the light of truth rose full-orbed upon him, and he called himself henceforth and gave himself out as Buddha. "Now," he said to himself, "I know it all," as Mohammed in his way did after him, and became a preacher to others of what had proved salvation to himself, which he continued to do for forty years, leaving behind him disciples, who went forth without sword, like Christ's, to preach what they, like Christ's, believed was a gospel to every creature.

Buffon (*boof'-fong*), **Georges Louis Leclerc, Count de,** an eminent French naturalist, a member of the French Academy, and of that of sciences; was born in 1707. His "Natural History," which appeared in 1749, gave him fame, combining in an eminent degree reason, eloquence, and research. Other works from his pen obtained great applause. He professed to be a materialist. In 1739, he was named Intendant of the Jardin Royal des Plantes. Died, 1788.

Bull, Ole Bornemann, famous violinist; born in Bergen, in Norway, 1810; he secured great triumphs both throughout Europe and in America by his wonderful playing. He lost all his money in a scheme to found a colony of his countrymen in Pennsylvania, and had to take again to his violin to repair his broken fortunes. He afterwards settled down at Cambridge, Mass., and had also a summer residence in Norway, where he died in 1880.

Buller, Sir Redvers, born in 1839; soldier, first saw service in the China War of 1860. In 1870 he took part in the Red River expedition, and in 1874 in the Ashantee War. In 1879 he was sent on special service to the Cape, held command of the Frontier Light Horse in the Kaffir War of 1878-79, and served with great gallantry in the Zulu War. He was present at Tel-el-Kebir, at El Teb and Tamai, and accompanied the Nile expedition of 1884. In 1890, he succeeded Lord Wolseley as adjutant-general. Was prominent in the Boer War. Died, 1908.

Bülow, Friedrich Wilhelm von, born in 1755; Prussian general, obtained field marshal's rank in 1813, and by the victory at Lukan saved Berlin from the French. His victories at Grossbeeren and Dennewitz over Oudinot and Ney respectively twice again saved the Prussian capital at critical moments. He was present at Leipzig, and in command of the right wing of the allies he occupied the low countries. In 1814 he marched into France, and he was in command during the Waterloo campaign. Died in 1816.

Bunyan, John (*bun'yăn*), author of the celebrated allegories, "Pilgrim's Progress," and "Holy War"; born in England, 1628, was when young dissipated, but in early manhood reformed and joined the Baptists, becoming so zealous as to invite persecution. He was sentenced to transportation on a charge of promoting seditious assemblies, but sentence was not enforced; was, however, imprisoned for more than twelve years, and during that time wrote his "Pilgrim's Progress." Died 1688.

Burbank, Luther, naturalist, originator of new fruits and flowers; born in Lancaster, Mass., March 7, 1849; boyhood on farm; educated at Lancaster Academy; always devoted to study of nature, especially plant life. Moved to Santa Rosa, Cal., 1875; conducts Burbank's Experiment Farms. Originator of the Burbank potato; gold, Wickson, apple, October purple, chalco, America, and climax plums; giant, splendor, sugar, and stoneless prunes; a new fruit, the plumcot; peachblow, Burbank, and Santa Rosa roses; gigantic forms of amaryllis, tigridia, the Shasta daisy, giant and fragrance callas; and various new apples, peaches, nuts, berries, and other valuable trees, fruits, flowers, grasses, grains, and vegetables.

Burdett-Coutts, Angela Georgina, Baroness, born in 1814; the daughter of Sir Francis Burdett, succeeded in 1837 to the great wealth of her grandfather, Mr. Thomas Coutts. The Shoe-black Brigade, the Nova Scotia Gardens, model lodging houses, and Columbia Market are of her foundation. The poor and the distressed at home and abroad had a constant benefactress in her; the east-end weavers, the Irish fishermen of Cape Clear, the Turkish peasantry after the Russo-Turkish War, are among those who received her help. In 1871, the queen made Miss Coutts a peeress, and in 1881 the baroness married William Ashmead-Bartlett. Died, 1906.

Burgess, John William, educator and author, was born in Cornersville, Tenn., August 26, 1844; attended Cumberland University, Lebanon, Tenn.; graduate of Amherst, 1867. Admitted to bar, Springfield, Mass., 1869; professor of English literature and political economy, Knox College, 1869–71; studied history, public law and political science, Göttingen, Leipzig, Berlin, 1871–73; professor history and political science, Amherst, 1873–76; professor political science and constitutional law since 1876, dean faculty of political science 1890–1912, Columbia University. Author: "Political Science and Comparative Constitutional Law" (2 volumes), "The Middle Period," "The Civil War and the Constitution" (two volumes), "Reconstruction and the Constitution," contributor to reviews on historical, political and legal topics.

Burgoyne, John, General (*bur-goin'*), an English officer in the American Revolution, was defeated and surrendered his army to General Gates at Saratoga, in 1777. Born, 1722; died, 1792.

Burke, Edmund, born in 1729; statesman and orator; an Irishman by birth; graduated at Trinity College, Dublin. Going to London, he attracted attention by his essays on the "Sublime and Beautiful," and devoted himself to literature, founding in 1759 "The Annual Register." In 1761 he became private secretary to Hamilton, the new chief secretary for Ireland; and served Lord Rockingham in the same capacity when that nobleman became prime minister. He was returned to Parliament for Wendover, and his speeches on American affairs created a great sensation in the House of Commons. His position in political life was raised still higher by the pamphlets which he wrote on current questions. Returned for Malton, he produced in 1780 his great plan of economical reform; and in 1782 he became paymaster under Lord Rockingham's government. He again took office in the Duke of Portland's coalition ministry, when he made his famous speech on the India bill. In the impeachment of Warren Hastings, Burke played a leading part, his opening speech extending over four days. The outbreak of the French Revolution was the occasion of one of his finest efforts of oratory. Burke's attitude in this matter severed his friendship with Fox, and he seceded from the Whig party. In 1794, he retired from parliamentary life, though he continued to produce his pamphlets on political affairs. Died, 1797.

Burleigh (*bur'le*), **William Cecil, Lord,** prime minister of England during the reign of Elizabeth; born in 1520, was regarded as one of the ablest statesmen of his time. Died, 1598.

Burlingame (*bur'ling-ām*), **Anson,** an American diplomatist; born in Chenango County, N. Y., 1820. He was elected member of Congress by the Republicans of the fifth district of Massachusetts, in 1854–56–58. In 1861, he was sent as minister to China, and, in 1867, appointed ambassador from China to the United States and to the great powers of Europe. In 1868 he visited this country at the head of a Chinese embassy, and concluded a liberal treaty between the United States and China, which was promptly ratified by the Chinese Government. The embassy afterwards visited London, Paris, Berlin, and lastly St. Petersburg, where Burlingame suddenly died, February, 1870.

Burne-Jones, Edward, born in 1833; painter, early fell under the influence of the pre-Raphaelite Brotherhood, and his paintings are marked by the mediævalism and realism of that school. He was elected an associate of the Royal Academy in 1885. Died, 1898.

Burnett, Frances Hodgson, author, playwright; born (Frances Eliza Hodgson), Manchester, England, November 24, 1849; family moved, 1865, to Knoxville, Tenn.; began writing for magazines, 1867; married Dr. L. M. Burnett, 1873; settled in Washington, 1875; obtained divorce, 1898; married second time, 1900, Stephen Townesend, English surgeon. Author (novels): "That Lass o' Lowrie's," "Dolly, a Love Story," "Kathleen," "Surly Tim and Other Stories" 1877; "Haworth's," "Louisiana," "A Fair Barbarian," "Through One Administration," "Little Lord Fauntleroy," "Editha's Burglar," "Sara Crewe," "Little Saint Elizabeth," "Two Little Pilgrims' Progress," "The Pretty Sister of José," "A Lady of Quality," "His Grace of Ormonde," "The Captain's Youngest," "In Connection with the De Willoughby Claim," "The Making of a Marchioness," "The Little Unfairy Princess," "A Little Princess." Plays: "Little Lord Fauntleroy," "Phyllis," "The Showman's Daughter," "Esmeralda," "The First Gentleman of Europe," "Nixie" (with Stephen Townesend), "A Lady of Quality" (with same).

Burns, Robert, born in 1759; Scottish poet; was the son of an Ayrshire farmer, and with his brothers worked

on the farm. His first volume of poems was published in 1786, and attracted much attention, Burns being invited to Edinburgh and made much of by literary society. At this time he was on the point of emigrating to Jamaica. In 1788 he married Jean Armour, and in 1789 became an excise officer, as well as a farmer in Dumfriesshire. In 1791, farming not being profitable, he removed to Dumfries, where he continued his post in the excise, and wrote poems for the Edinburgh publishers. The irregularities which had marked his earlier life returned in his later days, and accelerated his death in 1796.

Burr, Aaron, born in 1756; a vice-president of the United States, distinguished himself in the War of Independence. In 1807 he was arrested on a charge of conspiracy. It was supposed that he aimed to separate the Western States from the Union and annex them to Mexico, but, after a famous trial, he was acquitted. Died, 1836.

Burroughs, John, essayist; born in Roxbury, N. Y., April 3, 1837; academic education; taught school about eight years; treasury clerk, 1864–73; national bank examiner, 1873–84; after 1874 lived on a farm, devoting his time to literature and fruit culture. Author: "Wake-Robin," "Signs and Seasons," "Pepacton," "Riverby," "Birds and Poets," "Winter Sunshine," "Locusts and Wild Honey," "Fresh Fields," "Indoor Studies," "Whitman, a Study," "The Light of Day," "Squirrels and Other Fur Bearers," "Literary Values," "Far and Near," "Camping and Tramping with Roosevelt," "The Breath of Life," "Under the Apple Trees," "The Summit of the Years," "Accepting the Universe." Died, 1921.

Burton, Marion LeRoy, educator, was born at Brooklyn, Iowa, 1874. He graduated from Carleton College, Minn., 1900, Yale Divinity School, 1906, Ph. D., Yale, 1907. After teaching, preaching, and traveling in Europe, 1907–10, he was president of Smith College, 1910–17, and of the University of Minnesota, 1917–20. In 1920 he was elected president of the University of Michigan. Author: "The Secret of Achievement" and various other works.

Burton, Theodore E., statesman, lawyer, was born in Jefferson, O., 1851. He graduated from Oberlin College 1872, was admitted to the bar, 1875, and began practice in Cleveland. He was member of Congress, 1889–91 and 1895–1909, and United States Senator, 1909–15. Author: "Life of John Sherman" and other works.

Butler, Nicholas Murray, educator; born Elizabeth, N. J., 1862; received degrees of A. B., A. M., and Ph. D. from Columbia, and LL. D. from many institutions. Since 1902 president of Columbia, where, since 1885, he has taught philosophy. Also president Barnard college, Teachers college and College of pharmacy. Member of many learned societies and associations. Selected in 1912 by Republican national committee as candidate for vice-president in place of James S. Sherman, deceased. Editor: "Educational Review," "Great Educators Series," and "Teachers' Professional Library." Author: "The Meaning of Education," "True and False Democracy," "The American as He Is," and "Philosophy."

Butler, Samuel, born in 1612; English satirist; in his seventeenth year became attached to the household of the Countess of Kent, when he frequently attended meetings at the house of a Sir Samuel Luke, a strict Puritan and Parliamentarian. The experiences of this time furnished him with the material for his famous work, "Hudibras," the first part of which appeared in 1663, and achieved the widest popularity. Two other parts of the work appeared at intervals. Died, 1680.

Byng, Lord, of Vimy, British general, son of the earl of Strafford, was born in 1862. He joined the royal hussars, 1883; served in the Sudan expedition, 1884, and in the South African war, 1899-1902, during which he became colonel. Promoted major-general in 1909, he was in October, 1914, placed in command of a cavalry division in Flanders. For services at the Dardanelles, 1915, he was made lieutenant-general, and in 1916 was given command of the Canadian division on the western front. In November, 1917, he won a signal victory at Cambrai, breaking through the strongest trench systems by means of tanks, which he was the first to employ in attack. This important military discovery led to the great later successes of the Allies in breaking the Hindenburg line and other defenses which the Germans believed impregnable. In March, 1918, following the disaster to Gough's army in Picardy, Byng thwarted the efforts of the Germans to extend their gains by crushing their most powerful attacks against Arras and Vimy Ridge. In August, 1918, Byng made a successful drive from the old Somme front to Bapaume which prevented the retreating Germans from making a stand west of the Hindenburg line. Byng's work during the final weeks preceding the German collapse was very effective. In 1921 Lord Byng was appointed Governor-General of Canada.

Byron, George Gordon, sixth lord; noted English poet; was born in London, 1788. He spent his boyhood at Aberdeen and was educated at Harrow and Cambridge. He wrote "Hours of Idleness," a poor first attempt, which called forth a severe criticism in the "Edinburgh Review," and which he satirized in "English Bards and Scotch Reviewers," and soon afterwards left England and spent two years in foreign travel; wrote first part of "Childe Harold," "awoke one morning and found himself famous"; produced the "Giaour," "Bride of Abydos," "Hebrew Melodies," and other works. In 1815 he married Miss Millbank, an heiress, who in a year left him never to return. A storm raised against him on account of his private life drove him from England, and he never returned. On the Continent, he moved from place to place, finished "Childe Harold," completed several short poems, and wrote "Don Juan"; threw himself into revolutionary movements in Italy and Greece. His poems made a great impression on his age. Died in 1824.

Cable, George Washington, author; born in New Orleans, October 12, 1844; educated in public schools. Served Fourth Mississippi Cavalry, Confederate Army, 1863–65; clerk in cotton factor's office; for a time reporter on "New Orleans Picayune," 1865–79; wrote stories for "Scribner's Monthly"; since 1879 devoted to literature. Author: "Old Creole Days," "The Grandissimes," "Madame Delphine," "The Creoles of Louisiana," "Dr. Sevier," "The Silent South," "Bonaventure," "The Negro Question," "Strange True Stories of Louisiana," "John March, Southerner," "Strong Hearts," "The Cavalier," "Bylow Hill," "Kincaid's Battery," "Posson Jone and Père Raphael," "Gideon's Band," and "The Amateur Garden."

Cabot (*ka'-bot*), **John,** born in 1450; originally a Venetian pilot, settled in Bristol about 1472; obtained letters patent from Henry VII. to discover unknown lands; sailed with his sons in 1497, and sighted the coast of Newfoundland or Labrador, and Florida. Died, about 1498.

Cadorna, Count Luigi, Italian general, member of a famous noble family, was born at Pallanza, 1850. He began his military education at the age of 10, and in 1868 graduated at the head of his class from the military academy at Turin. In 1883 he was made major of infantry, in 1896 he was called to the general staff, and in 1910 was designated commander of an army corps. Following the declaration of war against Austria-Hungary in 1915, Cadorna was placed in command of the Italian armies, conducting the operations on the Isonzo which led to the capture of Gorizia. After the great Italian retreat of October-November, 1917, Cadorna relinquished the chief command to Diaz, and became a member of the supreme war council of the Allies.

Cæsar, Caius Julius, the greatest of Roman generals, born in 100 B. C. Elected consul 60 B. C.; formed a secret alliance with Pompey and Crassus known as the first triumvirate. Beginning the Gallic War in 58 B. C., he subdued in one campaign both the Helvetii and the Germans under Ariovistus. Pompey having become his enemy through jealousy, Cæsar crossed the Rubicon 49 B. C., and in a short time became master of Italy; having conquered all his enemies, and subdued Spain and Africa, he was made dictator for life, and received from the senate the title of Imperator. Although beloved by the masses, the patricians feared and hated him, and a conspiracy by Cassius, Brutus and others resulted in his assassination, 44 B. C.

Caine, Hall, was born of Manx parentage in 1853, and commenced his career as an architect in Liverpool; then joined the staff of the "Liverpool Mercury," and wrote for the "Academy" and the "Athenæum." Resided with Dante Rossetti in London till the poet's death in 1882. Published "Sonnets of Three Centuries," "Recollections of Rossetti," "The Shadow of a Crime," "A Son of Hagar," "The Deemster," "The Bondman," "The Scapegoat," "The Manxman," "The Christian," "The Eternal City," "The Prodigal Son," "The White Prophet," and "The Woman Thou Gavest Me." Many of his novels have been dramatized.

Calderon de la Barca, Don Pedro, born in 1600; Spanish dramatist, educated at the Jesuit College at Madrid, and the University of Salamanca. His mind early assumed a religious cast, first shown in the drama "La Devocion de la Cruz," written at the age of 18. While serving against the Milanese in the Low Countries he wrote the "Siege of Breda," and on the death of Lope de Vega, in 1635, became the leading poet in Spain. In 1651 he took holy orders, and thenceforward wrote little else than sacred dramas, or "autos." Died, 1681.

Calhoun, John Caldwell, born in 1782; American lawyer and statesman, effected great reforms as secretary of war, in 1817 and in 1825 became Vice-President of the

United States. He advocated slavery and the dissolution of the Union. Died, 1850.

Caligula (*ka-lig'-u-la*), the son of Germanicus and Agrippina, was born in A. D. 12. He was named by Tiberius joint heir of the empire. He subsequently became sole emperor, and proved a great tyrant. In the course of a career of incestuous debauchery and degrading voluptuousness, he conceived such a hatred to his subjects, that he openly expressed a wish that the Roman people had but a single neck, in order that he might extirpate them at a blow. He was murdered in 41.

Calvin, John, born in Noyon, France, in 1509; educated at the colleges of La Marche and Montaigu, Paris, held some livings, but preferring the law, he did not proceed to priest's orders. While studying law at Bourges he learned Greek, and on reading the New Testament became a Protestant. He removed to Paris, and wrote a commentary on Seneca's "De Clementia," but, forced by persecution to leave France, took refuge in Basel. In 1536 appeared his "Institutes of the Christian Religion." In conjunction with Farel he attempted to establish a kind of theocracy at Geneva, but they were expelled by the council in 1538, and retired to Zürich. Passing on to Strasburg, Calvin became pastor to the French refugees, married, and published his "Romans." In 1541, Calvin was invited back to Geneva. The theocratic government was resumed, and here he labored till his death. Calvin did more than any other man towards formulating the doctrines of the Reformed Church. The opinions on predestination and election called "Calvinistic," are rather those of his disciples than his own. Died, 1564.

Cambaceres (*kam-bă-sare'-ez*), **Jean Jacques, Duke of Parma,** was born in Montpellier in 1753. He was brought up to the legal profession, and became president of the French Convention in 1792. He voted for pronouncing Louis XVI. guilty, but denied the right of the Convention to proceed to the last extremity, and wished that the unfortunate monarch might be detained in prison, and put to death only in case of invasion. He was afterwards president of the Committee of Public Safety, and of the Council of Five Hundred. When Napoleon Bonaparte was named first, Cambacérès was made second consul. During the hundred days after Bonaparte's return, he was president of the Chamber of Peers. He left France when the Bourbons were a second time restored, but was permitted to return. Died, 1824.

Cambyses (*kam-by'-seez*), the son of Cyrus, King of the Persians, succeeded his father in 529 B. C. He conquered Cyprus and Egypt. At Memphis, he caused the bull Apis to be slaughtered by his priests, and leaving Egypt to return to Persia, he died at Ecbatana of a wound he had received from his own sword when mounting his horse, in 522 B. C.

Camoëns, Luiz de (*kăm'o-ĕnz*), the greatest of Portuguese poets, was born about 1524. After serving in an expedition against the Moors, in which he lost his right eye, he sailed for India, 1553, after which he wrote the "Lusiad" the great poem on which his fame rests. On his return from exile, he suffered shipwreck, and lost all his property excepting the manuscript of his epic. Died at Lisbon, in a hospital, 1580.

Campbell, Alexander, founder of the sect known as the "Disciples of Christ"; born near Ballymena, in County Antrim, Ireland, September 12, 1788. He emigrated to the United States in 1809. Though at first a Presbyterian, in 1812 he formed a connection with the Baptists, and for some time he labored as an itinerant preacher. In 1826 he published a translation of the New Testament, in which the words "baptism" and "baptist" gave place to "immersion" and "immerser." By his discussions on public platforms, and his serial publications, as well as his assiduity in preaching tours and training young men for the ministry, Campbell gradually formed a large party of followers, who began about 1827 to form themselves into a sect under the designation of "The Disciples of Christ." In 1841, Campbell founded Bethany College in West Virginia, where he died, March 4, 1866.

Campbell, Thomas, an English poet, born in 1777. His reputation rests mainly on his "Pleasures of Hope," and "Gertrude of Wyoming." As a writer of national songs he has never been surpassed. Died, 1844.

Campbell-Bannerman, Rt. Hon. Sir Henry, prime minister of Great Britain, was born in 1836. Educated at Glasgow University and Trinity College, Cambridge (B. A. honors, 1858; M. A., 1861); financial secretary in war office, 1871–74 and 1880–82; secretary admiralty, 1882–84; chief secretary of Ireland, 1884-85; secretary for war, 1886 and 1892–95; chosen leader of the Liberal Opposition in succession to Sir William Harcourt, February, 1899. Notwithstanding the differences between Liberal Imperialists and other Liberals over the Boer War, a unanimous vote of confidence in his leadership was carried at a meeting of the Liberal party held at the Reform Club, July, 1901. Again received the solid support of the Liberal party in the House in 1903, 1904, and 1905. On the resignation of the Balfour administration in December, 1905, he was summoned by the king and formed a Liberal Cabinet himself becoming first lord of the treasury and prime minister; the general election which followed gave him a tremendous majority. Died, 1908.

Canning, George (*kăn'nĭng*), an English statesman and orator, born in London, 1770. He commenced his career at the bar, but being brought into the House of Commons by Mr. Pitt, he abandoned the law for politics. In the Portland administration, Canning became secretary of state for Foreign Affairs, and largely contributed in that capacity to the overthrow of the plans of Napoleon. In 1816, he was appointed president of the Board of Control of Indian Affairs, and, in 1822, foreign secretary for the second time. On the death of Earl of Liverpool, Canning became first minister of the Crown, and distinguished his government by the liberal tendencies of his home and foreign policy. Died, 1827.

Cannon, Joseph G., congressman, lawyer; born in Guilford, N. C., May 7, 1836; admitted to Illinois bar; State's attorney, Vermilion County, Ill., 1861-68; member of Congress, 1873-91, 1893-1903, 12th Illinois district, and 1903-13, 1915-17, 18th district; chairman of Committee on Appropriations, 55th, 56th, and 57th Congresses; speaker of 58th, 59th, 60th and 61st Congresses.

Canova (*kah-nō'vah*), **Antonio,** one of the greatest of Italian sculptors, born at Possagno, in Venetia, 1757. Among his more celebrated works are the "Venus and Adonis," "Cupid and Psyche," "Mary Magdalen," etc. The ruling characteristic of his style is sentiment — sometimes, indeed, bordering on sentimentality. Died, 1822.

Canute the Dane (*kă-nūt'*), or **Cnut,** called the Great, son of Sweyn, King of Denmark, was born in 994. He invaded England, and after notable successes was chosen sole king in 1017. He married the queen of Æthelred, after the latter's death, and conquered Norway in 1028. His reign was that of a statesman and patriot. Died, 1035.

Capet, Hugh (*kă'pā*), founder of the third, or Capetian dynasty of French monarchs, as Count of Paris, on the death of Louis V., last of the Carlovingians, usurped the throne, in possession of which he was confirmed by a confederacy of nobles. The race of Capet has given 119 sovereigns to Europe, thirty-six kings to France, twenty-two to Portugal, five to Spain, eleven to Naples and Sicily, three to Hungary, and three to Navarre; three emperors to the East; seventeen dukes to Burgundy, thirteen to Brittany, two to Lorraine, and four to Parma. Died about A. D. 996.

Capo-D'Istria (*kă-po-dis'-tre-ă*), **John, Count of,** a Greek, who gained distinction as a diplomatist, born at Corfu in 1776. His father was a physician, and became governor of the seven Ionian islands when they were occupied by Russia. John, who had studied medicine at Venice, entered the service of Russia; and in 1813, in consideration of his meritorious labors, the Emperor Alexander made him minister for foreign affairs. In 1827, he was made president of the new Greek Government, where he fell by the hand of an assassin in 1831.

Caracalla, a Roman emperor, son of Septimius Severus, born in Lyons; his reign (211–217) was a series of crimes, follies, and extravagances; he put to death 20,000 persons, among others the jurist Papinianus, and was assassinated himself by one of his guards.

Carey, Henry Charles (*kā're*), an American political economist, born in Philadelphia, 1793, became principal partner in the great publishing firm of Carey & Lea, in that city, and was the first to establish the system of bookseller's trade sales. His published works are voluminous, and well known in their relations to trade, finance, and political economy. Died, October 13, 1879.

Carlisle, John Griffin, lawyer; born in Campbell County, Kentucky, September 5, 1835; common school education; admitted to Kentucky bar, 1858; several terms in Kentucky Legislature; State senator, 1866–71; delegate at large, National Democratic Convention, 1868; lieutenant-governor of Kentucky, 1871–75; member of Congress, 1877–91 (speaker, 1883–89); noted low tariff advocate; United States senator from Kentucky, 1890–93; secretary of treasury of United States, 1893–97; Democrat; affiliated with National (gold standard) Democrats, 1896; after 1897, in law

practice, New York. Vice-president of Anti-Imperialist League (Boston). Died, 1910.

Carlyle, Thomas (*kärlīl'*), an eminent Scottish historian and moral teacher, born in 1795. His writings have done much to impregnate English philosophy with the characteristic tendencies of the German school. His principal works are: "Sartor Resartus," "History of the French Revolution," "Hero Worship, and Other Essays," "Latter Day Pamphlets," "Life of Frederick the Great." Died, February 5, 1881.

Carnegie, Andrew, capitalist, manufacturer, philanthropist; born in Dunfermline, Fifeshire, Scotland, November 25, 1835; came with family to United States, 1848, settling in Pittsburgh; first work was as weaver's assistant in cotton factory, Allegheny, Pa.; became telegraph messenger boy in Pittsburgh office of Ohio Telegraph Company, 1851; learned telegraphy, entered employ of Pennsylvania Railroad, and became telegraph operator, advancing by promotions until he became superintendent of Pittsburgh division of Pennsylvania system; joined Mr. Woodruff, inventor of the sleeping car, in organizing Woodruff Sleeping Car Company, gaining through it nucleus of his fortune; careful investments in oil lands increased his means; during Civil War served as superintendent of military railways and government telegraph lines in the East. After the war he developed iron works of various kinds and established, at Pittsburgh, Keystone Bridge Works and Union Iron Works. Introduced into this country Bessemer process of making steel, 1868; was principal owner a few years later of Homestead and Edgar Thomson Steel Works, and other large plants, as head of firms of Carnegie, Phipps & Company and Carnegie Bros. & Company; interests were consolidated, 1899, in the Carnegie Steel Company, which, in 1901, was merged in the United States Steel Corporation, when he retired from business; married, 1887, Louise Whitfield, of New York. He gave libraries to many towns and cities in the United States and Great Britain, and large sums in other benefactions, including $10,000,000 to establish universal peace; $10,000,000 to Carnegie Institute, Pittsburgh; $5,200,000 to New York for the establishment of branch libraries; $24,000,000 to Carnegie Institution, Washington; $10,000,000 to Scotch universities; $5,000,000 to fund for benefit of employés of Carnegie Steel Company, etc., total exceeding $300,000,000, including over $60,000,000 for more than 3,000 municipal library buildings, and $15,000,000 for college professors' pension fund in United States, Canada, and Newfoundland. Author: "An American Four-in-Hand in Britain," "Round the World," "Triumphant Democracy," "The Gospel of Wealth," "Empire of Business." Lord rector of St. Andrew's University, 1903; LL. D., 1905. Died, 1919.

Carnot (*kär-nō*), **Leonard Sadi,** French physicist, born in Paris, 1796; founder of thermo-dynamics; in his "Réflexions sur la Puissance du Feu" enunciated the principle of reversibility, a most important contribution to physical science. Died, 1832.

Carpenter, Frank George, journalist and author; born in Mansfield, O., 1855; graduate Wooster University, 1877; began newspaper work as legislative correspondent for the "Cleveland Leader" in 1879. In 1881 he undertook a series of travels which embraced a period of nearly thirty years, during which he visited all parts of the world, from which he sent numerous articles to newspapers and magazines. Among his published books are an important series of geographical readers; "Our Colonies and Other Islands of the Sea;" "Africa;" "South America, Social, Industrial, and Political;" "How the World is Fed;" "How the World is Clothed," and "How the World is Housed."

Carpenter, William Benjamin, born in 1813; physiologist, son of Dr. Lant Carpenter, wrote "Principles of General and Comparative Physiology," etc., and in 1861, received the medal of the Royal Society. Died, 1885.

Carrel, Alexis, distinguished American biologist and surgeon; born in France, 1873; educated at the University of Lyons, where he graduated in medicine in 1900. He came to America in 1905, took charge of research laboratory at McGill University and later at the University of Chicago. In 1909 he was made Fellow of the Rockefeller Institute for medical research in New York where his brilliant investigations and discoveries in experimental surgery have won world-wide recognition. His researches in medicine have demonstrated that life in tissues may be prolonged after removal from the body; also that arteries, organs, and limbs may be successfully transplanted. In 1912 he was awarded the first Nobel Prize for medicine bestowed upon an American. He has published a great number of valuable scientific papers, chiefly in regard to his remarkable discoveries in the transplantation of organs by advanced surgical methods. Among his most important papers are: "Anastomosis and Transplantation of Blood Vessels," "The Preservation of Tissues," "The Surgery of Blood Vessels," "The Transplantation of Limbs," "Visceral Organisms," "Complete Amputation of the Thigh with Replantation," and "The Transplantation of Veins and Organs."

Carrère, John Merven, architect; born of American parents in Rio de Janeiro, Brazil, November 9, 1858; educated in Switzerland; graduate of École des Beaux Arts, Paris, 1882; partner with Thomas Hastings in firm, Carrère & Hastings, 1884-1911. The firm were architects of the Ponce de Leon and Alcazar hotels, St. Augustine, Fla., the New York Public Library, Academy of Design, and many other noted buildings. Fellow American Institution of Architects. Died, 1911.

Carroll, Lewis, the pseudonym of the Rev. Charles Lutwidge Dodgson; born in 1832; humorist and author of "Alice in Wonderland," "Through the Looking-glass," "The Hunting of the Snark," "Rhyme and Reason," "A Tangled Tale," "Sylvie and Bruno," and other works. Died, 1898.

Carson, Christopher, popularly known as Kit Carson, an American frontiersman, born in Kentucky in 1809. He was a saddler's apprentice, trapper, hunter, guide in Frémont's explorations, lieutenant in the rifle corps of the army (1847), and Indian agent. During the Civil War he rendered important services in the territories, and was brevetted brigadier general. Died, 1868.

Carteret, Philip, an English navigator, who made an expedition to the South Seas in 1766-69, and discovered Queen Charlotte's Isles, and other islands, two of which he called Gower and Carteret. Died, 1796.

Cartier, Sir George Étienne (*kär-tyā'*), a Canadian statesman, born in 1814. He was deeply involved in the rebellion of 1837. In 1848, he was elected to the house of assembly, in 1856 was appointed provincial secretary, and soon became attorney-general. In 1857, he became leader of the Lower Canada section of the government, and in 1858, premier; he held a cabinet office for several years afterward. He was prominent in numerous governmental reforms. Died, 1873.

Cartier, Jacques (*kär-tyā'*), a French explorer, was born 1494. Employed by Francis I. to make explorations on the North American coast, in three successive expeditions, 1534-50; he completed the discovery and colonization of Canada. Died about 1557.

Cartwright, Edmund, inventor of the power loom and the carding machine; born in Nottinghamshire; educated for the Church. His invention, at first violently opposed, to his ruin for the time being, is now universally adopted; a grant of £10,000 was made him by parliament in consideration of his services and in compensation for his losses. Born, 1743; died, 1823.

Caruso, Enrico, operatic tenor, was born in Naples, 1873. In early youth he took up mechanical engineering but later he was induced to study singing. He won his first European success in "La Bohême" at Milan in 1898. During the ensuing four years he sang in leading European cities and also in Buenos Ayres. In 1903 he came to America and achieved immense success at the Metropolitan Opera House, New York, where for more than seventeen years he continued as leading tenor. His repertoire comprised upwards of forty operas, chiefly Italian. Besides possessing a voice of extraordinary beauty and power, Caruso was an able caricaturist and displayed some talent as a sculptor. Died, 1921.

Casabianca, Louis, a French naval officer, born in Bastia about 1755, and in 1798, was Captain of the flagship "L'Orient" in the expedition to Egypt. He was mortally wounded at the battle of the Nile, August 1, 1798; the ship caught fire, his 10-year-old son would not leave him, and both were floating on the wreck of the ship's mast when the final explosion took place.

Cass, Lewis, born in 1782; American statesman and general, appointed governor of Michigan in 1813. He showed great prudence in his management of Indian affairs and in 1831, became secretary of war in the administration of President Jackson. While representative of the United States in France, he protested vigorously and effectually against the terms of the quintuple treaty, and returning to America was elected to the senate in 1845. In 1857, he became secretary of state, but about five years later withdrew from public life. Died, 1866.

Castlereagh (*kăs'-sl-ra*), **Robert Stewart, Lord,** eldest son of the Marquis of Londonderry; was born in 1769. At an early period he entered into public life, and was appointed keeper of the signet, or privy seal, in Ireland, in 1797; president of the board of control in 1802; and secretary of war in 1805. A difference having arisen between him and his colleague, Mr. Canning, a duel was the consequence, and both quitted office. During Lord Liverpool's administration, Lord Castlereagh again became a member of the government as foreign secretary, and concluded the treaty of Paris in

1814. He remained in office the remainder of his life, which was closed by suicide in 1822.

Catherine I., empress of Russia; born about 1685; was the outcast infant of a Livonian peasant-girl, and became nurse in the family of the Protestant minister of Marienburg. In 1701 she married a Swedish dragoon, who soon afterwards went with his regiment to Riga, and never returned. After the capture of Marienburg by the Russians, Catherine became the mistress first of General Bauer, with whom she lived at Moscow, secondly of Prince Menschikoff, and finally of Peter the Great, who first married her privately near Warsaw, and later publicly, in 1712 at St. Petersburg (now Petrograd). She then embraced the Greek religion, and took the name of Catherine. On the death of Peter, in 1725, she was proclaimed czarina. Her death was the result of intemperance. Died, 1727.

Catherine II., empress of Russia; born in 1729; the Princess Sophia Augusta, daughter of the Prince of Anhalt-Zerbst, on her marriage in 1745, with Peter, nephew and heir of the Empress Elizabeth, assumed the name of Catherine Alexievna. Her refinement and love of study contrasted with her husband's vulgarity and intemperance; neglected by him, she ingratiated herself with some of the nobles; her intrigues were discovered by Peter, and, on ascending the throne in 1762, he threatened to repudiate her, whereupon she imprisoned him and had him strangled. The subsequent murder of Ivan, the next heir, left Catherine in undisputed possession of the throne. As empress she seized the Crimea, and took part in the dismemberment of Poland. She promoted the welfare of Russia by encouraging literature and commerce, but her reign was sullied by disgraceful amours. Died, 1796.

Catherine of Aragon, queen of England; born in 1485; daughter of Ferdinand of Aragon and Isabella of Castile; married first Arthur, Prince of Wales, and subsequently his brother, afterwards Henry VIII. She was beautiful and virtuous, yet the king in 1527 sought a divorce on the ground that the marriage was uncanonical. After much temporizing on the part of the pope, the marriage was in 1533 pronounced invalid by Cranmer, Archbishop of Canterbury, and his sentence was ratified by act of parliament. Catherine spent the rest of her life in Kimbolton castle. Died, 1536.

Catherine de' Medici, born in 1519; great granddaughter of Lorenzo the Magnificent, niece of Pope Clement VII., and queen to Henri II. of France, acted as regent during the minority of her second son, Charles IX.; her policy was to play off the parties of the Guises and the Condés against one another. She instigated the massacre of St. Bartholomew. Died, 1589.

Catherine Parr, born in 1512; daughter of Sir T. Parr; was married first to Edward Borough, secondly to Lord Latimer, and in 1543 became the sixth and last wife of Henry VIII. She was learned in theology and a zealous Protestant, and, according to Foxe, on one occasion only escaped death as a heretic by timely submission to the king. She survived Henry, and in 1547 married Lord Seymour of Sudeley, who was accused of hastening her death (in child-birth), by poisoning. Died, 1548.

Catiline (*kat'-e-line*), **Lucius Sergius,** an ancient Roman, was descended from a patrician family, renowned for talent but degraded by crime. He gained the favor of Sulla, who advanced him to offices of great importance. He was a reckless sensualist. Having won for his paramour a member of a distinguished family, he married the daughter he had by her. He was charged with intriguing with a vestal, the sister of Cicero's wife. After Sulla's death, Catiline formed a conspiracy to murder the consuls and senators, and to assume the government. His designs were discovered and exposed in an oration by Cicero, which gave the speaker lasting fame. He attempted to execute his plan, but a great battle ensuing and victory inclining to the other side, he threw himself into the midst of the enemy and was slain, 62 B. C.

Cavell, Edith, English nurse, was born in Norfolkshire, 1866. She was the daughter of a clergyman. In 1907 she established a training school for nurses in Brussels in which hundreds of Belgian and German nurses were trained. In August, 1915, during the German occupation of the city under the civil governorship of Baron von der Lancken, Miss Cavell was suddenly arrested and imprisoned. She was charged with having aided English and Belgian young men who had come under her care as a nurse to escape into Holland. Following trial in military court, October 7-8, she was secretly condemned to be executed. In view of the fact that Miss Cavell had devoted her life to humane service and that the death penalty had not previously been inflicted for the offense with which she was charged, the American minister to Belgium, Brand Whitlock, endeavored by all means in his power to prevent her execution. When Whitlock's secretary, Hugh Gibson, on the evening of her execution, sought the offices of the civil governor, Baron von der Lancken and his staff were found attending a disreputable theater. After first denying, though later admitting, both the sentence and the order of execution, Von der Lancken brutally refused to delay her execution or even to grant permission to telephone the kaiser in her behalf. When reminded that her murder would rank with the burning of Louvain and the sinking of the "Lusitania" in stirring the civilized world with horror, Count Harrach, the civil governor's aide, remarked that his only regret was that they did not have "three or four more old English women to shoot." Despite all efforts of the American minister, Miss Cavell was shot at 2 A. M., October 13, 1915.

Cavour (*kah-voor'*), **Camillo, Count di,** eminent Italian statesman, was born in 1810. In 1847, he took an active part in the promulgation of the liberal doctrines then agitating his country, and largely assisted in the establishment of the constitution granted by King Charles Albert in 1848. In 1850 he became minister of commerce, and minister of finances the following year. In 1852 he succeeded D'Azeglio as first minister, secured the liberty of the press, favored religious toleration and free trade, and during his seven years' tenure of office brought about the regeneration of Italy by the treaty of Villafranca in 1859. Died, 1861.

Caxton (*kăks'-tun*), **William,** the founder of English printing, was born in 1422. During a residence in Flanders, he acquired the new typographic art, and on his return set up a press in the Almonry, Westminster, where he brought out the first printed book seen in England, the "History of Troy." Died, 1491.

Cenci (*chĕn'-che*), **Beatrice,** a noble Roman lady, whose tragic fate has served as the theme of one of Shelley's best tragedies, lived in the Sixteenth Century. She became the victim of her father, Count Francesco Cenci, a notorious libertine. Failing in her appeal for protection from Pope Clement VIII., she, it has been said, conspired with other members of her family to murder the count. When brought to trial on this charge, she asserted her innocence, but was, nevertheless, put to death, along with her relatives, in 1599. The fine portrait of Beatrice, by Guido Reni, in the Barberini gallery, Rome, is well known.

Cervantes Saavedra, Miguel de, Spanish author, born at Alcalá de Henares in 1547, belonged to an ancient Galician family, and was educated at the University of Salamanca, where he spent his time chiefly in writing verses. After following Cardinal Acquaviva as chamberlain into Italy, he enlisted under Marc Antonio Colonna, and distinguished himself at the battle of Lepanto (1571), where he lost his left hand; in 1575, was captured by a corsair, and spent five years in slavery at Algiers. In 1588 he settled at Seville, and for the next ten years devoted his time mainly to writing dramas. In 1605 the first part of "Don Quixote" appeared, and the second followed ten years later. Among the other works of Cervantes are "Novelas Exemplares," "Viage al Parnaso," and "Galatea." Died, 1616.

Chaffee, Adna Romanza, American soldier, was born at Crowell, Ohio, in 1842, and entered the United States army as a private in 1861. For gallant service during the civil war he was brevetted captain. In 1898 he served in Cuba during the Spanish-American war as brigadier-general of volunteers, distinguishing himself at El Caney. At the time of the Boxer rebellion, 1900, he commanded the United States forces sent to the relief of the American legation at Peking, China. Appointed major-general in the regular army, 1901, he was assigned to command in the Philippines and made military governor. In 1904 he was promoted lieutenant-general and chief of staff, succeeding General S. M. B. Young. Chaffee retired from active service in 1906. Died, 1914.

Chamberlain, Joseph, eminent British statesman, was born in London, July, 1836; educated in private school and University College, London; joined the firm of Nettlefold, screw makers of Birmingham; was one of the leaders of the defeated unsectarian candidates for the school board of Birmingham in 1870, but in 1873 he was elected chairman, and was also a member of the town council (mayor, 1873). On the death of his father he retired from the firm, in order to devote all his energies to public life. To him was due the transfer of the gas and water works to the borough authorities, and he was the author of the improvement scheme which has entirely transformed the face of central Birmingham. In 1876 he entered parliament and took his seat below the gangway with the Radicals; president of Board of Trade, with cabinet rank, 1880–85, and passed a patents bill and a bankruptcy bill; presi-

dent of Local Government Board in 1885, until his divergence of views on the Irish policy of Mr. Gladstone caused his resignation (March, 1886); chief commissioner to the Conference at Washington for the settlement of the dispute between the United States and Canada on the Fisheries question. Married Miss Endicott, November 15, 1888. In 1895, took office under Lord Salisbury as colonial secretary. The negotiations with the Transvaal, which ended in war, occupied him fully during 1899, and his South African policy was one of the main controversial features of the general election of 1900 and during 1901. He had charge in 1900 of the measure for the constitution of the Australian Commonwealth. In February, 1902, he was presented with an address by the City of London Corporation. He presided over the 1902 Colonial Conference. In November, 1902, he visited South Africa, and on his return received an address from the Lord Mayor and Corporation of London (March, 1903). In May, 1903, he launched, at Birmingham, his scheme for the revision of the fiscal policy of the country and the adoption of a policy of preferential tariffs; and in September, believing that policy to be at that time unacceptable to the majority in the constituencies, he resigned in order to be free to devote himself to explaining and popularizing his proposals. He began his campaign for this purpose at Glasgow on October 6, 1903, and the tariff commission was afterwards set up on his initiative. His 70th birthday and completion of thirty years' service as member of parliament for Birmingham were celebrated on July 7, 1906. He was returned for West Birmingham again in 1910. Died, 1914.

Chambers, Robert William, author, artist; born in Brooklyn, May 26, 1865; educated at Julien's Academy, Paris, 1886–93. First exhibited in salon, 1889; illustrations for "Life," "Truth," "Vogue," etc. Author: "In the Quarter," "The King in Yellow," "The Red Republic," "A King and a Few Dukes," "The Maker of Moons," "With the Band," "The Mystery of Choice," "Lorraine," "Ashes of Empire," "The Haunts of Men," "The Cambric Mask," "Outsiders," "The Conspirators," "Cardigan," "The Maid-at-Arms," "Outdoor Land," "The Maids of Paradise," "Orchard-Land," "Forest-Land," "Iole," "The Fighting Chance," "The Tracer of Lost Persons," "The Firing Line." Also "The Witch of Ellangowan," a drama; and many magazine stories.

Chamisso, Adelbert von, born at the Castle of Boncourt, in Champagne, France, 1781; a celebrated lyric poet of Germany, who, though born in France, was driven from that country by the Revolution of 1790, and spent the greater part of his life in Prussia. He is best known by his "Peter Schlemihl, the Story of a Man Who Lost His Shadow," which was published in 1814, and has been translated into most European languages. Died in Berlin, 1838.

Champlain, Samuel de, a French naval officer of the Seventeenth Century. During the reign of Henry IV., of France, he visited many parts of America, and formed the first French establishments at Quebec and Montreal. He was made governor of Quebec, from which he was driven by the English, in 1631. When peace was restored, he was reinstated. He wrote an account of his "Voyages and Travels in New France, called Canada," in 1632. Died in 1635.

Chandler, William Eaton, lawyer; born in Concord, N. H., December 28, 1835; common school education; graduate of Harvard Law School, and admitted to the bar, 1855; became reporter of decisions of Supreme Court, New Hampshire, 1859; member of New Hampshire Legislature, 1862, 1863, 1864, and 1881; speaker, 1863–64; appointed solicitor and judge-advocate-general, navy department, March 9, 1865; first assistant secretary of treasury, June 17, 1865; resigned, November 30, 1867; member of New Hampshire Constitutional Convention, 1876 and 1902; appointed solicitor-general of United States, March, 1881, but rejected by senate; secretary of the navy, April 12, 1882, to March 7, 1885; United States senator, 1887–1901; president of Spanish Treaty Claims commission, 1901–07. Died, 1917.

Channing, Edward, historian; born in Dorchester, Mass., June 15, 1856; graduate of Harvard, 1878; instructor, 1883; now professor of history at Harvard. Author: "The United States, 1765–1865," "A Student's History of the United States," "Town and County Government in the English Colonies of North America," "Narragansett Planters," "The Planting of a Nation in the New World," etc. Collaborator with Justin Winsor on "The Narrative and Critical History of America"; with Albert B. Hart in "Guide to Study of American History"; and with Thomas W. Higginson in "English History for American Readers."

Channing, William Ellery, an eminent American divine, and one of the most elegant writers this country has produced, was born in Newport, R. I., 1780. In 1803, he became pastor of the Federal Street Church, Boston. During the Unitarian controversy, Dr. Channing was the head of the Liberal party, and took an active part in its defense. Among his most successful productions are his lectures on "Self-Culture," and on the "Elevation of the Laboring Classes." His work on slavery, published in 1841, had also a wide circulation. Died, 1842.

Charlemagne, i. e., **Charles** or **Karl the Great,** the first Carlovingian King of the Franks, son and successor of Pepin le Bref (the Short); born in 742; became sole ruler on the death of his brother, Carloman, in 771; he subjugated by his arms the southern Gauls, the Lombards, the Saxons, and the Avars, and conducted a successful expedition against the Moors in Spain, with the result that his kingdom extended from the Ebro to the Elbe; having passed over into Italy in support of the pope, he was, on Christmas day, 800, crowned Emperor of the West, after which he devoted himself to the welfare of his subjects, and proved himself as great in legislation as in arms; enacted laws for the empire, called capitularies; reformed the judicial administration, patronized letters, and established schools; kept himself in touch and *au courant* with everything over his vast domain. He died and was buried at Aix-la-Chapelle in 814.

Charles I., King of England, second son of James I., was born in Dunfermline in 1600. Failing in his suit for the infanta of Spain, he married Henrietta Maria, a French princess, a devoted Catholic, who had great influence over him, but not for good. He had for public advisors, Strafford and Laud, who cherished in him ideas of absolute power adverse to the liberty of the subject. Acting on these ideas brought him into collision with the parliament, and provoked a civil war, Charles himself being the first to throw down the gauntlet. He raised the royal standard at Nottingham, but in the end surrendered himself to the Scots' army at Newark, and was delivered by them to the parliament. He was tried as a traitor to his country, condemned to death, and beheaded at Whitehall, January 30, 1649.

Charles II., King of England, son of Charles I., born in St. James Palace, London, in 1630; was at The Hague, in Holland, when his father was beheaded. He assumed the royal title, and was proclaimed king by the Scots; landed in Scotland, and was crowned at Scone. Marching into England, he was defeated by Cromwell at Worcester, September 3, 1651, and fled to France. By the policy of General Monk, after Cromwell's death, he was restored to his crown and kingdom in 1660, an event known as the Restoration. Charles II. was an easy-going man, and is known in history as the "Merry Monarch." His reign was an inglorious one for England, though it is distinguished by the passing of the Habeas Corpus Act, one of the great bulwarks of English liberty next to the Magna Charta. Died, 1685.

Charles V. (I of Spain), Emperor of Germany, son of Philip, Archduke of Austria, was born in Ghent in 1500, and became King of Spain in 1516, on the death of his maternal grandfather, Ferdinand, and Emperor of Germany in 1519, on the death of his paternal grandfather, Maximilian I., being crowned at Aix-la-Chapelle in 1520, and reigned during one of the most important periods in the history of Europe. The events of the reign are too numerous to detail; enough to mention his rivalry with Francis I. of France, his contention as a Catholic with the Protestants of Germany, the inroads of the Turks, revolts in Spain, and expeditions against the pirates of the Mediterranean. The ambition of his life was the suppression of the Protestant Reformation and the succession of his son Philip to the imperial crown, but he failed in both, and finally resigned in favor of his son, and retired into the monastery at St. Yuste, in Estremadura, near which he built a magnificent retreat, where, it is understood, notwithstanding his apparent retirement, he continued to take interest in political affairs, and to advise in the management of them. Died, 1558.

Charles XII., King of Sweden, son of Charles XI., a warlike prince, ascended the throne at the age of 15. He had to cope with Denmark, Russia, and Poland combined against him; he foiled the Danes at Copenhagen, the Russians at Narva, and Augustus II. of Poland at Riga; but being trapped in Russia, and cooped up to spend a winter there, he was, in July, 1709, attacked by Peter the Great at Pultowa, and defeated, so that he had to take refuge with the Turks at Bender; here he was again attacked, captured, and conveyed to Demotica, but escaping, he found his way

miraculously back to Sweden, and making peace with the czar, commenced an attack on Norway, but was killed by a musket-shot at the siege of Frederikshald. Charles XII. was "the last of the Swedish kings." "His appearance among the luxurious kings and knights of the North" at the time, Carlyle compares to "the bursting of a cataract of bomb-shells in a dull ballroom." Born in 1682, and died in 1718.

Charles Martel, the illegitimate son of Pepin d'Heristal, Duke of Austrasia, was born about 690, died, 741; he was mayor of the palace during the reigns of Chilperic and Thierry IV., exercising the whole regal power; defeated the Saracens at Poitiers, in 732, in honor of which victory he was called Martel (the Hammer). On the death of Thierry in 737, Charles carried on the government as Duke of the Franks. His son, Pepin, was founder of the Carlovingian line of monarchs, taking their name from Charles Martel.

Chase, Salmon Portland, an American jurist and statesman, was born in New Hampshire in 1808. He was sent to the House of Representatives and to the United States Senate from Ohio, and was elected governor of that State. Appointed secretary of the treasury by President Lincoln, at the outbreak of the Civil War, he conducted the finances with rare skill and success. Appointed chief justice of the Supreme Court in 1864, he held this office at his death in 1873.

Chaucer (*tshaw'-ser*), **Geoffrey,** an English poet, commonly spoken of as the father of English poetry; born about 1340, of parents who appear to have been citizens of London, and who gave him a good education. In his youth he served under Edward III. in the invasion of France, and was made prisoner by the enemy at the end of 1359, or early in 1360. He afterwards enjoyed court favor, and was employed on several embassies, visiting France and Italy in the course of his foreign missions. In the latter part of the reign of Richard II. he appears to have been involved in the disgrace thrown on the family of the Duke of Lancaster, his patron, and suffered from poverty; but on the accession of Henry IV., he was again taken into royal favor. The writings of Chaucer, in verse and prose, are extensive; and the "Canterbury Tales" is one of the noblest monuments of English poetry. Died October 25, 1400.

Cheops, or **Cheospes** (*tshe'-ops, tshe-os'-pes*), king of ancient Egypt, who lived about 2800-2700 B. C. He built the great pyramid, spending immense sums in providing food for the workmen. He was considered a wise and powerful ruler. Various monuments bearing his name still exist, and to him the foundation of many temples has been ascribed.

Cherubini (*ka-roo-bē'ne*), **Maria Luigi Carlo Zenobio Salvatore,** an eminent Italian composer, was born at Florence in 1760. He was naturalized in France, and settled in Paris, the scene of his greatest triumphs, where he composed operas, of which the chief were "Iphigenia in Aulis," and "Les deux Journées," or "The Water-Carrier," his masterpiece; also a number of sacred pieces and requiems, all of the highest merit. Died, 1842.

Chesterfield (*tshes'-ter-feeld*), **Philip Dormer Stanhope, Earl of,** was born in 1694, and educated at Cambridge. He represented St. Germans in the House of Commons, and in 1726 succeeded to the earldom. He was distinguished at the court of George II, and was sent as ambassador extraordinary to Holland in 1728. He was made a knight of the garter in 1730, and received the appointment of lord steward of the household. He was found among the opponents of Sir Robert Walpole. In 1745, he was appointed lord-lieutenant of Ireland, and afterwards became secretary of state. He is now better known by his "Advice to His Son," than by his public services. Died, 1773.

Choate (*chōt*), **Joseph Hodges,** lawyer, diplomat, ambassador of United States to England, 1899-1905; born in Salem, Mass., 1832; graduate of Harvard, 1852, and Harvard Law School, 1854. Admitted to Massachusetts bar, 1855; New York, 1856; settled in New York, 1856. Identified with many famous cases; one of the committee of seventy which broke up the Tweed ring, 1871; secured the reinstatement of General Fitz-John Porter to his army rank; governor of New York Hospital after 1877 (chairman of committee of elections); noted as a public and after-dinner speaker. Author: "Addresses on Abraham Lincoln, Admiral Farragut, Rufus Choate," etc. Elected bencher of the Inner Temple, England, April 10, 1905. Died, 1917.

Choate, Rufus, eminent American advocate, was born in Ipswich, Mass., 1799. Graduated at Dartmouth College, and entered upon the study of law at Cambridge and in Washington. After practicing at Danvers, Salem, and Boston, successively, he was elected to the Senate in 1841, which he quitted in 1845. After the death of Daniel Webster, Choate became the recognized leader of the Massachusetts bar, and acquired a national reputation. As an advocate and orator, he may be classed with the most distinguished masters of modern eloquence. Died, 1859.

Choiseul (*shwoi'-zeul*), **Stephen Francis, Duke of,** was born in 1719. He gained high rank in the army and was then employed as a diplomatist at Rome and Vienna, and honored with a peerage. He became prime minister of France, it was reported, through the influence of Madame de Pompadour. In 1770 he was dismissed from office, and exiled to one of his estates. He died in 1785.

Christina, Queen of Sweden, born in 1626; succeeded her father, Gustavus Adolphus, in 1632. After her coronation in 1650, she fell under the influence of favorites, and ceased to interest herself in state affairs. She resigned the crown to her cousin, Charles Gustavus, in 1654, was baptized by the pope, and lived for some time at Paris. On the death of Charles Gustavus, in 1660, she vainly endeavored to regain the throne. She died at Rome in 1689.

Christy, Howard Chandler, illustrator, writer; born in Morgan County, Ohio, January 10, 1873; educated at Duncan's Falls, O.; went East in 1893; since then on New York illustrated periodicals; went to Cuba with second United States regulars and "Rough Riders"; saw the fighting before Santiago; his letters and illustrations published in Scribner's Magazine, Harper's Magazine and Collier's Weekly, brought him wide fame.

Chrysostom, St. John, one of the Greek fathers, born about 347; gave himself, from an early age, to a life of prayer and asceticism, and, in 398, was made Bishop of Constantinople by the Emperor Arcadius. He was renowned for his eloquence and almsgiving, and his zeal as a reformer made him many enemies, among them the Empress Eudoxia. He was summoned before a synod at Chalcedon, deposed, and banished, but an insurrection of the people led to his immediate recall. He was soon afterwards deposed again, and conveyed to the Taurus Mountains, whence he was ordered to proceed to Pityus, on the Euxine, but died on the journey at Comana in 407.

Churchill, Winston, author, born St. Louis, Mo., 1871; educated at Smith Academy, St. Louis, and U. S. Naval Academy. Was editor of Army and Navy Journal, 1894; managing editor Cosmopolitan magazine, 1895; member New Hampshire legislature, 1903 and 1905. President authors' league of America. Author: "The Celebrity," "Richard Carvel," "The Crisis," "The Crossing," "Coniston," "The Inside of the Cup," "A Far Country," "The Dwelling Place of Light."

Churchill, Winston Leonard Spencer, appointed minister of munitions, 1917; M. P. for Dundee since 1908; born, 1874; was educated at Harrow. He entered the army, 1895; served with Spanish forces in Cuba, as war correspondent, 1895. Was special correspondent in South African war, 1899-1900, and was taken prisoner by the Boers, but escaped. Was elected Unionist member of parliament for Oldham, 1900; as a liberal sat for N. W. Manchester, 1906-08. He was under-secretary to the colonial office under the new liberal government, 1906-08, in which position he became conspicuous as a brilliant and aggressive orator. Was president of the board of trade, 1908-10; home secretary, 1910-11; first lord of the admiralty, 1911-15, resigning to join the army in France. Author: "The River War," "London to Ladysmith via Pretoria," "My African Journey."

Cicero, Marcus Tullius, born in Arpinum in 106 B. C.; Roman orator and statesman, studied rhetoric under Milo and others; commenced pleading at the age of twenty-six, and, offending Sulla by his successful defense of Roscius Amerinus, retired to Athens, where he studied under Antiochus; went as quæstor to Sicily in 75, and on his return impeached Verres, a former governor; was ædile in 69, prætor in 66, and, in 64, was elected consul in opposition to Catiline. His vigor in putting down the conspiracy of the latter gained for him the title of "father of his country." The measures passed by his enemy, the tribune Clodius, obliged him to withdraw to Greece. After about sixteen months he was recalled by the senate, and, in 52, went as governor to Cilicia. He sided with the senate and afterwards with Pompey against Cæsar, but submitted to the latter after Pharsalia, and, retiring to his Tusculan villa, wrote his "De Natura Deorum," and other philosophical works. His defense of Cæsar's murderers and the "philippic" orations directed against Mark Antony led to his proscription on the formation of the second triumvirate. He was murdered by Antony's emissaries in 43 B. C.

Cid Campeador, Ruy, or **Rodrigo Diaz de Bivar,** hero of Spanish fiction, aided Sancho of Castile against his brother, Alfonso, King of Aragon, but on the death of Sancho, acknowledged Alfonso as King of Castile. He lost the favor of Alfonso, and retired from his court,

but obtained some aid from him in capturing the city of Valencia from the Moors (1094), which he ruled till his death. Born about 1040; died about 1099.

Cimabue, Giovanni, born in 1240; Italian artist, one of the restorers of the art of painting in Italy, which had fallen into neglect during the barbarism of the dark ages. The exhibition of his table of "The Virgin" for the Rucellai chapel in Santa Maria Novella was the occasion of a public festival. Except the "Madonna," little of his work remains. Died, 1302.

Cincinnatus (*sin-sin-nah'-tus*), **Lucius Quintius,** a famous Roman general, who, on being made dictator, in 458 B. C., to carry on the war against the *Æqui* and *Volsci*, was found engaged in ploughing his own farm. He gained a decisive victory, laid down the office, and returned to his simple life. In the year 439 B. C. he was again appointed dictator. Died about 430 B. C.

Clark, Champ, congressman, lawyer; born in Anderson County, Ky., March 7, 1850; educated in common schools, Kentucky University, Bethany College, and Cincinnati Law School; president Marshall College, West Virginia, 1873–74; worked as hired hand on farm, clerk in country store, country newspaper editor; was city attorney of Louisiana, Mo., and later of Bowling Green, Mo.; prosecuting attorney of Pike County; presidential elector; member Congress, ninth Missouri district, 1893–95 and 1897–1921; chairman Democratic National Convention, St. Louis, 1904. Speaker of House of Representatives, 1911–1919. Died, 1921.

Clark, Francis Edward, founder United Society Christian Endeavor; born of New England parentage, Aylmer, Quebec, Sept. 12, 1851; graduate of Dartmouth College, 1873; studied theology three years at Andover; became pastor Williston Church, Portland, Me., which from a small mission he built up to a large Congregational Church; founded, February, 1881, the Society of Christian Endeavor, which has extended throughout the world; pastor Phillips Church, South Boston, 1883–87; since then has served as president United Society Christian Endeavor, president World's Christian Endeavor Union, and editor of "The Christian Endeavor World."

Claxton, Philander P., United States commissioner of education 1911–1921; born in Tennessee, 1862; A. B., university of Tennessee, 1882, A. M., 1887; graduate student, Johns Hopkins, 1884–85; studied in Germany, 1885–86; visited schools in Europe, 1897. Superintendent of schools, Kinston, N. C., 1883-84, Wilson, 1886–88, Asheville, 1888–93; professor of pedagogy and German, 1893–96, professor of pedagogy, North Carolina normal and industrial college, 1896–1902; professor of education, university of Tennessee, 1902–11. In 1921 he was elected provo of the University of Alabama.

Clay, Henry, born in 1777; American orator and statesman; was educated for the law, and in 1811, entered the House of Representatives, of which he was seven times elected speaker; and later, secretary of state and United States senator; supported the war with Great Britain on the right of search in 1812, and acted as plenipotentiary in the negotiations preceding the treaty of Ghent (1814); was author of the Missouri Compromise, restricting slavery to the Southern States (1821), and of the Omnibus bill, which postponed the Civil War for ten years. He was three times an unsuccessful candidate for president. Died, June 29, 1852.

Clemenceau, Georges, eminent French statesman and journalist, was born in 1841. He migrated to the United States in 1865 and, as a war correspondent, entered Richmond with Grant's army. In 1869 he returned to France and practised as a physician in Montmartre. Entering politics, he became an ardent supporter of Gambetta whom he succeeded as leader of the Extreme Left. He was a member of the chamber of deputies, 1876-1893. In 1902 he was elected senator, retaining his seat until after the end of the world war. In 1880 he established a daily newspaper, "La Justice," and thereafter displayed great ability and influence as a journalist. Espousing the cause of Dreyfus, he founded, in 1903, a daily to defend him called "L'Aurore," in which Zola wrote his famous letter "I Accuse." After 1890 Clemenceau came to be regarded as a destroyer of ministries, his effective oratory, brilliant editorials, and biting epigrams causing even the most powerful political leaders to fear him. In 1906 he was chosen premier, resigning in 1909. During his ministry he carried out with great firmness the law separating the church and the state and, although a radical, put down a great miners' strike by prompt use of the military. Pledged from the days of the French defeat in 1870 to the ultimate restoration of Alsace-Lorraine, Clemenceau, during the world war, became one of the most inspiring patriotic leaders of France. At the critical period following the downfall of the Painlevé ministry Clemenceau was again chosen premier (November 16, 1917) and, by unflagging energy, united the French nation for the supreme effort which, within a year, led to complete victory for the Allies. In 1919 Clemenceau was made leader of the French delegation to the peace conference at Versailles and, upon motion of President Wilson seconded by Premier Lloyd George, was chosen to preside over its sessions.

Clemens, Samuel Langhorne ("Mark Twain"), author, lecturer; born in Florida, Mo., November 30, 1835; educated in common schools, Hannibal, Mo. (M. A., Yale; L. H. D., Yale, 1901; LL. D., University of Missouri, 1902); apprenticed to printer at twelve; worked at trade; for a short time was Mississippi pilot; became, 1861, private secretary to his brother; city editor Virginia City (Nev.) "Enterprise," 1862; alternated between mining and newspaper work until, becoming noted as a humorist, he began lecturing and writing books; founded, 1884, publishing house of C. L. Webster & Co., failure of which involved him in heavy losses; paid its debts by proceeds of lectures and books; traveled extensively. Author: "The Jumping Frog," "The Innocents Abroad," "Autobiography and First Romance," "The Gilded Age" (with late C. D. Warner), "Roughing It," "Sketches New and Old," "Adventures of Tom Sawyer," "Punch Brothers, Punch," "A Tramp Abroad," "The Prince and the Pauper," "The Stolen White Elephant," "Life on the Mississippi," "The Adventures of Huckleberry Finn," "A Yankee at the Court of King Arthur," "The American Claimant," "Merry Tales," "The £1,000,000 Bank Note," "Puddin'head Wilson," "Tom Sawyer Abroad," "Joan of Arc," "Following the Equator," "The Man That Corrupted Hadleyburg," "A Double-Barreled Detective Story," "Christian Science." Died, 1910.

Cleopatra, queen of Egypt; born in 69 B. C.; celebrated for her beauty; was the daughter of Ptolemy Auletes, by whose will she was left joint sovereign with her brother Ptolemy (51 B. C.). Expelled by the latter, she sought the assistance of Julius Cæsar, who restored her to the throne in conjunction with a younger brother. She afterwards followed Cæsar to Rome, and in 41 captivated Mark Antony, who rejected Octavia for her sake. A quarrel with Octavius ensued; the fleet of Antony and Cleopatra was defeated at Actium, and they fled together to Egypt, where both committed suicide in 30 B. C.

Cleveland, Grover (Stephen Grover Cleveland), twenty-second and twenty-fourth president of the United States; born in Caldwell, Essex County, N. J., March 18, 1837; academic education (LL. D., Princeton, 1897); married, June 2, 1886, Frances Folsom. Went to Buffalo, 1855, became clerk in a law office and was admitted to bar, 1859; assistant district attorney Erie County, 1863–66; sheriff Erie County, 1870–73; established law practice; in 1881 was elected mayor of Buffalo. His veto of extravagant appropriations directed outside attention to him and led to his nomination and election as governor the following year; in 1884 elected president of United States as Democrat, over James G. Blaine, Republican, by majority of thirty-seven electoral votes; in 1888 again Democratic nominee, but defeated by Benjamin Harrison; returned to law practice, locating in New York; in 1892 again elected president as Democrat, defeating President Harrison; in 1896 the Democratic party having declared for the free coinage of silver in the platform of its national convention, Cleveland withheld his support from the ticket and platform. He took up his residence, after his second retirement from the White House, at Princeton, N. J., where he died, June 24, 1908.

Clews, Henry, banker; born in Staffordshire, Eng., 1836; intended for ministry, but left school at 15 to enter mercantile life in New York, whither his father had taken him for a visit; junior clerkship Wilson G. Hunt & Company, woolen importers; member firm Stout, Clews & Mason, 1858; later Livermore, Clews & Company; at outbreak of Civil War invited by secretary of treasury to become agent to sell government bonds; firm of Henry Clews & Company organized, 1877, its members pledging themselves never to take any speculative risk. Frequent contributor to newspapers and magazines; author: "Twenty-eight Years in Wall Street," "The Wall Street Point of View."

Clinton, George, an American commander and statesman, born in 1739. He served in early life under General Amherst against the French, and afterwards studied law. During the struggle for independence in the North American colonies, he sat in congress, and was made a brigadier-general. With an inferior force, he succeeded in preventing Sir Henry Clinton from assisting General Burgoyne. Died, 1812.

Clinton, Sir Henry, an English general, succeeded Sir William Howe as commander-in-chief in America,

was born, 1738. His course was marked by bravery and good conduct, but not with success. After his return to England he was appointed governor of Limerick, and subsequently of Gibraltar, where he died in 1795.

Clovis I., son of Childeric I., was born about 465, and is regarded as the real founder of the French monarchy. He succeeded Childeric in 481. The victory of Soissons, which he gained in 486, over Syagrius, rendered him master of all the Roman possessions in the center of Gaul. Victorious when opposed to the Germans at Tolbiac near Cologne, in 496, he is said to have made a vow of embracing Christianity, and to have kept his promise. He was baptized by St. Remigius, Archbishop of Rheims. Having conquered Alaric, King of the Visigoths, in 507, he gained most of the south provinces, but was himself overthrown near Arles, by Theodoric, in 507. Died, 511.

Cobden, Richard, an eminent British politician and reformer, was born at Dunford, in Sussex, in June, 1804. His early life was spent in connection with manufacturing industry at Manchester; it was not until the year 1837, when he unsuccessfully contested the borough of Stockport, that he became publicly known. In 1838, the anti-corn-law agitation commenced; and in the cause of free trade Cobden took the foremost rank, until the accomplishment of its principles, in 1846. Shortly afterwards a public subscription was raised, and the handsome sum of £75,000 was contributed, as a testimonial of his countrymen to the unwearied exertions of Cobden. He represented the West Riding of Yorkshire until 1857; and, in 1860, succeeded, with M. Chevalier, in completing a free-trade treaty between France and Great Britain. He died on the 2d of April, 1865.

Cockran, William Bourke, lawyer, orator; born in Ireland, February 28, 1854; educated in Ireland and France; came to the United States, 1871; taught in private academy; later, principal of a public school in Westchester County, N. Y.; then a lawyer, soon becoming prominent in New York City politics; made noteworthy speeches at Democratic National conventions, 1884 and 1892, opposing the nomination of Cleveland; member of Congress, 1887–89, and 1891–95, as Democrat. In 1896, became advocate of the gold standard and campaigned for McKinley. On issue of anti-imperialism, returned to Democratic party, 1900, and campaigned for Bryan. Was again elected to Congress, February 23, 1904, at a special election to fill a vacancy caused by the resignation of George B. McClellan; reëlected, 1904 and 1906.

Cockrell, Francis Marion, United States senator, 1875–1905, lawyer; born in Johnson County, Mo., October 1, 1834; graduate of Chapel Hill College, Mo., 1853; studied law and practiced at Warrensburg; served in Confederate States Army, becoming brigadier-general. Democrat, chairman of Senate committee on Engrossed Bills, and member of committees on Appropriations, Military Affairs, Rules, etc., and select committee on Industrial Expositions. Interstate commerce commissioner, 1905-10. Died, 1915.

Cohen, Solomon Solis, physician; born in Philadelphia, September 1, 1857; son of Myer David and Judith Simirah (da Silva Solis) Cohen; graduate (A. B.) of Central High School, 1872, A. M., 1877; graduate of Jefferson Medical College, 1883. Professor of clinical medicine and therapeutics, Philadelphia Polyclinic and College for Graduates in Medicine, 1887–1902; lecturer on clinical medicine, Jefferson Medical College, 1888–1902; professor of clinical medicine, Jefferson Medical College, since 1902. Author: "Therapeutics of Tuberculosis," "Essentials of Diagnosis," and other medical writings. Editor: "System of Physiologic Therapeutics"; was editor of "Philadelphia Polyclinic"; editor of department of "Treatment," in "American Medicine"; one of the editors of "The American Hebrew." Has contributed poems and occasional essays to "Century," "Scribner's," "Lippincott's," "Arena," etc.; also a translator of poems from the Hebrew.

Coke, Sir Edward, born in 1552; judge and law writer, educated at Norwich grammar school and Cambridge; was called to the bar in 1578; early acquired a high reputation, and became solicitor-general in 1592, and attorney-general in 1594. He showed much harshness in his prosecution of Essex, Raleigh, and others; but his loyalty gained him the chief justiceship of the common pleas, in 1606. In this position and that of chief justice of the king's bench (1613), he opposed James I.'s claim to exercise prerogatives and was temporarily deprived in 1616. Entering parliament in 1620, he there resisted the king's encroachments; was imprisoned in the Tower in 1622, and in 1628 took the chief part in drawing up the Petition of Right. The remainder of his life was spent in compiling his "Commentaries upon Littleton." Died, 1634.

Colbert, Jean Baptiste, born in Rheims, 1619; a distinguished French statesman, minister of finance in the reign of Louis XIV. His whole life was devoted to financial and fiscal reforms, and to the encouragement of commerce and manufactures. To him the kingdom was indebted for the enlargement of its navy, for the acquisition of many of its foreign possessions, and for a large number of internal improvements. He instituted the Royal Academy of Painting and Sculpture, and also the Academies of Science and of Architecture. The Gardens of the Tuileries, the Hôtel des Invalides, the façade of the Louvre, and several of the quays along the Seine, were all the work of Colbert. Died, 1683.

Coleridge, Samuel Taylor, poet, essayist, and dramatist, was born in Devonshire, England, in 1772. He was sent to Christ's hospital, and subsequently studied at Cambridge, where, in 1792, he obtained the prize for the best Greek ode. His works are many, and are generally distinguished by benevolence and piety. His "Sibylline Leaves" and "Biographia Literaria" found many admirers, and several of his poems were deemed beautiful. Died, 1834.

Coligny, Gaspard de Chatillon, Sire de (*ko-lain-ye'*), a noted French Huguenot, was born in 1517, and murdered in the St. Bartholomew Massacre, 1572. In early life he attained great distinction as a military leader, and was created admiral in 1552. After the accession of Charles IX., he became a Protestant, and on the breaking out of the civil war, he became, with the Prince de Condé, the leader of the Huguenots.

Colt, Samuel, an American inventor, born at Hartford, Conn., in 1814. He early conceived the idea of revolving fire-arms, and, in 1835, took out a patent for the weapon since known the world over as "Colt's revolver." In 1848, he established a company for the working out of his patent, and built at Hartford one of the most extensive armories in the world. Died, 1862.

Columbus, Christopher, discoverer of America, on October 12, 1492, after two months of great peril and, in the end, mutiny of his men; was born in Genoa, 1446. He went to sea at 14, and cherished, if he did not conceive the idea of reaching India by sailing westward. He applied in many quarters for furtherance, and, after seven years of waiting, was provided with three small vessels and a crew of 120 men. First touching land at the Bahamas, he visited Cuba and Hayti, and returned home with spoils of the land, and was hailed and honored as "King of the Sea." He made three subsequent visits, and on the third had the satisfaction of landing on the mainland, which Sebastian Cabot and Amerigo Vespucci had reached before him; but he became at last the victim of jealousy, and charges were made against him, which so cut him to the heart that he never rallied from the attack, and he died at Valladolid, in 1506, broken in body and in soul. Carlyle, in a famous passage, salutes him across the centuries: "Brave sea-captain, Norse sea-king, Columbus, my hero, royalist sea-king of all."

Comstock, Anthony, secretary and special agent of New York Society for Suppression of Vice, 1873-1915; born in New Canaan, Conn., March 7, 1844; educated in district school and Wyckoff's Academy, New Canaan, and 1860-61, high school, New Britain, Conn.; left school to earn living, 1861. His brother Samuel having been killed at Gettysburg, he volunteered to fill his place in regiment, enlisting in 17th Connecticut Volunteer Infantry, December, 1863; mustered out, July, 1865. Appointed, March 3, 1873, post-office inspector of New York; was prominent in Y. M. C. A. As secretary and special agent of New York Society for Suppression of Vice and post-office inspector, he brought about 3,670 criminals to justice and destroyed 160 tons of obscene literature and pictures, etc. Author: "Frauds Exposed," "Gambling Outrages," "Morals vs. Art," "Traps for the Young." Died, 1915.

Condé, Louis de Bourbon, Prince of, born in 1530; joined the Huguenots after the death of Henri II., and, together with Coligny, became their leader during the reign of Charles IX. He was wounded at Dreux (1562), lost the battle of St. Denys (1567), and was killed at Jarnac (1569).

Condorcet (*kong-dor'-sa*), **Jean Marie Antoine Nicholas Caritat, Marquis de,** was born in 1743. He gained celebrity by his successful labors as a mathematician. His treatise on integral calculations, written when he was but twenty-two years of age, was eminently successful, and was considered to indicate a degree of knowledge seldom possessed at so early an age. He was the friend of D'Alembert and of almost all his illustrious contemporaries, as well as one of the disciples of Voltaire. Being appointed governor of the dauphin

by the constituent assembly, he was successively called to the legislative body and to the convention; but subsequently denounced as a partizan of the Girondists, he was outlawed in 1793, and poisoned himself in 1794.

Confucius (*kon-fu'-se-us*), the Latinized name of Koung-Fou-Tseu, a celebrated Chinese philosopher, supposed to have been born in the year 551 B. C. From his youth he devoted his hours to the study of philosophy. A mandarin when but 17 years of age, he resigned his office on the death of his mother, according to custom, and withdrew to solitude, giving himself up to profound meditation. He afterwards established a school, and had many disciples. The King of Lu invited him to his court and appointed him first minister. Confucius endeavored to correct the manners of his countrymen by his sage maxims. He effected important reforms, but the intrigues of his enemies prevailed against him, and he was sent into exile. He wrote several very important works, and died in 478 B. C.

Connaught, Arthur William Patrick Albert, duke of, third son of Queen Victoria, born in 1850. He was educated for the army at Woolwich, became a cadet, 1866, lieutenant, 1868, and captain, 1871. In 1874 he was created duke of Connaught and Strathern and earl of Sussex. He served in Egypt, 1882; was made general 1893, field marshal, 1902, and inspector-general, 1904. From 1911 to 1916 he was governor-general of Canada.

Constantine I. (*kŏn'stăn-tīn*), called The Great; born in 272, at Mœsia, was son of Constantius Chlorus by Helena. On the death of his father at York, where he had accompanied him, was proclaimed emperor by the troops; this title being challenged by Maximian, his father-in-law, and Maxentius, his brother-in-law, he took up arms against first the one and then the other, and defeated them. One day he saw a cross in the sky with the words, "By this Conquer," in Greek; under this sign, known as the labarum, which he adopted as his standard, he accordingly marched straight to Rome, where he was acknowledged emperor by the senate in 312, and thereafter an edict was issued granting toleration to the Christians. He had still to extend his empire over the East, and having done so by the removal of Lucinius, he transferred the seat of his empire to Byzantium, which was thereafter called Constantinople, i. e., Constantine's city. Constantine was baptized in 337, after having three years before proclaimed Christianity the state religion. Died, 337.

Cook, Captain James, celebrated English navigator, born in Marston, Yorkshire, 1728, best known by his "Voyages Round the World". He conducted three principal voyages, making many important discoveries and explorations in the Australian region and in the North Pacific. After rediscovering the Sandwich Islands, he was killed in a quarrel with the natives of Hawaii, 1779.

Coolidge, Calvin, governor and legislator, was born at Plymouth, Vt., 1872, of early New England ancestry. He graduated from Amherst College, 1895, entered the law office of Hammond and Field, Northampton, Mass., and was admitted to the bar, 1897. He served as city councilman, 1899, city solicitor 1900-01, clerk of courts, 1904. He was elected to the Massachusetts house of representatives, 1907-08, was mayor of Northampton, 1910-11, member of the state senate, 1912-13-14-15, president of the senate, 1914-15, and lieutenant governor, 1916-17-18. Elected governor of Massachusetts, 1919, he attracted nation-wide notice by his firm stand for law and order during the Boston police strike. At the Republican National Convention, held at Chicago, in June, 1920, he was nominated for Vice-President. Winning the ensuing election, he assumed office, March 4, 1921.

Cooper, James Fenimore, an illustrious American novelist, was born in Burlington, N. J., 1789. After six years' experience in naval life, Cooper retired from the sea in 1810, and took up his residence at Cooperstown, Otsego County, N. Y. About 1819 appeared his first work, "Precaution." In quick succession followed "The Spy," a tale which at once secured for him a place in the first rank of novelists; his almost unequaled sea stories, "The Red Rover," "Pilot," and "Water-witch"; his famous "Leather Stocking Series" of Indian life and adventure, the "Pioneers," "Last of the Mohicans," "Pathfinder," "Deerslayer," "Prairie." Cooper, after passing some years in Europe, died in 1851. His works have been translated into every European language and have exhausted numberless editions.

Cooper, Peter, noted American inventor, manufacturer, and philanthropist, was born in New York, 1791. He erected iron works in Baltimore in 1828, and soon after constructed from his own designs the first locomotive engine built in America. He was actively interested in state canals, and later in the first ocean telegraph. His great life work, however, was the establishment of Cooper Union, founded in 1854, containing free day and evening schools in science, art, mathematics, and engineering, open to both sexes. He died in 1883. Elected to American Hall of Fame, 1900.

Copernicus, Nicolas, founder of the modern system of astronomy, born in 1473 at Thorn, Prussia; studied at Cracow and Bologna, and became professor of mathematics at Rome. Obtaining a canonry in the chapter of Frauenburg, he there wrote his work in Latin "On the Revolution of the Celestial Orbs," which he deferred publishing until a little before his death, in 1543, aware of the opposition it would arouse.

Corday D'Armont, Marie Charlotte, born in 1768, at St. Saturnin, Normandy, of a noble Norman family; sympathized with the ideas of the French Revolution but was horrified at its excesses; visited Paris in July, 1793, with the purpose, it is said, of assassinating Marat or Robespierre; obtaining an interview with the former while in his bath, she stabbed him with a knife; was immediately apprehended and executed four days afterwards.

Corelli, Marie, the adopted child of the poet, Charles Mackay, was born, 1864; educated in a French convent, and studied for a musical career. At an early age she showed literary gifts, and the success of "A Romance of Two Worlds" decided her course. Since then she has written a number of novels which have had large circulations. Persuaded Edward Morris, of Chicago, to purchase Harvard House, Stratford-on-Avon (which she had restored), and to present it to Harvard University, to which it now belongs.

Corneille (*kor-nayl'*), **Pierre,** French dramatist, born in 1606, in Rouen; was educated for the law, but the success of his first comedy, "Mélite," induced him to devote himself to literature. It was followed by other comedies, but from 1635 he preferred tragedy, producing "Médée," "Le Cid" (which established his fame), "Horace," "Cinna," "Polyeucte," and "La Mort de Pompée." Died, 1684.

Cornelia, the daughter of Scipio Africanus, was the wife of Tiberius Sempronius Gracchus, who was consul, 177 B. C. By him Cornelia had twelve children, and was left, still in the prime of life, a widow. To her children she gave all her care, though only three reached maturity, but these owed to their mother the high distinction which they gained in the commonwealth. A lady, after displaying her jewels, asked to see those of Cornelia, who, producing her sons, said, "These are mine."

Cornell, Ezra, an American philanthropist, born in 1807, Westchester Landing, N. Y. He accumulated a large fortune and is best known as the founder of Cornell University. He began life as a mechanic and miller, and subsequently became a contractor for the erection of telegraph lines. Died, 1874.

Cornwallis, Charles, Marquis, born in 1738; a prominent English statesman and general, celebrated as the general under whom the British forces were finally defeated (1781) in the American War of Independence. He was afterwards governor-general and commander-in-chief in India, where he greatly distinguished himself by his victories over Tippoo Sahib; and still later (1798), he was lord-lieutenant of Ireland, and (1802) plenipotentiary of Great Britain to negotiate the Peace of Amiens. He was appointed, in 1805, governor-general of India a second time but died (1805) while on his way to assume command.

Corot (*kō-rō'*), Jean Baptiste Camille, was born in Paris, 1796, distinguished French painter, leader of the noted Barbizon school and one of the world's greatest masters of landscape art. His harmonious romantic paintings have been styled "painted music." Died, 1875.

Correggio (*kor-ra'-je-o*), **Antonio Allegri da,** an artist of great fame, was born at Correggio in 1494, in the duchy of Modena. He is regarded as the founder of the Lombard School, and was distinguished above all his rivals by the grace and beauty of his figures, and by the richness and harmony of his coloring. He painted "The Assumption of the Virgin," for the cathedral church of Parma; and among his numerous productions are the "Nativity," the "Marriage of St. Catherine," and the "Holy Family." Died, 1534.

Cortelyou, George Bruce, ex-secretary of the treasury, born in New York, 1862; graduated at Hempstead (L. I.) Institute and State Normal School, Westfield, Mass.; graduate of the law schools of Georgetown and Columbian (George Washington) universities; in 1883 general law reporter; was principal of schools in New York from 1885 to 1889; entered the public service as private secretary to public officials; 1895, was appointed stenographer to President Cleveland; 1896, executive clerk; 1898, assistant secretary to President McKinley; 1900, secretary to the president; reappointed by President Roosevelt; was appointed secretary of the newly established Department of Commerce and Labor, 1903;

1904, was elected chairman of the Republican National Committee, and conducted the campaign which resulted in the election of President Roosevelt. He entered the new cabinet, 1905, as postmaster-general, and on March 4, 1907, was appointed secretary of the treasury. In 1909, became president of New York Gas Co.

Cortes, or **Cortez** (*kor'-tez*), **Hernando,** a Spanish adventurer; born in Medellin in Estremadura, in 1485. He was first destined for the law; but a passion for arms carrying him to the military profession, he went early in the Sixteenth Century, with Velasquez, to Cuba, and subsequently obtained the command of the expedition sent against Mexico. With seven hundred men under his command, he landed at Tobasco in 1519, and immediately burned his ships, that his followers might have no hope but in victory. He advanced to Mexico, where he was at first received with friendly demonstrations; but on his seizing Montezuma, the Mexican king, as a hostage, a struggle ensued, in which many thousands of lives were lost. He eventually succeeded in putting down all opposition, and in overrunning Mexico. While effecting this he is believed to have perpetrated the most enormous cruelties. He was rewarded with the title of marquis, and a grant of land; but subsequently, on his return to Spain, he found himself very much neglected. He died near Seville, in 1547.

Corwin, Thomas, an American statesman; born in Kentucky in 1794; was admitted to the bar in 1818, and after serving some seven years in the State legislature, was elected to Congress in 1830, and to the United States Senate in 1845. In 1850, he was appointed secretary of the treasury, and, in 1861, minister to Mexico. Died in Washington in 1865.

Cox, James Middleton, congressman and governor, was born at Jacksonburg, Ohio, 1870, grew up on a farm, and received a public school and high school education. In early life he taught country school and worked in a printing office. Later he became a newspaper reporter and rose to the position of editor on the staff of the "Cincinnati Enquirer". In 1898 he bought the "Dayton Daily News" and in 1903 he purchased the "Springfield Press-Republican", forming the News League of Ohio, and making a record as a successful newspaper man. He was elected member of Congress, 1909-13, and governor of Ohio for the terms 1913-15, 1917-19, and 1919-21. At the Democratic National Convention, held at San Francisco in July 1920, he was nominated for President of the United States, but was defeated at the ensuing election.

Cox, Kenyon, painter; born in Warren, O., October 27, 1856; studied in Cincinnati and Philadelphia; in Paris under Carolus Duran and Gérôme, 1877-82; returned to New York. Pictures are principally portraits and figure pieces; painted two decorations in Library of Congress, one in Walker Art Gallery, Bowdoin College; one in Minnesota State Capitol, one in Citizens' building, Cleveland, O., and frieze in court room, Appellate Court, New York, and other decorative pictures. He contributed to leading magazines on art subjects; part author of "Modern French Masters," edited by J. C. Van Dyke, and of "The Nineteenth Century." Author: "Mixed Beasts," "Old Masters and New." Died, 1919.

Cox, Palmer, artist; born in Granby, Quebec, Canada, April 28, 1840; graduate of Granby Academy; lived in San Francisco, 1863–75, contributing to "Golden Era" and "Alta California"; since 1875, has lived in New York. His specialty is original humorous pictures illustrating his own books. Author: "Squibs of California, or Every-day Life Illustrated," "Hans von Pelter's Trip to Gotham," "How Columbus Found America," "That Stanley," "The Brownies, their Book," "Queer People," "Queer People with Wings and Stings," "Queer People with Paws and Claws," "Another Brownie Book," "The Brownies at Home," "The Brownies Around the World," "The Brownies Through the Union," "The Brownies Abroad," "The Brownies in Fairyland" (cantata in two acts), "Palmer Cox's Brownies" (spectacular play in three acts), "The Brownies in the Philippines."

Craik, Dinah Maria, born in 1823; daughter of Mr. Mulock, a clergyman. Besides poems and essays, she wrote many novels, of which "John Halifax, Gentleman" (1857) is the best known. Died, 1887.

Cranmer, Thomas, born in 1489; Archbishop of Canterbury, obtained the favor of Henry VIII. by furthering his divorce from Catherine of Aragon, and was appointed primate in 1533. He favored the Reformed doctrines during the reign of Henry VIII., and in that of Edward VI. Protestantism was thoroughly established, and the "Book of Common Prayer" compiled (1549) under his guidance. He was committed to the Tower on the accession of Mary, condemned at Oxford for heresy in 1554, and after two years' imprisonment, burnt there, openly rejecting the recantation of Protestantism which he had been induced to sign.

Crassus, Lucius Licinius, the greatest Roman orator of his day, became consul in 95 B. C.; during his consulship a law was passed, requiring all but citizens to leave Rome, an edict which provoked the Social War. Born 140 B. C.; died 91 B. C.

Crassus, Marcus Licinius, the triumvir with Pompey and Cæsar; was avaricious, and amassed great wealth; appointed to the province of Syria, provoked out of cupidity war with the Parthians, in which he was treacherously slain; Orodes, the king, cut off his head, and poured melted gold into his mouth, saying as he did so, "Now sate thyself with the metal of which thou wert so greedy when alive." (105–53 B. C.).

Crawford, Thomas (*krau'furd*), an American sculptor, was born in New York, in 1814. He early manifested a taste for artistic studies, and, in 1834, repaired to Rome, where he entered the studio of Thorwaldsen. His principal works are the bronze statue of Beethoven, executed for the Boston Music Hall; the colossal equestrian statue of Washington at the capitol, Richmond; and the marble and bronze statuary for the capitol, Washington. Died in London in 1857.

Creasy, Sir Edward (*krē'se*), an English historian, born in 1812; author of "Fifteen Decisive Battles of the World," which has become very widely known; "The Rise and Progress of the English Constitution" (1856); and a "History of England," the first volume of which was published in 1869. Died, 1878.

Crispi, Francesco, born in 1819; Italian statesman, joined in the conspiracies which led to the overthrow of the kingdom of the two Sicilies (1848); planned the second Sicilian revolt of 1859–60; fought under Garibaldi; became a minister of state; represented Palermo in the first Italian Parliament, in which he was leader of the constitutional opposition. In 1877, he was appointed minister of the interior; in 1887, president of the council and premier, and resigned in 1891. Died, 1901.

Crittenden, John Jordon (*krĭt'-n-dĕn*), an American statesman, born in Kentucky in 1787. After having studied and engaged in the practice of the law, he, in 1816, became a member of the Kentucky House of Representatives, and, in 1817, was elected to the United States Senate. In 1841, he became attorney-general in President Harrison's administration; and, in 1848, was elected governor of Kentucky. He served as attorney-general in President Fillmore's cabinet from July, 1850, till the accession of President Pierce. Throughout his political career, Crittenden's name is identified with most of the measures introduced and advocated by his friend, Henry Clay. Died, 1863.

Crompton, Samuel, inventor of the spinning-mule; born near Bolton, England, 1753; for five years he worked at his project, and after he got it into shape was tormented by people prying about him and trying to find out his secret; at last a sum was raised by subscription to buy it, and he got some £60 for it, by which others became wealthy, while he had to spend, and end, his days in comparative poverty, all he had to subsist on being a life annuity of £63, which some friends bought him. Died, 1827.

Cromwell, Oliver, the Protector, son of Robert Cromwell, was born in Huntingdon in 1599, and educated at the free school and at Cambridge, where he did not graduate; represented Huntingdon in the parliament of 1628; always an advocate of puritanical views, first became seriously religious himself about 1638; was member for Cambridge in the short and long parliaments, and soon made himself prominent by his zeal in the cause of liberty; on the outbreak of the civil war raised a troop of horse for the parliament; distinguished himself in the battles which followed, and was specially exempted from the Self-denying Ordinance (1645); joined the Independent party in opposition to the Presbyterians, and by the ejection of members known as "Pride's Purge," secured the condemnation and execution of Charles I. (1649). After reducing Ireland to submission, he attacked the Scottish Royalists, defeating them at Dunbar (1650) and Worcester (1651). He dissolved the Long Parliament in 1653, and, after an unsuccessful attempt at constitutional government, assumed the title of Protector, and ruled as a military despot, enforcing order at home, and winning the respect of foreign countries. Died, 1658.

Crookes, Sir William, scientist, inventor; born in 1832. Past-president of the Chemical Society; past-president of the Institution of Electrical Engineers; president of the British Association, 1898; vice-president of Royal Society, 1895–96; president of Society for Psychical Research, 1897; discoverer of thallium and of properties of radiant matter; inventor of the radiometer, spinthariscope, and other instruments. Wrote "Manu-

facture of Beet Sugar." "Handbook of Dyeing," "Manual of Practical Assaying," "Select Methods in Chemical Analysis," "The Wheat Problem," etc.; editor of the "Chemical News." Died, 1919.

Cujas, Jacques (*koo'zhăs*), an eminent French jurist, born in 1522; became professor of the Roman law at Bourges and Valence. Among his numerous works are "Commentaries on Justinian's Institutes," and on the "Pandects and Decretals." Cujas has been styled by Hallam the "greatest of all civil lawyers." Died, 1590.

Culberson, Charles A., United States senator from Texas; born in Dadeville, Ala., June 10, 1855; graduate of Virginia Military Institute, 1874; studied law at University of Virginia, 1876–77; settled in Texas, 1856; county attorney, Marion County; attorney-general of Texas, 1890–94; governor, 1894–98; delegate and chairman of Texas delegations to Democratic National conventions, 1896, 1904; elected United States senator, 1899, to succeed Roger Q. Mills; reëlected, 1905, 1911, and 1917; minority leader of the United States Senate, 60th and 61st Congresses.

Cummins, Albert Baird, governor, lawyer; born in Carmichaels, Pa., February 15, 1850; academic education at Waynesburg, Pa.; admitted to bar; settled in practice at Des Moines, Ia.; member of Republican National Committee, 1896–1900; governor of Iowa, 1902–1908; United States senator since 1908.

Curtis, William Eleroy, journalist; born in Akron, O., November 5, 1850; graduate of Western Reserve College, 1871. On staff of "Chicago Inter-Ocean," 1873–87; Washington correspondent for "Chicago Record," 1887–1901; "Chicago Record-Herald," 1901–11. Special commissioner from United States to Central and South American republics; executive officer of International American Conference, 1889–90; director of Bureau of American Republics, 1890–93; chief of Latin-American department and historical section at World's Columbian Exposition, 1891–93; commissioner of Columbian Exposition to Madrid, and special envoy to the Queen Regent of Spain and Pope Leo XIII., 1892. Author: "Tibbalses Folks," "A Summer Scamper," "The Life of Zachariah Chandler," "Children of the Sun," "Capitals of Spanish America," "The Land of the Nihilist," "Trade and Transportation," "Handbook to the American Republics," "Guatemala," "Costa Rica," "Ecuador," "Venezuela: a Land Where It is Always Summer," "The United States and Foreign Powers," "The Existing Autographs of Columbus," 1893 (American Historical Association); "Relics of Columbus," "Recent Discoveries Concerning the Early Settlement of America in the Archives of the Vatican," "The Yankees of the East," "To-day in France and Germany," "Between the Andes and the Ocean," "The True Thomas Jefferson," "The Turk and His Lost Provinces," "Denmark, Sweden, and Norway," etc. Was member of many learned societies. Died, 1911.

Curtiss, Glenn H., aeronaut, sportsman, manufacturer, was born at Hammondsport, N. Y., 1878; in 1906, at Ormond Beach, Curtiss covered a mile on a motorcycle of his own construction in twenty-six and two-fifths seconds; director of experiments of Aerial Experiment Association, 1907; winner of international contest at Rheims, 1909, covering the course of 12.42 miles in 15 minutes, 50 3-5 seconds, in a biplane of his own design; flew over Hudson River, Albany to New York, 1910; invented and demonstrated hydro-aeroplane, 1911, and flying boat, 1912. In 1914 built the "America," designed for transatlantic flight; also made successful flight with Langley aërodrome. In 1915 removed plant from Hammondsport to Buffalo, and organized syndicate to operate large aeroplane and motor concern.

Curzon of Kedleston, Baron, English statesman, born 1859; viceroy of India, 1899-1905. His term of office was extended. In June, 1905, difficulties over the new military scheme in India led to his resigning. The resignation was withdrawn at request of home authorities, but in August, controversy again reached an acute stage, and Lord Curzon finally relinquished office. He remained in India to receive the Prince and Princess of Wales. The "Times" spoke of his work as "among the most brilliant and strenuous accomplished for the empire in our times," and of his having infused into Indian civil administration a new spirit born of his own indomitable belief in reform and his own unshaken determination to carry it into practice. His wife died in 1906. Elected chancellor of Oxford University, March, 1907. President war cabinet under Lloyd-George, 1916.

Cuvier (*ku'-ve-a*), **George Leopold Christian Frederick Dagobert, Baron,** was born at Montbéliard in the duchy of Württemberg in 1769. He devoted himself to the study of natural history, and gained extraordinary celebrity. He was placed by Bonaparte in the most important offices in the department of public instruction. The additions he made to the general stock of knowledge gave him fame throughout the civilized world, and he was received with appropriate honors by scientists when he visited England in 1818, and in 1830. He died in 1832.

Cyrus the Great, born about 590 B. C.; founder of the Persian Empire; was the son of Cambyses and Mandane, daughter of Astyages, King of Media. His early history is probably mythical; in 549 B. C., he excited the Persians against the Medes, defeated Astyages, and usurped his throne. He subsequently conquered Lydia and Babylon, and marched against the Massegatæ, governed by Queen Tomyris, by whom he was defeated and slain, 529 B. C.

Cyrus the Younger, born in 424 B. C.; son of Darius, and governor of the western provinces of Asia Minor; after unsuccessfully plotting against his elder brother, Artaxerxes, he raised a large army, including about 12,000 Greek soldiers, with which he marched against him, but was defeated and slain at Cunaxa. Xenophon then conducted the retreat of the 10,000 surviving Greeks. Died, 401 B. C.

Daguerre, Louis Jacques Mandé, born in 1789; the inventor of photography by the daguerreotype process, by which the portrait was fixed on a plate of copper thinly coated with silver, by the successive action of the vapors of iodine, bromine, and mercury, in which invention he was associated with M. Nièpce Daguerre. He was also celebrated as a dioramic painter; was named by the French Government as an officer of the Legion of Honor, and granted a pension of six thousand francs. Died, 1851.

Dalzell, John, ex-congressman, lawyer; born in New York, April 19, 1845; removed to Pittsburgh, 1847; graduate of Yale, 1865; admitted to bar, 1867; has practiced ever since; for years one of the attorneys for the Pennsylvania Railroad Company for all its western lines; also attorney for many corporations in Allegheny County, Pa. Member of Congress, 1887–1913; member of Committee on Rules and Committee on Ways and Means, 54th, 55th, 56th, 57th, 58th, 59th, 60th, 61st and 62d Congresses.

Daniel, one of the Jewish prophets, is affirmed by Josephus to have descended from the royal family of Judah. While young, he was carried as a captive from Jerusalem to Babylon. There his talents caused him to be advanced to the rank of chief of the magi, or wise men, and to the government of the province; and his wisdom, courage, and skill in prophecy gave him great distinction. He is supposed to have died about the year 534 B. C.

Daniel, John Warwick, United States senator, 1887–1910; born in Lynchburg, Va., September 5, 1842; educated at Lynchburg College and Dr. Gessner Harrison's University School; in Confederate States Army of Northern Virginia throughout war; became adjutant-general on General Early's staff; studied law at University of Virginia, 1865–66. Member of Virginia house of delegates, 1869–70, 1871–72; of State senate, 1875–81; presidential elector, 1876; defeated for governor of Virginia, 1881; member of Congress, 1885–87; member of National Democratic conventions, 1880, 1888, 1892, 1896 (temporary chairman), 1900 and 1904. Author: "Attachments Under the Code of Virginia," "Negotiable Instruments," etc. Died, 1910.

Dante Alighieri, Italian poet; was born in Florence, 1265. Of his early days little is known, till, as related in his "Vita Nuova," he first met "the lady of his heart, Beatrice." According to Boccaccio, she was the daughter of Folco Portinari, and married Simone de Bardi and to her Dante was passionately but platonically attached. She died in 1290, and shortly afterwards Dante married Gemma Donati, a daughter of one of the "Guelph" familes. In 1289, he fought at Campaldino, and was present at the surrender of Caprona. After filling various minor offices, in 1300, he became one of the six priors of Florence. In 1301, he went as ambassador to Pope Boniface VIII., and never returned to his native town. Charles of Valois aided the Neri or Black Guelphs against their opponents, the Whites, of whom Dante was a supporter, and, in 1302, he was banished. He made many unsuccessful attempts to return, and spent the remaining years of his life wandering from town to town, finally settling in Ravenna, where he died in 1321. His most celebrated work is the "Divina Commedia," and others are the "Vita Nuova," the "Convito," and the "Canzoniere."

Danton (*dăn'ton*), **George James,** a French advocate, and notorious republican; was born in 1759. He took a leading part in dethroning Louis XVI., and was a prominent actor in the sanguinary scenes that followed. He became a formidable rival to his associate Robespierre,

but was worsted in the strife, and suffered on the guillotine in 1794.

D'Arblay, Frances Burney, English novelist; born in 1752, was the third child of Dr. Charles Burney. From the age of eighteen to twenty-six she worked at "Evelina," which appeared anonymously in 1778, and won her fame, and the admiration and friendship of Dr. Johnson. "Cecilia" (1782) was equally successful; her works gained her a position at the court in 1786, and in her "Diary" she gives a graphic description of its decorous dullness. In 1793, she married General D'Arblay, a French refugee. Her later works are "Camilla" (1796), "The Wanderer" (1814), and the "Memoirs" of her father. Died, 1840.

Darius, born about 558 B. C.; son of Hystaspes, dethroned Smerdis the usurper, and became King of Persia in 521. He captured Babylon after a siege of twenty months, conquered Thrace, and defeated the Scythians. He sent two armies to Greece to avenge the destruction of Sardis by the Athenians, the first of which was repulsed by the Thracians, and the second by the Athenians at Marathon in 490. He died in B. C. 486, while organizing a third expedition.

Darrow, Clarence S., lawyer; born in Kinsman, O., April 18, 1857; educated in Ohio public schools; studied law; admitted to bar, 1875. Formerly attorney for Northwestern Railway. Has been identified with many prominent cases; of recent years, notably in cases against monopolies, including litigation against gas trust in Chicago; chief counsel for anthracite miners in the anthracite coal strike arbitration at Scranton and Philadelphia, 1902–03, commission appointed by President Roosevelt. Elected Illinois Legislature, 1902. Active in political campaigns as Independent Democrat; twice married. Counsel in Debs strike case and large number of labor injunction and labor conspiracy cases on side of labor; platform speaker. Counsel for McNamara brothers in Los Angeles Times dynamite case, 1911. Author: "Persian Pearl" (essays), "Resist Not Evil," "Farmington" (novel), "An Eye for an Eye," various pamphlets on social and economic questions.

Darwin, Charles Robert, an English naturalist; born in Shrewsbury, February 12, 1809; was the son of Dr. Robert Darwin and grandson of Dr. Erasmus Darwin. He was educated at Shrewsbury School, and at the universities of Edinburgh and Cambridge. He early devoted himself to the study of natural history. In 1839, he married his cousin Emma Wedgwood, and henceforth spent the life of a quiet country gentleman, engrossed in scientific pursuits — experimenting, observing, recording, reflecting, and generalizing. In 1859, his name attained its great celebrity by the publication of "The Origin of Species by Means of Natural Selection." This work, scouted and derided though it was at first in certain quarters, may be said to have worked nothing less than a revolution in biological science. In it for the first time was given a full exposition of the theory of evolution as applied to plants and animals, the origin of species being explained on the hypothesis of natural selection. The rest of his works are largely based on the material he had accumulated for the elaboration of this great theory. He died April 19, 1882, and was buried in Westminster Abbey.

Darwin, Erasmus, a poet and physician; born in Elston near Newark, in 1731. He studied at Cambridge, obtained a doctor's degree at Edinburgh, and settled at Lichfield as a physician. He was a man of great and varied talent, but some of his opinions were deemed extravagantly eccentric. His "Botanic Garden" was admired as a fine specimen of polished verse, and his "Zoonomia," or "The Laws of Organic Life," was admitted to be ingenious, though built upon an hypothesis which was repudiated as absurd. In 1781, removed from Lichfield to Derby, where he died, 1802.

Davenport, Homer Calvin, cartoonist; born in Silverton, Ore., March 8, 1867; reared on farm in Oregon; never attended art schools; no school education; had been jockey, railroad fireman, clown in circus. Given employment, 1892, on "San Francisco Examiner"; taken to New York by W. R. Hearst, 1895; on "New York Journal," 1895–1912; originated the Mark Hanna $-mark suit of clothes and the giant figure of the trusts in 1899; his work caused attempt to pass anti-cartoon bill in New York, 1897. Author: "Davenport's Cartoons," "The Bell of Silverton, and Other Short Stories of Oregon," "The Dollar or the Man?" Died, 1912.

David (*da'-vid*), the son of Jesse, of the tribe of Judah; was born in Bethlehem, and flourished in the Eleventh Century B. C. He watched the flocks of his father, when Samuel was sent by the Most High to Bethlehem, to anoint him King of Israel in the place of Saul whom he had rejected. War having broken out between the Israelites and the Philistines, he fought and vanquished the giant Goliath. Saul gave him the command of a body of men, but later conceived a great hatred of him. David was exposed to imminent danger, and compelled to seek a refuge among the Philistines. After the death of Saul, he was recognized as King of Israel, and defeated the Philistines, the Moabites, the Syrians, and the Ammonites. Many acts of weakness were committed by him, but he obtained forgiveness from the Almighty by exemplary penitence. He transported the ark to Jerusalem, and is the reputed author of many of the psalms.

Davidson, Samuel, born in 1807; biblical critic; was educated in Ireland at the Royal College of Belfast. He entered the Presbyterian ministry, and was called in 1835 to the chair of biblical criticism in his own college. In 1842 he became professor of biblical literature and Oriental languages in the Congregational College at Manchester. He was a member of the Old Testament Revision Committee. Died, 1899.

Davis, Henry Gassaway, capitalist; born in Baltimore, November 16, 1823; educated in country schools, but being left fatherless went to work young; became superintendent of a plantation, then brakeman, conductor, and later agent at Piedmont, W. Va., of the Baltimore & Ohio Railroad; later merchant and a leading collier; projected and carried on to success the West Virginia Central & Pittsburgh Railway, which was sold to the Wabash, 1902; then built the Coal & Coke Railway of West Virginia, of 200 miles, of which he was president; was president Davis Trust company of Elkins, West Virginia, etc.; member house of delegates, West Virginia, 1865; State senator, 1867-71; United States senator, 1871-83, declining reëlection; democratic delegate to six Democratic National conventions; one of American delegates to Pan-American congress; was member United States Permanent Pan-American Railway Commission; was candidate of Democratic party for vice-president, 1904. Died, 1916.

Davis, Jefferson, born in 1808; American statesman and soldier, graduated at West Point in 1828, and served in the army for seven years. In 1845 he was elected to Congress, and was appointed colonel of the first regiment of Mississippi volunteers. In 1853 he was secretary of war, and from 1857–61 was again member of the senate. On February 9, 1861, he was unanimously elected "President of the Confederate States of America." War followed, and commenced with a Confederate victory at Bull Run, but the South soon sustained serious reverses, then finances failed, and Grant's defeat of Lee concluded the war. Davis was captured at Irwinsville, and conveyed to Fort Monroe, where he was imprisoned for two years. He was prosecuted in 1867 for treason, was discharged, and his name included in the general amnesty. Died, 1889.

Davis, Richard Harding, novelist, journalist; born in Philadelphia, 1864; son of the late L. Clarke and Rebecca (Harding) Davis; served as war correspondent "London Times" and "New York Herald" in Turkish-Greek, Spanish-American, South African, and Russian-Japanese Wars. Author: "Soldiers of Fortune," "Gallegher and Other Stories," "The Princess Aline," "Our English Cousins," "Van Bibber and Others," "About Paris," "The Rulers of the Mediterranean," "Three Gringos in Venezuela," "Cuba in War Time," "A Year from a Correspondent's Note-Book," "Stories for Boys," "Cuban and Porto Rican Campaigns," "Cinderella and Other Stories," "Dr. Jameson's Raiders," "Exiles," "The King's Jackal," "The Lion and the Unicorn," "West from a Car Window," "Episodes in Van Bibber's Life," "With Both Armies in South Africa," "In the Fog," "Ranson's Folly," "Captain Macklin," "The Bar Sinister," "Kits and Outfits." Plays: "Taming of Helen," "Ranson's Folly," "The Dictator." Died, 1916.

Davy, Sir Humphry, born in 1778; English chemist, was a native of Penzance. Two papers on nitrous oxide obtained him the post of assistant lecturer on chemistry to the Royal Institution, London, and in a few weeks he was raised to the chief lectureship. In 1803 he became a fellow, and in 1807 secretary of the Royal Society. His Bakerian lecture in 1806 gained him the 3,000 franc prize of the French Institute. In 1815 he invented the miner's safety lamp. He was knighted in 1812, made a baronet and elected president of the Royal Society in 1820. Failing health compelled him to leave England, and he died at Geneva in 1829, of paralysis.

Dawson, Sir John William, geologist and naturalist; was born at Pictou, Nova Scotia, 1820. He studied in Edinburgh, and distinguished himself as a palæontologist. Published, "Story of the Earth and Man," "Origin of the World," and "Geology and History." Dawson called in question the Darwinian theory as to the origin of species. For many years he was chancellor of McGill University, and one of the most noted of Canadian educators. Died, at Montreal, 1899.

Day, James Roscoe, clergyman, educator; born in Whitneyville, Me., October 17, 1845; A. B., Bowdoin, 1874, S. T. D., 1894 (D. D., Wesleyan, Conn., and Dickinson College; LL. D., Northwestern University; D. C. L., Cornell College, Ia.). Methodist Episcopal clergyman in Bath, Portland, Boston, and New York. Chancellor Syracuse University since 1894. Elected bishop Methodist Episcopal Church, 1904, but declined. Is a vigorous writer and speaker, and well-known publicist.

Day, William Rufus, jurist; born in Ravenna, O., April 17, 1849; graduate of University of Michigan, 1870; studied in law department, same; admitted to bar, 1872; established in practice at Canton, O.; judge court of common pleas, 1886–90; elected as nominee of both political parties; appointed, 1889, judge United States District Court, northern district of Ohio, but because of failing health resigned before taking office; appointed assistant secretary of state, March, 1897; succeeded John Sherman as secretary of state, April 26, 1898, but in September, 1898, was succeeded by John Hay, becoming chairman United States peace commissioners at Paris, at close of war with Spain; judge United States Circuit Court, sixth circuit, 1899–1903; associate justice United States Supreme Court since February, 1903.

Decatur, Stephen, a United States naval commander, born in 1779. On various occasions he was distinguished by his skill and courage. In the war of 1812, between England and America, he captured the "Macedonian" English frigate. In the year 1815, he was taken by the British, after maintaining a running fight for more than two hours. He died in 1820, being shot in a duel which he fought with Commodore Barron.

Defoe (de-fō'), **Daniel,** a much admired English novelist, born in 1661, was the son of a butcher. In 1688 he kept a hosier's shop in Cornhill, but proving unsuccessful, he was obliged to depend upon his literary powers for a livelihood. He obtained, in 1695, the appointment of accountant to the commissioners of glass duty, which office he held till that duty was repealed in 1701. He was an active writer, but his "Robinson Crusoe," the work for which he was most celebrated, did not appear till 1719. Among his productions may be mentioned "A Journal of the Plague in 1665," by a supposed witness of it. He died in 1731.

DeGogorza, Emma Eames, American prima donna soprano, was born at Shanghai, China, of American parentage, 1867. Made début at Paris grand opera, 1889; Covent Garden, London, in rôle of Marguerite in Faust, 1891; sang in regular opera seasons in London and United States. Married Julian Story, well-known painter, in 1891; married Emilio de Gogorza in 1911.

Deland, Margaretta Wade, author; born (Campbell) in Allegheny, Pa., February 23, 1857; educated in private schools. Author: "John Ward, Preacher," "The Old Garden and Other Verses," "Philip and His Wife," "Florida Days," "Sydney," "The Story of a Child," "The Wisdom of Fools," "Mr. Tommy Dove and Other Stories," "Old Chester Tales," "Dr. Lavendar's People," "The Common Way," "The Iron Woman."

Delcassé, Théophile, was born in Pamiers, March 1, 1852; educated in Paris, and began his career as a journalist. He was elected to the chamber in 1889, for Foix; in 1893, became under-secretary for the colonies under MM. Ribot and Dupuy, and colonial minister in the Dupuy cabinet of May, 1894. He has always been a consistent advocate of colonial expansion. When M. Brisson formed his ministry in 1898, he entrusted foreign affairs to M. Delcassé, and it fell to his lot to deal with the difficult position at Fashoda. He retained his portfolio in M. Dupuy's ministry, after the defeat of the Brisson administration. In 1899, he negotiated the agreement with Great Britain as to the Nile Valley and Central Africa, and still remained foreign minister when M. Waldeck-Rousseau succeeded M. Dupuy, and when M. Combes, in 1902, succeeded M. Waldeck-Rousseau. He brought about the rapprochement with Italy, visited England with the president in 1903, and with Lord Lansdowne prepared the Anglo-French Agreement, signed April 8, 1904. The difficulty with Germany about Morocco caused his retirement in 1905.

Delmas, Delphin Michael, lawyer; born in France, April 14, 1844; removed to California in boyhood; graduate of Santa Clara College, California, 1862; graduate of Yale Law School, LL. B., 1865. Admitted to California bar, 1866; practiced in San José, Cal., 1866–83; since then in San Francisco and New York. District attorney of Santa Clara County, Cal., 1868; regent of University of California, 1885; delegate-at-large of Democratic National Convention, St. Louis, 1904. Author: "Speeches and Addresses."

Demetrius, surnamed Poliorcetes, King of Macedon, was defeated near Gaza by Ptolemy in 318 B. C. He delivered Athens from Demetrius Phalereus, but the successors of Alexander defeated him at Ipsus (301). In 294, he seized the throne of Macedonia, but was expelled (287), and died in captivity (283 B. C.).

Demosthenes, born about 385 B. C.; Greek orator, resolved to study rhetoric, though his lungs were weak, his pronunciation bad, and his gesture awkward. He persevered till he surpassed all other orators, and is noted for his "Philippics" and "Olynthiacs," aimed against Philip of Macedon. On the advance of Antipater he fled, and poisoned himself in preference to falling into his enemies' hands, 322 B. C.

Deneen, Charles Samuel, ex-governor; born in Edwardsville, Ill., May 4, 1863; educated in public schools at Lebanon, Ill., and McKendree College (graduated, 1882); taught school about three years; studied law; admitted to bar. Elected to Illinois House of Representatives, 1892; served one term as attorney for sanitary district of Chicago, December, 1895–96; State's attorney of Cook County, Ill., 1896–1904; governor of Illinois, 1905–09, 1909–13.

Depew, Chauncey Mitchell, an American lawyer; born in Peekskill, N. Y., April 23, 1834; was graduated at Yale College in 1856, and engaged in the presidential campaign for Frémont immediately afterward; studied law, and was admitted to the bar in 1858. He was appointed United States minister to Japan, and after holding the commission a month, declined, and began his career as a railroad official as attorney for the New York and Harlem Railroad. He was made attorney and director of the consolidated Hudson River and New York Central railroads in 1869; general counsel of the whole Vanderbilt system in 1875; second vice-president of the reorganized New York Central Railroad in 1882, and president, 1885–98. His political career, since 1866, embraces his unsuccessful candidacy as lieutenant-governor on the Liberal Republican ticket in 1872; his election by the legislature as a regent of the State University in 1874; his candidacy for United States senator to succeed Thomas C. Platt, in which he withdrew his name after eighty-two days of balloting, in 1881; his declination of the United States senatorship tendered by the Republicans of the legislature in 1885; his candidacy for the presidential nomination in the national convention in 1888; and his election to the United States Senate, in 1899 and 1905. He has an international reputation as an unusually entertaining speaker, is constantly in request as a lecturer, and has delivered many addresses of large public importance.

De Quincey, Thomas, English essayist; born in Manchester in 1785. His father, Thomas Quincey (not De Quincey), was a merchant, and left his family well provided for. De Quincey was first educated at Salford and at Bath, and afterwards at Winkfield and the Manchester grammar school, from which he ran away, and subsequently went through the adventures and privations which he described in the "Confessions of an English Opium Eater." In 1803, he went up to Worcester College, Oxford, which he left without a degree, and soon after became acquainted with Coleridge and Wordsworth, took a cottage at Grasmere, and became one of the famous Lake scholars. Here he remained for many years, occasionally visiting London and Edinburgh. In 1830, he removed his wife and eight children to the latter place, and lived there till his wife's death, in 1837. He had acquired the habit of taking opium by using it to cure an attack of neuralgia, and so greatly did it grow upon him that he was known to take as many as 12,000 drops, equal to ten wineglasses, in a day. He was engaged in preparing fourteen volumes of his works for the press within a few days of his death. Besides the "Opium Eater," the following works may be mentioned: "Murder Considered as One of the Fine Arts," "Suspiria de Profundis," "The English Mail Coach," and "A Vision of Sudden Death." Died, 1859.

De Reszke, Édouard, distinguished operatic singer; born in Warsaw, Poland, 1855; studied under Ciaffei and Coletti; début, Théâtre des Italiens, Paris, as the king in "Aïda," April 22, 1876; later, sang at Turin, Milan, and other European cities; London début as Indra in "Royal Italian Opera," April 13, 1880, remaining there four seasons. After that he appeared in grand opera in Europe and United States, taking basso rôles. Died, 1917.

De Reszke, Jean, distinguished operatic singer, brother of Edouard De Reszke, born at Warsaw, Poland, 1850; studied under Ciaffei, Cotogni, and Sbriglia; début as baritone singer in Favorita, Venice, January, 1874; tenor début, Madrid, 1879; has appeared in leading rôles in grand opera in Europe and United States.

Descartes (*dā'-kärt'*), **René,** a great French philosopher and mathematician, was born in Touraine in 1596. He early adopted the profession of arms, and served in

the armies of the Dutch and Bavarians. In 1629 he settled in Holland, in which country he devoted himself to his favorite studies of the natural and exact sciences. In 1637 he produced his celebrated discourse on the "Method of Reasoning, and of Investigating Scientific Truth"; and, in 1641, he published his "Meditationes de Prima Philosophia," a work of the grandest metaphysical research and speculation, indoctrinating a new system of philosophy named for its author, "Cartesianism." In 1644 appeared his theory of the world in the "Principia Philosophiæ." Died, 1650.

Deschanel, Paul (*dā'-shā'-nĕl'*), French statesman, orator, and writer, chosen president of France for the term 1920–27, was born in Brussels, Belgium, 1856. He was educated at the Collège Saint-Barbe and at the Lycée Condorcet. Elected to the Chamber of Deputies, 1885, he became noted for his eloquence as a party leader and as an advocate of the separation of church and state. He was president of the Chamber of Deputies, 1898–1902 and 1913–14. In 1899 he was elected to the French Academy. His numerous writings include "French Interests in the Pacific," "The Social Question," "Lamartine," and "Internal and Foreign Policy." Owing to failing health, Deschanel resigned the presidency of France, September 16, 1920.

De Soto (*dā-sō'-to*), **Hernando,** a Spanish explorer, born about 1500; followed the path of Cortez and Pizarro, under the latter of whom he served in Peru. In 1539 he conducted an expedition from Florida, which resulted in the discovery of the Mississippi. Died, 1542.

Dewar, Sir James, professor of chemistry Royal Institution, London; was born in Kincardine, Scotland, 1842; educated at Dollar Academy and Edinburgh University. With Sir Frederick Abel he invented cordite, and was the first to liquify and solidify hydrogen. He was awarded the Lavoisier gold medal in 1894 and the Matteucci medal in 1906. Knighted 1904.

Dewey, George, admiral in United States Navy; born in Montpelier, Vt., December 26, 1837; appointed to Naval Academy, September 23, 1854; graduated in 1858, as passed midshipman; LL. D., University of Pennsylvania, Princeton University, 1898. Attached to steam frigate "Wabash," Mediterranean squadron, until 1861; then to steam sloop "Mississippi" of West Gulf squadron; commissioned lieutenant, April 19, 1861; in Farragut's squadron which forced the passage of Fort St. Philip and Fort Jackson, April, 1862, and participated in the attack on Fort St. Philip and the subsequent fights with gunboats and ironclads, which gave Farragut possession of New Orleans. In the smoke of the battle of Port Hudson, the "Mississippi" lost her bearings and ran ashore under the guns of the land batteries, and the officers and men took to the boats after setting the vessel on fire. Was afterward on several vessels in North Atlantic blockading squadron, then in European squadron, and later on various duties and at different stations, being promoted to commander, April, 1872; captain, September, 1884; commodore, February 9, 1896. In January, 1898, assumed command of Asiatic squadron. On May 1, 1898, in Manila Bay, he commanded in the greatest naval battle since Trafalgar, completely annihilating the Spanish Asiatic squadron under Admiral Montojo, destroying eleven and capturing all other vessels and all the land batteries, without the loss of a man on the American side. Immediately upon receipt of official news of victory he was promoted to rear admiral, and thanked by resolution of Congress; member of U. S. Philippine Commission, 1899; promoted admiral, March 2, 1899. Died, 1917.

De Witt, John, Dutch statesman, was born in 1625, at Dort, in Holland. A work, entitled the "Elements of Curved Lines," which he produced at the age of 23, was greatly admired. In 1650 he was chosen pensionary of Dort, and subsequently attained the higher dignity of pensionary of Holland. In 1654 he promoted a perpetual edict for abolishing the office of Stadtholder, and was publicly thanked for his patriotic services. At a later period, Holland being invaded by the French, popular rage was unjustly directed against him, and he, with his brother Cornelius, were assassinated with great cruelty by the populace, in 1672.

Diaz, Armando, Italian general, was born in 1861. Following the disastrous battle of Caporetto, October 24, 1917, in which all the fruits of earlier campaigns were lost, Diaz succeeded Cadorna as commander-in-chief of the Italian armies. In nine days, June 15-23, 1918, Diaz decisively repulsed a great Austrian offensive designed to crush the Italian armies, driving the Austrians back across the Piave and inflicting enormous losses. After four months' preparation, Diaz began, October 24, a tremendous counterattack against the Austrian lines in Italy. These soon began to crumble under his well-directed blows. A series of increasing successes resulted at the end of ten days in the total collapse and rout of the Austrian forces. When Austria, on November 4, accepted terms of truce, a virtual surrender which hastened the impending downfall of Germany, the Italian armies under Diaz had captured 300,000 prisoners, 5,000 guns, and military booty valued at about a billion dollars. This victory by Diaz ranks as one of the most overwhelming in military history.

Diaz, Porfirio, president of Mexico, was born at Oaxaca, September 15, 1830. Took part in resistance to French invasion, 1863; commander of the Army of the East, 1867; headed an insurrection against the government, 1875; president, 1877-80; after a lapse of one term, reelected 1884, holding office continuously to 1911. Died, 1915.

Dickens, Charles, was born in 1812, in Landport, Portsmouth, where his father held a small appointment in the navy pay-office; but when this position was lost the family came to London and Dickens's youth was spent in constant penury and want. For some time he was employed in a blacking factory, but at 12 years of age he was again sent to school, and after three years' tuition he entered an attorney's office. Then he became a shorthandwriter, and at 19 obtained the position of parliamentary reporter. During the years 1831 to 1836 he represented various papers — latterly the "Morning Chronicle"— and in 1836 his "Sketches by Boz" were published in a collected form. A publishing firm wishing to produce an illustrated periodical, Dickens undertook the letterpress, and produced the "Pickwick Papers." At the same time he was writing "Oliver Twist." In 1842, he visited America, and wrote on his return the "American Notes." In 1843 he began to publish "Martin Chuzzlewit," which at first fell rather flat, and, in order to economize, Dickens went to live at Genoa. When the "Daily News" was started Dickens was appointed editor, but he retired very soon, and busied himself in further novel-writing — "Dombey and Son," "David Copperfield," "Bleak House," and "Little Dorrit," all being produced between 1846 and 1855. In 1850 he started the periodical "Household Words," afterwards changed to "All the Year Round." In 1858 he separated from his wife. In this year he first appeared as a public reader of his own works, and from 1866 to 1870 he was almost continuously employed in this task, his success being unexampled. In 1867 he made a lecturing tour in America, where he was received with great enthusiasm, despite his unpalatable "American Notes." The strain proved too great for his constitution, and he died suddenly at Gadshill in 1870.

Dickinson, Jacob M., lawyer, cabinet officer; born, Columbus, Miss., 1851; graduate University of Nashville, 1871, A. M., 1872; studied law at Columbia University and Leipzig. Admitted to bar, 1874; several times special judge supreme court of Tennessee; assistant attorney-general United States, 1895-97; counsel for United States before Alaskan Boundary tribunal, 1903; president American Bar Association, 1907-08; secretary of war, 1909-11.

Dielman, Frederick, artist, born in Hanover, Germany, December 25, 1847; came to United States in childhood; graduate of Calvert College; was topographer and draughtsman in United States engineering department, 1866–72; studied art under Diez at Royal Academy, Munich; opened studio in New York, 1876; National Academician since 1883; president National Academy of Design, 1889–1909; member Art Commission, New York, 1901-03. Illustrator and figure painter; designer of mosaic panels "Law" and "History" in Congressional Library, of large mosaic, "Thrift," Albany Savings Bank, and the decorations in new building of the Washington "Evening Star"; professor of drawing, college of the city of New York. Member national institute of arts and letters.

Dillon, John, Irish political leader, was born in Dublin, 1851, and was educated at the Catholic university of that city. He assisted Parnell and Michael Davitt in founding the Land League in America, and, in 1880, was elected to parliament for County Tipperary, a position his father, John Blake Dillon, had previously held. Retiring for a time by reason of ill health, he again entered parliament in 1885 as member for East Mayo which he continued to represent for more than thirty years. Under Lord Salisbury's administration of 1886, he took, as leader of the Irish party, a prominent part in opposition to the government and was twice convicted under the Irish crimes act. From 1896 to 1899 he was chairman of the Irish nationalist party. In 1918 he succeeded John Redmond as chairman of the Irish League.

Diogenes (*di-ŏj'-e-nēz*), a philosopher of the school of Cynics; was born in Asia Minor. Becoming a citizen of Athens, he made himself notorious by his abnegation

of all social laws and customs, lived upon alms, and took up his abode in a tub. Of his cynicism many well-known anecdotes are related. Died at Corinth, at the age of 90, 323 B. C.

Disraeli (*dĭz-rā'lē*), **Benjamin,** an English statesman and author, was born 1804. He was of Jewish descent, and for years was the leader of the conservative party in the Commons, holding the office of prime minister in 1868–70, and 1874–80. In 1876 he was created Earl of Beaconsfield. Died, 1881.

Dixon, Thomas, Jr., lecturer and author; born in Shelby, N. C., January 11, 1864; graduate of Wake Forest College, N. C., 1883, A. M., 1883; graduate of Greensboro, N. C., law school, 1886; admitted to bar all courts, North Carolina and United States district, and Supreme Courts, 1886; scholarship, history and politics, Johns Hopkins University, 1883–84; member North Carolina Legislature, 1885–86; resigned to enter Baptist ministry, October, 1886; pastor Raleigh, N. C., 1887, Boston, 1888–89, New York, 1889–99; popular lyceum lecturer, 1889–1903. Author: "The Leopard's Spots," "The One Woman," "The Clansman," "The Life Worth Living."

Döllinger, Johan Joseph Ignaz, an eminent German theologian; was born 1799. He was leader of the German Catholics who refused to accept the doctrine of the pope's infallibility, and which afterwards founded the Old Catholic sect. Died, 1890.

Dolliver, Jonathan Prentiss, United States senator, lawyer; born near Kingwood, Preston County, W. Va., February 6, 1858; graduated at West Virginia University, 1875; admitted to bar, 1878; established practice in Iowa; member 51st, 52d, 53d, 54th, 55th, and 56th Congresses, tenth Iowa district; appointed United States senator to succeed late Hon. J. H. Gear, August 23, 1900; elected 1902, and reëlected, 1907. He earned a high reputation as an orator and lecturer. Died, 1910.

Doré, Paul Gustave, French painter and book illustrator; was born in Strasburg, in 1833, and educated at a Parisian lycée. He became known by his illustrations of "Rabelais" and "Don Quixote," and for some years was a constant contributor to the "Journal pour Rire." At the time of the Crimean War he produced his "Alma" and "Inkermann"; in 1861, he published the first of his famous illustrations to Dante's "Divine Comedy"; and next his illustrations to the "Bible," "Paradise Lost," "The Ancient Mariner," and "The Idylls of the King." These works secured for him a greater reputation in England than was accorded to him in his native country. He afterwards devoted himself to the production of large pictures on religious subjects, such as "The Dream of Pilate's Wife," "The Entry into Jerusalem," and "Ecce Homo." Died, 1883.

Douglas, Stephen Arnold, an American statesman, was born at Brandon, Vermont, in 1813. His early youth was one of poverty; but he managed to spend three years at the Canandaigua Academy, having the study of law in view. In 1833, he went West and settled in Jacksonville, Ill., where he entered on the practice of law, and was chosen attorney-general of the State. He soon after was elected to the legislature, and in 1840 became secretary of state for Illinois. He was judge of the Illinois supreme court from 1841 to 1843, when he resigned, and was chosen to Congress as a Democrat where he at once became recognized as one of the ablest men of his party. He was opposed to slavery, was strongly opposed to the celebrated Wilmot Proviso, and argued in favor of States rights. Douglas was elected to the Senate in 1847, and it was as a member of the Senate that he introduced, in 1854, the Kansas-Nebraska bill, which provided that their own citizens should determine whether these territories should become free or slave States. In 1860, the Democratic party split into two divisions, one of which nominated Mr. Douglas for president, and the other John C. Breckenridge. The ensuing election resulted in favor of Mr. Lincoln. Mr. Douglas was strongly opposed to secession, and delivered several addresses on the subject after the outbreak of the Civil War. He died at Chicago, Ill., June 3, 1861.

Douglas, William Lewis, ex-governor, manufacturer; born in Plymouth, Mass., August 22, 1845; educated at brief irregular periods in public schools of Massachusetts; when 5 years old lost father by death; at age of 7 went to work for an uncle, who set him to pegging shoes, and except for a brief return to his mother when 11 years old, worked for uncle eight years; worked in cotton mill at Plymouth at 15, and later in factory at Chiltonville, Mass.; afterward went to Hopkinton and South Braintree, Mass., where he learned bootmaking; at Brockton, 1876, began with small shop, from which he has built up a business with combined capacity of over 20,000 pairs of shoes daily, and owns seventy-eight retail shoe stores in large cities selling the "Douglas" shoe. Member Massachusetts House of Representatives, 1884–85, and of Massachusetts Senate, 1887; mayor of Brockton, 1890; elected, November, 1904, governor of Massachusetts. Delegate to Democratic National Conventions, 1884, 1892, 1896, delegate-at-large, 1904.

Douglass, Frederick, American orator; was born in 1817, a mulatto slave in Maryland, but he escaped as a young man, and in 1841 began to deliver lectures against slavery, which attracted much attention. In 1845–47, he made a very successful lecturing tour in England, and, returning to America, he became a newspaper editor. From 1876 to 1881 he was United States marshal for the district of Columbia. Died, 1895.

Doyle, Sir A. Conan, the grandson of John Doyle, the famous political caricaturist "H. B.," was born in Edinburgh in 1859, and educated at Stonyhurst and in Germany. In 1876, he commenced to study medicine at the Edinburgh University, and remained there for five years. From 1882 till 1890, he practiced his profession at Southsea, writing all the while various short stories, some of which have been since published under the title of "The Captain of the Polestar." After "A Study in Scarlet," "Micah Clarke," and "The Sign of Four," came "The White Company," which led to the final abandonment of medicine for literature. "The Adventures of Sherlock Holmes" and "The Memoirs of Sherlock Holmes" formed a brilliant series of detective stories. In 1894, he wrote a short play, "A Story of Waterloo," successfully produced by Sir Henry Irving. "The Exploits of Brigadier Gerard" and "Rodney Stone," in 1896, "Uncle Bernac" in 1897, "The Tragedy of the Korosko," a volume of poems ("Songs of Action") in 1898, "A Duet" in 1899, "The Hound of the Baskervilles" in 1902, "The Adventures of Gerard" in 1903, "Return of Sherlock Holmes" in 1904, "Sir Nigel" in 1906, and "Through the Magic Door" in 1907. He volunteered for service in the Transvaal War, and, in 1900, gave his medical services for some months in the hospitals there, afterwards publishing a history of the war, entitled "The Great Boer War." Knighted, June 26, 1902.

Draco (*drā'kō*) was the first lawgiver of Athens. His code was published in 621 B. C. The laws were severe, and popularly said to have been written in blood.

Drake, Francis, Sir, a distinguished English naval commander, was born in 1540. He circumnavigated the globe under a commission against the Spaniards, destroying many vessels and capturing immense booty in Spanish America. In 1587, he commanded the fleet which destroyed over 100 ships at Cadiz, breaking up a contemplated invasion of England. He was made vice-admiral, and commanded in the battle, in 1588, which destroyed the Spanish Armada. Died, 1596.

Draper, John William (*drā'pur*), an American chemist, physiologist, and author, was born in England, in 1811. He took his degree of M. D. at the University of Pennsylvania in 1836; became successively professor of natural sciences in Hampden-Sidney College, Virginia, and, in 1841, professor of chemistry in New York University, and, in 1850, of physiology. Of his numerous works we may mention "Human Physiology, Statical and Dynamical; or the Conditions and Course of the Life of Man," in 1856; and a "History of the American Civil War," in 1867–70. Died, 1882.

Dryden, John (*drī'dn*), an English poet; was born in 1631. After graduating at Cambridge, he entered upon a literary career, and succeeded Sir William Davenant as poet-laureate in 1670. His "Essay on Dramatic Poesy," according to Dr. Johnson, created the school of English criticism. Dryden, by his dramas and political satires,— especially his "Absalom and Achitophel" (1681) — stands at the head of English poets of the second rank, and his works have elicited high eulogy from such judges as Pope, Scott, Macaulay, and Brougham. Died, 1700.

Dumas, Alexandre, the Elder, a celebrated French author, born in Villers-Cotterets, 1802, son of General Dumas, a Creole; lost his father at four, and led for a time a miscellaneous life, till, driven by poverty, he went to Paris to seek his fortune; there he soon made his mark, and became by-and-by the most popular dramatist and romancer of his time; his romances are numerous, and he reached the climax of his fame by the production of "Monte Cristo" in 1844, followed soon after by the "Three Musketeers"; he was unhappy in his marriage, and with his wife, as afterwards, he squandered his fortune in reckless extravagance; before the end it was all spent, and he died at Dieppe, 1870, broken in health and impaired in intellect, ministered to by his son and daughter.

Dumas, Alexandre, born in 1824; son of the preceding, and, like him, a novelist and dramatist, accom-

panied his father in a voyage to the Mediterranean in 1846, and, in 1848, produced the work which made his reputation — "La Dame aux Camélias," a novel which drew the encomium of his own father. Subsequently his work was chiefly dramatic, and included such plays as the "Demi-Monde," "La Princesse Georges," "Monsieur Alphonse," and "Denise." In 1874, he was admitted as a member to the French Academy. Died, 1895.

Du Maurier, George Louis Palmella Busson, artist and draughtsman; born in Paris in 1834, but educated in London, Belgium, and the Netherlands. For many years a valuable contributor to "Punch," at the same time illustrating many other books and magazines. His mode of satirizing the extravagances of the so-called "Æsthetic" school and other society foibles have procured for him a high reputation. In 1891, he published a novel, "Peter Ibbetson," followed by "Trilby." Died, 1896.

Dunne, Finley Peter, journalist, author; born in Chicago, July 10, 1867; educated in Chicago public schools; entered newspaper life as reporter in 1885; served on various papers; on editorial staff of "Chicago Evening Post" and "Times-Herald," 1892–97; editor of "Chicago Journal," 1897–1900. Author: "Mr. Dooley in Peace and in War," "Mr. Dooley in the Hearts of His Countrymen," "Mr. Dooley's Philosophy," "Mr. Dooley's Opinions," "Observations by Mr. Dooley."

Duns Scotus, born in 1265; divine and writer. Residing in Paris, he occupied there the post of head of the theological schools, and was known as the "Subtle Doctor." He was the first to promulgate the doctrine of the Immaculate Conception. At one time a follower of Thomas Aquinas, he later founded a school of his own in antagonism to the system of Aquinas. Died, 1308.

Duse, Eleonora, Italian actress of the first rank, was born in Vigevano, October 3, 1859. She appeared about 1880, on the Italian, chiefly Roman, stage, as leading lady in the plays of Dumas and Sardou, but afterwards played parts of greater depth. She earned golden opinions by her combined force and gracefulness; in 1892, appeared at Vienna and Berlin; in 1893, at New York, and her recent visits to England have, by a unanimous accord, reaffirmed her triumphs. Although she appears chiefly in grave parts ("Magda," "Nora," "Adrienne Lecouvreur"), her versatility has also allowed her to please in the lighter vein of Dumas's "Francillon," and as the hostess in Goldoni's "Locandiera." More recently she has produced d'Annunzio's "Gioconda" and "Francesca da Rimini."

Dwight, Timothy, born in 1752; American divine, served as army chaplain in the Continental army, and, after working on a farm, was ordained a minister. In 1795, he became president of Yale College. He wrote "The Conquest of Canaan," an epic poem, "Theology Explained and Defended," etc. Died, 1817.

Eads, James Buchanan, born in 1820; American engineer, constructed the steel bridge over the Mississippi at St. Louis (completed, 1874); partly carried out a plan of deepening the Mississippi by means of jetties, and was engaged at his death in planning a ship-canal over the Isthmus of Tehuantepec. Died, 1887.

Early, Jubal A., born in 1816; American general and lawyer, served in the Mexican War, and on the Confederate side in the American Civil War, holding Fredericksburg in 1863 and commanding a division at Gettysburg. He published "Memoirs of the Last Year of the War." Died, 1894.

Eddy, Mary Baker Glover, founder of Christian Science, born in Bow, N. H., 1821; received her education in public schools, in an academy, and under private tutors. She was connected with the Congregational Church until 1866, when she discovered the principles of Christian Science. In 1867 she began to teach them, and in 1879 founded the Church of Christ (Christian Scientist) in Boston, Mass. In 1881 she was ordained to the ministry; in the same year established the Massachusetts Metaphysical College in Boston; and in 1883 started the "Christian Science Journal." Author of "Science and Health, With Key to the Scriptures" (the Christian Science text-book); "Unity of Good"; "No and Yes"; "Rudimental Divine Science"; "Manual of the Mother Church," and other works on related subjects. Mrs. Eddy left her entire fortune to the Christian Science Church, specifying that $100,000 be used for the benefit of indigent, educated, well-qualified persons who desire to enter the Christian Science work, while the residue of her fortune is to be used by the church for furthering the Christian Science movement. Died, 1910.

Edison, Thomas Alva, electrician; was born at Milan, O., February 11, 1847; received some instruction from his mother (Ph. D., Union, 1878); at 12 years of age, became newsboy on Grand Trunk Railway; later learned telegraphy; worked as operator at various places in United States and Canada; invented many telegraphic appliances, including automatic repeater, quadruplex telegraph, printing telegraph, etc. Established workshop at Newark, N. J., removing to Menlo Park, N. J., 1876, and later to West Orange, N. J. Invented machines for quadruplex and sextuplex telegraphic transmission; the carbon telegraph transmitter; the microtasimeter for detection of small changes in temperature; the megaphone; the phonograph; the aërophone; the incandescent lamp and light system; the kinetoscope; also scores of others. Made chevalier, officer, and afterward commander, of Legion of Honor, by French Government; appointed, 1903, honorary chief consulting engineer, Louisiana Purchase Exposition, St. Louis. Invented the kinetophone, 1912; the telescribe, 1915. Made chairman, naval advisory board, 1915.

Edward, the name of ten kings of England. Of them, three belong to the Anglo-Saxon line. Edward I., "the Elder," son and successor of Alfred the Great, crowned 901, died 925. Edward II., "the Martyr," great-grandson of the former, succeeded his father Edgar, 975, and was assassinated by direction of his stepmother Elfrida, 979. Edward III., "the Confessor," who succeeded his half-brother Edmund Ironsides, 1042, died 1066. In the Plantagenet line there were five of the name. Edward I., "Longshanks," who succeeded his father, Henry III., 1272, died in 1307. Edward II., his son, born in Wales, was the first to assume the title of Prince of Wales, since bestowed upon the heir to the throne. He succeeded his father, 1307, and was murdered by Roger de Mortimer, paramour of his queen, Isabella of France, 1327. Edward III., his son and successor, born in 1312, died in 1377. Edward IV., son of Richard, Duke of York, great-great-grandson of Edward III., was born in Rouen, France, 1441, and claimed the throne in right of his mother and as the head of the house of York, in opposition to Henry VI., king de jure, representing the house of Lancaster. The long and bloody civil "Wars of the Roses" ensued, Edward finally vanquishing his enemies. Died in 1483. Edward V., his son and successor, born 1470, was murdered along with his younger brother in the Tower of London, 1483, by order of their uncle, Richard, Duke of Gloucester, afterwards Richard III. In the Tudor line there was but one of the name — Edward VI., only son of Henry VIII. by Jane Seymour, born in 1537. He succeeded his father, 1547, and died in 1553. Edward VII., son of Victoria and Albert Edward, born 1841, died 1910.

Edward "the Confessor" was born about 1004, son of Ethelred the Unready and Emma, daughter of Richard the Fearless, Duke of Normandy; was brought up at the Norman court, and after his accession, on the death of Hardicanute, in 1042, showed a preference for Norman customs and ideas. Outrages were committed with impunity by his Norman favorites, while the English earls, Leofric of Mercia and Godwine of Wessex, were engaged in private quarrels. At last, in 1052, Godwine, who had been outlawed, rose in rebellion, installed Stigand, Archbishop of Canterbury, in place of Robert of Jumièges, who had fled with the other Normans, and during the rest of the reign all real power was in the hands of the House of Godwine. Edward codified the customary law of the Anglo-Saxons, which thus became known as the "laws of King Edward." Died 1066.

Edward I., King of England, born 1239, succeeded his father, Henry III., in 1272. Imbued with high notions of feudal sovereignty, he sought to establish his supremacy throughout the island of Britain. His expeditions against Llewellyn-ap-Gruffydd, Prince of Wales (1282), and his brother, David (1283), resulted in the reduction of the principality, the government of which he settled by the statute of Wales (1284). The struggle between John Baliol and Robert Bruce for the throne of Scotland gave him a pretext for interfering in that country (1290). After vainly endeavoring to maintain Baliol as his vassal, he set to work to conquer Scotland for himself, sending the Earl of Warrenne thither as viceroy, but was forced to contend with a succession of claimants, and died near Carlisle, whilst marching against Robert Bruce. A man of strictly legal, but somewhat narrow mind, he secured order and good government by the Statutes of Winchester and Westminster and other enactments, and carried on Simon de Montfort's work of molding the English Parliament (1295), though, at the same time, somewhat inclined to strain the royal prerogative. His personal character was extremely high. Died, 1307.

Edward VII., King of Great Britain and Ireland, Emperor of India, born November 9, 1841. He studied at Edinburgh, and afterwards attended the public lectures at Oxford and Cambridge. In the summer of 1860 he paid a visit to the United States and Canada. Two years later he traveled in the East and visited

Jerusalem. On March 10, 1863, he married Princess Alexandra of Denmark, the surviving issue being one son and three daughters. Late in 1871, he suffered from a dangerous attack of typhoid fever, and his recovery in February, 1872, was celebrated by a national thanksgiving festival. Between November, 1875, and March, 1876, the prince was engaged in a grand tour of India. He took great interest in exhibitions and institutions, as the Colonial and Indian Exhibitions, the Royal College of Music, and Imperial Institute. Ascended throne, January 22, 1901. Died, 1910.

Edwards, Jonathan, was born at East Windsor, Connecticut, October 5, 1703. He was a celebrated metaphysician and divine, chiefly remembered as the author of a treatise on "The Freedom of the Will." He was the author, however, of several other treatises, especially of one on the "Religious Affections," and of a "History of Redemption," which have been many times republished. At the time of his death he had just been appointed to the presidency of Princeton College, New Jersey. As a preacher, Edwards was especially famous; and, according to some authorities, he ranks by his writings, in the Calvinistic school of theology, amongst the greatest luminaries of the Christian Church. Died, 1758.

Egan, Maurice Francis, educator, author, diplomat, was born in Philadelphia, 1852; graduated at LaSalle College, 1873; A. M., Notre Dame, 1878; Ph. D., Villanova, 1907. Engaged in editorial work, 1877–88; professor of English literature, university of Notre Dame, 1888–95; professor of English language and literature, Catholic University of America, 1895–1907; United States minister to Denmark, 1907–18. Author, editor, and translator of numerous works.

Egmont, Lamoral, Count, Prince de Gavre, Flemish noble, was born in 1522; accompanied Charles V. on his expedition to Africa (1541), and distinguished himself against the French in the battles of St. Quentin and Gravelines. Becoming obnoxious to Philip II., owing to his connection with the Prince of Orange, he was seized and executed by the Duke of Alva, 1568.

Eiffel, Gustave (*ĕf-fĕl'*), an eminent French engineer, born at Dijon, 1832; early obtained a reputation for bridge construction; designed the great Garabit viaduct, and also the enormous locks for the Panama canal; his most noted work is the gigantic iron tower which bears his name.

Einstein, Albert, physicist, was born in Germany, 1874, of Jewish parentage. At the age of 16 he went to Switzerland and became a naturalized citizen. He early displayed a genius for mathematics and became professor of theoretical physics at the Zürich Polytechnic. Shortly before the World War he was called to Berlin to succeed Van't Hoff, the great Dutch physicist, at the Kaiser Wilhelm Academy for Research. After the outbreak of the war he refused to sign the manifesto of the German men of science denying all charges against Germany. At the time of the armistice he signed an appeal in favor of the revolution. Some two years later he removed to the University of Leyden. In 1905 Einstein propounded his first theory of relativity, dealing with physics in general and with light and gravitation in particular. In 1915 he put forward a more generalized theory and proposed three important astronomical tests of its correctness. The results of two of these tests have since confirmed his predictions and have won recognition for his theory by many eminent scientists. Professor Einstein is an ardent Zionist, and, in 1921, visited the United States in behalf of the movement.

Eldon, John Scott, Earl of, was born, 1751, son of a Newcastle coalfitter; after a successful career at Oxford, entered the Middle Temple (1773), and was called to the bar (1776); entered parliament as a supporter of Pitt (1783); became solicitor-general (1788), and as attorney-general (1793) prosecuted Thelwall, Horne Tooke, and other revolutionary agitators. He became chief justice of the Common Pleas in 1799, and was lord chancellor from 1801 to 1806, and 1807 to 1827. He was an unbending Tory, opposing all improvements in the law or constitution. Died, 1838.

Eliot, Charles William, born in Boston, Mass., March 20, 1834; graduated at Harvard in 1853. He taught mathematics and chemistry at Harvard, and in 1863 he went to Europe for study of chemistry and to investigate the educational institutions of that continent. While at Vienna was chosen in 1865 professor of analytical chemistry in Massachusetts Institute of Technology, which post he filled for a period of four years and again went to Europe and spent fourteen months in further investigation, mainly in France. In 1869, Dr. Eliot succeeded Dr. Thomas Hill as president of Harvard College, and continued at its head until 1909. During his administration many notable changes in the government of the college occurred, its scope was broadened and there was a great increase in the number of its professors and students, while its wealth by gifts and benefactions was greatly increased, so that now it more than successfully competes with the great European universities in its curriculum. Mr. Eliot was given the degree of LL. D. by Williams and Princeton colleges in 1869, and by Yale in 1870, and is an honored member of many scientific and literary bodies. Besides numerous addresses, chemical memoirs, and technical investigations, he published in conjunction with Prof. F. H. Storer a "Manual of Inorganic Chemistry," and a "Manual of Qualitative Chemical Analysis." More recently he published "American Contributions to Civilization," "Educational Reform," and "Charles Eliot: Landscape Architect."

Eliot, George, the nom de plume of Marian Evans, the great English novelist. She was born in Warwickshire, England, November 22, 1819. She received a superior education, and became familiar with Latin, German, and the higher mathematics. In 1844–46 she translated Strauss's "Leben Jesu," and later Spinoza's "Ethics," and other works. In 1851 she became assistant editor of the "Westminster Review." At this time she first met George Henry Lewes, and with him she formed a connection, only terminated by his death in 1878. Lewes had been married many years, but his wife proved unfaithful. He condoned her offense by taking her back to his home, and, when she left him finally, he was unable, by reason of the condonation, to secure a divorce under the law of England. Under these circumstances, and after due deliberation, Lewes and Miss Evans decided to live together.

In 1857, the first of the "Scenes of Clerical Life" appeared in "Blackwood," and in 1858 "Adam Bede" was published. This magnificent piece of work at once placed its author in the front rank of living writers. It was followed in succession by "The Mill on the Floss," "Silas Marner," "Romola," and "Felix Holt," the latter appearing in 1866. George Eliot published her first poem, "The Spanish Gypsy," but neither this nor others which followed proved as successful as her prose writings. "Middlemarch," by many considered as even superior to "Adam Bede," was issued in 1871-72, and about five years later appeared "Daniel Deronda," a much inferior work. Mr. Lewes died in November, 1878, and Miss Evans married on May 6, 1880, a stockbroker, named John Cross, a man much younger than herself. Died, 1880.

Elizabeth, Queen of England, daughter of Henry VIII. and Anne Boleyn, was born 1533. Her education was intrusted to the most learned men of the age, and she became an accomplished scholar. During the reign of her sister Mary she was imprisoned for a time in the Tower. On her accession (1558), Mary's enactments in favor of Romanism were abrogated; by the Act of Supremacy the sovereign again became head of the Church, and a form of worship was established which, it was hoped, would conciliate moderate men of all parties. At first the spirit of discontent dared not show itself amidst the general satisfaction. But after the escape of Mary Stuart into England (1568), her presence in the country was a constant source of disquiet. She was the heir to the throne, and as Elizabeth persistently refused to marry, it seemed probable that she would be her successor. The disaffected Papists were further encouraged by the sentence of excommunication pronounced against Elizabeth by the Pope, and by the triumph of their cause abroad; Jesuits from Douay traversed the country in disguise, several plots were formed, and it became necessary to put the penal enactments against Recusants more stringently in force. The Protestantism of the country was acutely aroused, and a strong party in the council urged the queen to put herself forward as the champion of the Reformed faith on the Continent. But Elizabeth chose rather to encourage a feeling of independence and energy at home than to involve England in foreign complications; the prudence and patriotism of her policy were fully proved by the after history of her reign. The growing feeling of nationality proved stronger than the lingering attachment to the old faith, especially after the hopes of the Roman Catholics had been dashed by the execution of Mary (1587), and when Philip of Spain sent his long-projected expedition against England (1588) Papists as well as Protestants came zealously forward in defense of the realm. During the latter part of the reign, the disturbances created by the Puritans foreshadowed the troubles of the opening century. Died, 1603.

Elizabeth, St., of Hungary, was born 1207, a daughter of Andrew II., King of Hungary, and the wife of Louis IV., Landgrave of Thuringia. Left a widow after six years of marriage, and when she was only

twenty years of age, she was deprived of her regency by her husband's brother Henry, and lived for some time in great poverty. Ultimately, the regency was once more offered to her, and her son Hermann was declared heir to the throne; but she preferred henceforth to live in retirement at Marburg, and to devote herself to works of piety under the direction of her confessor Conrad. Died, 1231.

Elliott, Maxine, actress; born in Rockland, Me., 1871; made début with E. S. Willard in small parts; soon after played leading parts in Rose Coghlan's company; was under Augustin Daly's management two seasons; married Nat. C. Goodwin, 1898, with whom she played as co-star in "Nathan Hale"; divorced, 1908; owner and manager of Maxine Elliott's Theater, New York.

Ellsworth, Oliver, jurist, was born in Windsor, Conn., April 29, 1745. He became prominent in State affairs and in the Continental Congress, and was a member of the federal convention of 1787, which prepared the constitution of the United States. It was on his motion that the words "National government" in that organic act were replaced by the definition "Government of the United States." He became United States senator from Connecticut in 1789, and was chairman of the committee which organized the federal judicial system. He led the Federalist party in the Senate, and was an earnest advocate of Jay's treaty with England in 1794. From 1796 to 1800 he was chief justice of the United States Supreme Court, and in 1800 negotiated, with Patrick Henry and Governor Davie, a treaty with France. He afterward served on the governor's council of Connecticut, and in May, 1807, became chief justice of the State Supreme Court. Died, 1807.

Emanuel, Filibert, Duke of Savoy, son of Charles III., born 1528, was commander-in-chief of the imperial troops in Italy against the French, who, on his father's death, seized most of his inheritance; appointed governor of the Netherlands by Philip II. in 1556, he attacked France, winning the battle of St. Quentin, and by the Treaty of Château-Cambresis (1559) recovered his ancestral domains, and married Marguerite, sister of the King of France. He applied himself to the administrative and military organization of his country, and is considered the founder of the Sardinian monarchy. Died, 1580.

Emerson, Ralph Waldo, an American poet and prose writer, born at Boston in 1803. He graduated at Harvard in 1821, for five years taught in a school, and in 1829 became minister of a Unitarian church in Boston, but in 1832 resigned his charge. He spent the greater part of 1833 in Europe, and on his return began his career as a lecturer on various subjects, in which capacity he acted for a long series of years. In 1834 he took up his permanent residence at Concord, Mass., and in 1836 published a small volume called "Nature." He was one of the original editors of the Dial, a transcendental magazine begun in 1840. Two volumes of his essays were published in 1841 and 1844, and his poems in 1846. His miscellaneous addresses had been published in England in 1844, and on visiting Great Britain in 1847 he was welcomed by a large circle of admirers. In 1850, he published "Representative Men"; in 1856, "English Traits"; in 1860, "The Conduct of Life"; in 1869, "May Day and Other Poems"; in 1870, "Society and Solitude"; in 1874, "Parnassus," a collection of poems; in 1875, "Letters and Social Aims." Emerson showed certain similarities with Carlyle, of whom he was a friend and correspondent. Their correspondence appeared in 1883. He was one of the most original and influential writers that the United States has produced. Died, 1882.

Emmet, Robert, Irish revolutionist, born 1778; son of a Dublin doctor; expelled from Dublin University in 1798 owing to his anti-English sympathies; in 1803 led an unsuccessful attack on Dublin Castle; escaped into Wicklow, but was captured and executed, 1803. His fate is the subject of some verses by Moore.

Epictetus, a Stoic philosopher of the 1st century, A. D., born at Hierapolis in Phrygia; was bought as a slave by Epaphroditus, a favorite of Nero. When emancipated he lived at Rome, until banished by Domitian, and then became a teacher at Nicopolis in Epirus. His lectures were transcribed by his pupil, Arrian.

Epicurus, Greek philosopher, was born about 342 B. C. It is doubtful whether his birth occurred before or after his parents' removal from Gargettus, in Attica, to Samos. His youth was spent in that island, whence he removed to Athens, when about eighteen, and afterwards taught at Colophon, Mitylene, and Lampsacus. He returned to Athens about 306, and remained there till his death. He was founder of the Epicurean school, who hold that the *summum bonum* consists in pleasure — chiefly mental pleasure. Died, 270 B. C.

Erasmus, Desiderius, one of the greatest scholars of the Renaissance; born in 1467, at Rotterdam; on his parents' death entered a monastery, which he left to become a teacher at Paris, and, at the invitation of his pupil, Lord Mountjoy, came to England. He settled at Oxford, where he became the friend of More, and studied divinity under Colet, and Greek under Grocyn and Linacre. In 1506 he visited Italy, staying at Bologna and Rome, where he was warmly received, but returned to England, and was made Margaret professor of divinity and professor of Greek at Cambridge. He returned to the Continent, and, after a journey to the Low Countries, settled at Basel, where he published his edition of the New Testament. Erasmus was in favor of moderate reform in the church, as is shown by his "Enchiridion Militis Christiani" and "Encomium Moriæ," but he gave little support to Luther, although he refused to write against him. Died, 1536.

Eric the Red, a Norwegian navigator, who, in 982, located on the island of Iceland. In 983 he sailed from Bredifiord to reach some western shore said to have been visited by one of his countrymen in former times. On the voyage he passed Cape Farewell, and on the coast met with reindeer. He named the country Greenland and the inlet Ericfiord. Returning to Iceland in 985, he interested the people of the island in his discovery, and with twenty-five sail set out for the voyage. Some of the ships were lost in a storm, and others were driven home; but he succeeded in reaching the Greenland coast with fourteen, and located on the fiord, at some distance from the ocean, where there were grass and trees. About twelve years later his son Lief is said to have discovered the continent of North America, which he called Markland and Vinland.

Ericsson, John, engineer, born in Lanzbanshyttan, Sweden, July 31, 1803. At the age of twelve he became cadet of engineers, and at seventeen entered the Swedish army; in 1827 he was promoted captain. In 1828 he constructed a flame engine, and went to London to introduce it, resigning his captaincy in the army. He also produced in succession an instrument for sea-sounding, a hydrostatic weighing machine, and a tubular steam boiler, besides other important devices. In 1833 he constructed the caloric engine, and in 1853 the ship "Ericsson," of 2,000 tons, propelled by this motor. In 1836 Ericsson invented and patented the screw propeller, and in 1839 he came to the United States, where, in 1841, he designed for the government the screw-propelled war ship "Princeton." This was the pioneer screw war ship; she carried a twelve-inch wrought-iron gun, designed by Ericsson, and a wrought-iron gun carriage, which took up the recoil without breaking. In 1861 he built for the United States Government, in 100 days, the iron-clad "Monitor," which, on March 9, 1862, in Hampton Roads, defeated the Confederate iron-clad ram "Merrimac." In 1881 he built for the United States a vessel called the "Destroyer." His later scientific investigations included computations of the influences that retard the earth's rotary motion, and the intensity of solar heat. Died, 1889.

Erskine, Thomas, Lord, born in 1750; son of the tenth Earl of Buchan; after serving in the army and navy, was called to the bar in 1778, and soon won renown as an advocate by his defense of Lord Keppel and of Lord George Gordon. A strong Whig, he acted for the defense in the political trials of the time, giving his aid to Horne Tooke, Thelwall, and Tom Paine; his defense of the last cost him the post of attorney-general to the Prince of Wales. He was now regarded as the defender of popular liberties and constitutional rights. From 1790, he sat in parliament as a supporter of Fox; in 1806, became chancellor under him, and was raised to the peerage. Henceforward he took little part in politics, but vigorously supported Queen Caroline in 1821. Died, 1823.

Estaing, Charles Hector, Count d', born in 1729; French admiral; after serving in the army in India, under the Marquis de Bussy, and being made prisoner at the siege of Madras, entered the navy, and led an expedition to Sumatra, capturing several English forts. Placed in command of a squadron sent to aid the United States against England, he captured the Isle of Grenada, but ultimately met with reverses, and returned to France in disgrace. He was guillotined during the Revolution in 1794.

Euclid of Alexandria, a celebrated geometrician. Little is known of his life. According to Proclus, he lived from 328 to 283 B. C., and was one of the Platonic school. He is said to have written other works besides the "Elements of Geometry."

Eugéne, François, Prince of Savoy; born in 1663, son of Eugène Maurice, Count of Soissons; joined the Austrian service; distinguished himself against the

Turks in 1683, and was present at the siege of Belgrade, in 1688. After serving against the French, and defeating Catinat in Italy, he overthrew the Turks at Zenta. Again opposed to the French in the War of Succession he captured Villeroi at Cremona, and joined Marlborough in 1704, taking part in the battle of Blenheim. He then went to Italy, and was defeated at Cassano (1705), but soon afterwards gained a victory, and relieved Turin. In 1708, he joined Marlborough in Flanders, and was present at Oudenarde and Malplaquet. He again distinguished himself against the Turks at the battles of Peterwaradin and Belgrade. Died, 1736.

Euler, Leonhard, mathematician; born in Basel in 1707; was invited by Catherine II. to Russia in 1727, and taught mathematics at Petrograd. In 1741, he went to Berlin, but returned to Petrograd in 1766. His writings are numerous and valuable. Died, 1783.

Euripides, Greek tragedian; born in Salamis in 480 B. C.; rival and contemporary of Sophocles, and friend of Socrates; studied under Anaxagoras, and produced his first tragedy in 455. He sought in Macedonia a refuge from the satire of Aristophanes. Among his works are the "Alcestis," "Hecuba," and "Medea." Died, 406 B. C.

Eusebius (*ū-sē'-bē-us*), **Pamphili,** a celebrated divine honored with the title of "Father of Ecclesiastical History," was born in Cæsarea in 264. He was bishop of his native city from 313 till his death, about 340.

Eustachio (*ūs-tăsh'e-ō*), **Bartolommeo,** an Italian physician of the Sixteenth Century, settled in Rome, and made several anatomical discoveries, among others those of the tube from the middle ear to the mouth, and a valve on the wall of the right auricle of the heart, both called "Eustachian" after him.

Evans, Robley Dunglison, officer of United States Navy; born in Floyd County, Va., August 18, 1846; educated in public schools of Washington; appointed to the United States Navy for Utah, September 20, 1860; graduate of United States Naval Academy, 1863; rear admiral, February 11, 1901. During the Civil War he participated in both attacks on Fort Fisher January 15, 1865, and in land attack received four severe rifle-shot wounds. When in command of the "Yorktown" at Valparaiso, Chile, 1891, during period of strained relations between Chile and United States, his actions in connection with various incidents earned him his popular name of "Fighting Bob." In war with Spain, commander of "Iowa" in Sampson's fleet off Santiago, taking active part in battle with Cervera's fleet, July 3, 1898; was president of Board of Inspection and Survey; commander-in-chief at Asiatic Station, 1902–04, and in command of the Asiatic expedition, 1908. Author: "A Sailor's Log." Died, 1912.

Everett, Alexander Hill, an American litterateur and diplomatist, was born in Massachusetts in 1792, and died while commissioner to China, in 1847. He was minister to Russia, Holland, and Spain.

Everett, Edward, born in 1794; American author and statesman, brother of the preceding; became professor of Greek at Harvard in 1815; traveled in Europe from 1815 to 1818; became editor of the "North American Review," and was a member of Congress from 1824 to 1834; governor of Massachusetts from 1835 to 1839; and from 1840 to 1845, minister-plenipotentiary to England, in which capacity he succeeded in adjusting several delicate matters. He became secretary of state in 1852, and was elected to the senate in 1853. He wrote "The Dirge of Alaric the Visigoth" (a poem), lives of Washington and General Stark, and other works, but was best known as an orator. Died, 1865.

Ezekiel (*e-zē'-ke-el*), one of the four great Hebrew prophets, was the son of Buzi, and one of the sacerdotal race. He was carried to Babylon as a captive by Nebuchadnezzar, 598 B. C. Favored by the Almighty with the gift of prophecy, he soothed, and comforted, and admonished his countrymen, till at length he was stoned to death by order of the Babylonian authorities.

Fabius, Maximus Quintus, born about 275 B. C.; Roman general. He was surnamed "Cunctator" because, having, in 217 B. C., been appointed dictator for the second time and entrusted with the defense of Italy against the victorious Hannibal, he pursued a course of cautious and patient generalship, never risking a general engagement with his opponent, but cutting off his supplies, and gradually wearying him out, and meeting with signal success. Before his appointment to the dictatorship, he was five times consul. Died, 203 B. C.

Fahrenheit, Gabriel Daniel, born in 1686; Prussian experimental philosopher; after traveling in England, Germany, and France, settled in Holland. In 1720, it occurred to him to use quicksilver instead of spirits of wine in the construction of thermometers. By this substitution the accuracy of the instrument was greatly enhanced. In 1724, he was elected a Fellow of the Royal Society of London, and in the "Philosophical Transactions" of that year there appeared several papers from his pen. Died, 1736.

Fairbanks, Charles Warren, vice-president of the United States; born on a farm near Unionville Center, Union County, O., May 11, 1852; graduate of Ohio Wesleyan University, Delaware, O., 1872; admitted to Ohio bar, 1874, and established practice at Indianapolis. Was Republican caucus nominee for United States senator, 1893, but defeated by David Turpie, Democrat. Appointed, in 1898, member of Joint High British-American Commission, and chairman of American commissioners. Elected United States senator from Indiana, 1897, and reëlected in 1903; vice-president, 1905-09; again nominated by Republicans, 1916. Died, 1918.

Fairfax, Thomas, Lord, an English parliamentarian general, was born in Yorkshire, in 1612. After serving with distinction in the Low Countries, Lord Fairfax was declared general-in-chief of the parliament army at the opening of the civil war, in 1642, and again in 1645. He distinguished himself in most of the great battles and sieges of that struggle, and after its close refused to act as one of the judges of Charles I. In 1659, Lord Fairfax used all his influence with the army to promote the restoration of Charles II. Died, 1671.

Falconio, Diomede, cardinal, was born in Pescocostanzo, Italy, 1842. He entered the Franciscan order, 1860, finished his novitiate, 1865; was sent to the United States as a missionary, and, 1866, was ordained priest. In 1866 he became professor and vice-president of St. Bonaventure's College, Allegany, N. Y., and in 1867 president of the college and seminary. After serving, 1872–82, as adminstrator of the cathedral at Havre de Grace, Newfoundland, he returned, 1883, to Italy. He was twice elected provincial of the Franciscans and at various times served also as commissary, visitor general, synodical examiner, and procurator general of the order. In 1892 he was made bishop of Lacedonia and in 1895 archbishop of Acerenza and Matera. He was apostolic delegate to Canada, 1899–1902, and to the United States from 1892 until 1911, when he was made cardinal. Died, 1917.

Faraday (*făr'ah-da*), **Michael,** one of the most eminent of English chemists and physicists, was born in Surrey, in 1791. In 1833, he became professor of chemistry in the Royal Institution, London, where his lectures attracted the admiration of European and American savants. Faraday's great fame rests principally upon his discoveries in electricity and electro-magnetism. Of the latter science he may truly be termed the founder. His writings include numerous researches in physics and chemistry. Died, 1867.

Farragut, David Glasgow, a famous American admiral, of Spanish extraction; born at Knoxville, Tennessee, 1801; entered the navy as a boy; rose to be captain in 1855, and at the outbreak of the Civil War attached himself to the Union; distinguished himself by his daring capture of New Orleans; in 1862 was created rear-admiral, and two years later gained a signal victory over the Confederate fleet at Mobile Bay; was raised to the rank of admiral in 1866, being the first man to hold this position in the American Navy. Died, 1870.

Farrand, Livingston, educator, was born in Newark, N. J., 1867. He was educated at Princeton University, A. B., 1888, A. M., 1891, and at the College of Physicians and Surgeons, Columbia University, M. D., 1891; studied also at Cambridge, Eng., 1891–92, and at Berlin, 1892–93. He was instructor in psychology, 1893–1901, adjunct professor of same, 1901–03, and professor of anthropology, 1903–14, at Columbia University. During 1914–19 he was president of the University of Colorado, and 1919–21, was chairman of the Central Committee of the American Red Cross. In 1921 he was chosen president of Cornell University.

Fénelon (*fĕn'-a-lŏng*), **François de Salignac de la Mothe,** an eminent French divine and writer; was born in 1651, and died in 1715.

Ferdinand I., "the Great," King of Castile, of Leon and Galicia; was the second son of Sancho III., King of Navarre and Castile, and succeeded to the latter kingdom in 1037. He was one of the most powerful monarchs of his age, and disputed with Henry III. of Germany for the imperial crown. Died, 1065.

Ferdinand V. of Castile, III. of Naples and II. of Aragon and Sicily, surnamed "the Catholic." He was the son of John II., and succeeded his father on the throne of Aragon and Sicily in 1466. In 1469 he was married to Isabella, sister of Henry IV. of Castile, and in 1479 became, through her, King of Castile, Isabella

sharing with him the royal dignity. The reign of Ferdinand and Isabella was signalized by the discovery of America by Columbus. Ferdinand died in 1516.

Field, Cyrus W., an American merchant; was born in Stockbridge, Mass., in 1819. Was the original organizer of the Atlantic Telegraph Company, 1856-66, which succeeded in establishing telegraphic communication between the United States and Europe. Died, 1892.

Field, David Dudley, born in 1805; American jurist, and brother of Cyrus Field and Stephen Field; was, in 1857, appointed to draw up a political, civil, and penal code, of which parts have been adopted by several of the States. To him is due the formation of an association for the reform of the law of nations, and for the adoption of arbitration in place of war. Died, 1894.

Field, Eugene, American poet and journalist; born at St. Louis, Mo., 1850. He entered journalism at the age of twenty-three, ten years later becoming editor of the "Sharps and Flats" column of the "Chicago Daily News." His humorous sayings therein during the following decade established his reputation in newspaper work. He was an author and poet of rare sympathy, his poems of childhood exhibiting fine qualities of appreciation and power of expression, and gaining for him the title, "The Child's Poet." Among his works are: "The Denver Tribune Primer," "Culture's Garland," "Love Affairs of a Bibliomaniac," "Little Book of Western Verse," "With Trumpet and Drum." He died in 1895.

Field, Marshall, merchant; born in Conway, Mass., in 1835; spent boyhood on farm; studied at academy until 1852; dry goods clerk, Pittsfield, Mass., 1852-56; in Chicago, 1856-60; junior partner, 1860-65, then senior partner in house, which became, 1865, Field, Palmer & Leiter. Potter Palmer retired, 1867, and Levi Z. Leiter, 1881, Field becoming head of Marshall Field & Company, now having the largest wholesale and retail dry goods business in the world. Founded, with gifts of $9,000,000, the Field Columbian Museum of Chicago. Died in 1906, leaving an immense fortune.

Fielding, Henry, the father of English fiction, and one of the most illustrious prose-writers in the language; was born in Somersetshire, in 1707, of a noble family allied to the imperial house of Austria. After dissipating a handsome fortune, Fielding launched into authorship, and in 1742 produced his "Joseph Andrews," a sparkling satire upon the characteristics of the Richardsonian school of fiction. In 1749 the novel of "Tom Jones" appeared like a comet in the literary world. "Amelia" followed, in 1751, to entrance the minds of such critics as Burke, Gibbon, and Dr. Johnson. Died in Lisbon, 1754.

Fillmore, Millard, American statesman; born in Summerhill, N. Y., in 1800; was apprenticed to a wool carder, but became a clerk in a judge's office, and was admitted to the bar. He entered Congress in 1832, was appointed chairman of the committee of ways and means in 1840, and was author of the tariff of 1842. He was elected vice-president of the United States in 1848, and succeeded to the presidency on the death of Taylor in 1850. By signing the act for the surrender of fugitive slaves he brought about the utter defeat of the Whig party in 1852. Died, 1874.

Firdausi (*fur-dou'se*), or **Firdusi,** the most eminent of Persian poets, was born in Khorassan, about A. D. 940. During his lifetime his fame filled the East, and he was the recipient of great honors from the Sultan Mahmud. His chief poem, the "Shah-Namah," or "Book of Kings," has been termed by Sir William Jones "a glorious monument of Oriental genius and learning." Died, about 1020.

Fisher, Harrison, illustrator, born in Brooklyn, July 27, 1876; educated in San Francisco; recent books illustrated by him: "The Market Place," by Harold Frederic; "Three Men on Wheels," by Jerome K. Jerome; "The Eagle's Heart," by Hamlin Garland; now illustrating "The Saturday Evening Post," "McClure's Magazine," "Life," "Puck," "Ladies' Home Journal," "Scribner's." Author: "The Harrison Fisher Book."

Fiske, John, philosopher and historian, was born at Hartford, Conn., 1842. He graduated from Harvard, 1863; from Harvard law school, 1865; was made lecturer on philosophy at Harvard, 1869, and instructor in history, 1870. In his early career he won international reputation by his luminous writings on evolution, among which were "Outlines of Cosmic Philosophy", "Myths and Mythmakers", "The Destiny of Man", and "The Idea of God". During later life he produced a long series of valuable works on American history, including "The Discovery of America", "The Beginnings of New England", "New France and New England", "Old Virginia and Her Neighbors", "The American Revolution", "The Critical Period of American History", and "The Mississippi Valley in the Civil War". Died, 1901.

Fiske, Minnie Maddern, actress, born in New Orleans, in 1865; appeared in child's part when 3 years old; at 12 was alternately playing leading rôles and old women parts, and at 15 became a star, under name of Minnie Maddern. Retired, about 1890, for five years; married Harrison Grey Fiske, journalist and playwright, 1890, in whose "Hester Crewe" she returned to the stage. Among well-known plays in which she has acted successful rôles are: "A Doll's House," "Tess of the D'Urbervilles," "Little Italy," "Frou Frou," "Magda," "Becky Sharp," "Rosmersholm," and "Leah Kleschna."

Fitch, William Clyde, American author and playwright, was born in New York, 1865; graduated from Amherst college, 1886, and immediately devoted himself to dramatic writing. He was the author of about forty plays, of which some of the best known are: "Nathan Hale," "Barbara Frietchie," "The Climbers," "The Stubbornness of Geraldine," "The Girl with the Green Eyes," "Beau Brummell," "The Moth and the Flame," "The Cowboy and the Lady," "The Way of the World," "Betty's Finish," "The Last of the Dandies," "A Modern Match," "Her Own Way," "The Truth," "The Straight Road," and "The City." Died, 1909.

Fletcher (*flĕch'ur*), **John,** an English dramatist, whose name is inseparably associated with that of his friend and coworker, Francis Beaumont; was born in Northamptonshire, in 1579. His plays, such as "The Scornful Lady" and "Rule a Wife and Have a Wife," were during two centuries the delight of the stage. Died, 1625.

Flint, Austin, physiologist, was born in Northampton, Mass., 1836; removed to Buffalo, N. Y., in infancy; was educated in private schools and at Harvard. He studied medicine at Louisville, 1854-56, and graduated from Jefferson medical college, 1857. After practising in Buffalo, 1857-59, he removed to New York. He was one of the founders of Bellevue Hospital medical college in which he was professor of physiology, 1861-98. From 1898 to 1915 he was professor of physiology at Cornell University medical college. He conducted many valuable investigations and wrote numerous works on physiology and other medical subjects. Died, 1915.

Foch (*fŏsh*), **Ferdinand,** generalissimo of the allied armies, was born at Tarbes, Hautes-Pyrénées, France, of Basque-Alsatian parentage, 1851. He joined the French Army in 1870 and fought in the war against Prussia. In 1898 he was appointed lieutenant-colonel and professor of strategy and tactics in the war college. In 1905 he was made regimental commander of artillery, and in 1910 commandant of the war college. In the early stages of the invasion of France in 1914, Foch stopped the great German drive toward Calais, and later won the victories of Ypres and La Bassée. The plan whereby Joffre defeated the German armies in the great battle of the Marne was largely due to Foch, who came to be regarded as the master tactician among the allied commanders. On March 26, 1918, following the gigantic German attacks which drove back the allied line in Picardy, jeopardizing Paris and Calais, Foch was placed in supreme command of the allied armies. Holding the enemy's powerful thrusts to local gains, he organized for the counter-offensive. On July 18 he inflicted a stunning defeat upon the Germans, blocking their fifth great drive of the year, and began a campaign of continuous attack against all the Teutonic allies. His consummate ability as a strategist was shown in an uninterrupted series of victories on all fronts. By well-timed offensives, the military power of Bulgaria, Turkey, and Austria was crushed. Under relentless pressure, the great German army, beaten in every important battle, was practically driven out of France. To escape the impending annihilation of her forces, Germany, on Nov. 11, 1918, signed an armistice, surrendering enormous war supplies and yielding the military occupation of the Rhine. In recognition of his distinguished services Foch was created marshal of France.

Folk, Joseph Wingate, ex-governor, born in Brownsville, Tenn., October 28, 1869; graduate of Vanderbilt University; admitted to bar, 1890; circuit attorney, St. Louis, 1900-04; prosecuted numerous bribery cases; governor of Missouri, 1905-09; solicitor for U. S. dept. of labor, 1913-14; chief counsel for Interstate commerce commission since March, 1914.

Foraker, Joseph Benson, United States senator, 1897-1909; born July 5, 1846, on farm near Rainsboro, Highland County, Ohio. Enlisted July 14, 1862, in the 89th Ohio volunteer infantry, and served to end of war becoming first lieutenant and brevet captain; graduated at Cornell, 1869; admitted to bar and began practice at Cincinnati, 1869. Judge Superior Court, Cincinnati, 1879-82; resigned on account of ill-health; Republican candidate for governor of Ohio, 1883; defeated, but elected governor in 1885 and 1887; again defeated, 1889, for same office; chairman

Republican conventions, Ohio, 1886, 1890, 1896, 1900; delegate-at-large from Ohio national Republican conventions, 1884–1904; in conventions of 1892 and 1896, served as chairman committee on resolutions, and as such reported the platform each time to the convention; presented name of William McKinley to the conventions of 1896 and 1900 for nomination to the presidency. He was elected to the United States Senate in 1896, re-elected in 1902, and served until 1909. Died, 1917.

Ford, Henry, noted American manufacturer, was born at Greenfield, Mich., 1863. After attending the district schools, he learned the machinist's trade. He located in Detroit in 1887, and later became chief engineer of the Edison illuminating company. In 1903 he organized and became president of the Ford motor company which he developed into the largest automobile manufacturing concern in the world. In 1916 his establishment produced 533,921 cars, with sales amounting to $206,000,000, yielding a net profit of almost $60,000,000. More than 34,000 workmen were employed in the Detroit factories, and the total number of employees, including those at branch plants was about 50,000. In 1917 Ford placed his immense establishment at the disposal of the United States government for the construction of war materials. During 1921 the total production of the Ford manufacturing plant exceeded 1,000,000 auto-vehicles, including automobiles, motor trucks, and tractors.

Forrest (*fŏr'rĭst*), **Edwin,** an eminent American tragedian; born in Philadelphia in 1806; was the patriarch of his country's stage, having performed with distinguished merit for two generations, both in the United States and in England. In the parts of "Richard III.," "Macbeth," and "Othello," his acting was of the highest order. Died, 1872.

Foster, John Watson, diplomat, was born in Pike County, Ind., 1836; graduated from Indiana state university, 1855; admitted to the bar; was minister to Mexico, 1873–80, to Russia, 1880–81, to Spain, 1883–85; secretary of state, United States, 1892–93; agent for United States in Bering Sea arbitration, at Paris, 1893; member Anglo-Canadian commission, 1898; agent for United States, Alaskan Boundary tribunal, London, 1903. Author of "A Century of American Diplomacy." Died, 1917.

Fox, Charles James, statesman; born in Westminster in 1749; was the third son of Henry Fox, Lord Holland. Educated at Eton and at Hertford College, Oxford, he entered parliament at the age of 19 as member for Midhurst, and, having immediately made his mark as a debater, became a lord of the admiralty, and was in 1773 nominated lord of the treasury. He soon, however, quarreled with Lord North. In 1782, Fox became secretary of state under Lord Rockingham, but on the latter's death (in the same year), refused to serve under Lord Shelburne. His name was struck off the list of privy councilors, and in 1797 he retired from parliamentary life to superintend the education of his nephew, Lord Holland, and to write the "History of the Reign of James II." When his great rival, Pitt, formed his last administration, he wished Fox to join it, but the king gave a steady refusal. On Pitt's death, in 1806, the king was obliged to admit him to office, and Fox became foreign secretary in Grenville's ministry of "All the Talents." But the term of his life had nearly run out, and he had no time to realize the high expectations of his followers. His last motion in parliament was directed against the slave trade, and he died (at Chiswick in 1806) within a few months of the measure founded upon it being passed into law. He was admittedly the first orator of his time; he was also a man of wide reading, and he showed himself equal to sacrifices to principle such as few statesmen have cared to make.

Fox, George, founder of the Society of Friends; was born in County Leicester, England, in 1624. Early adopting the peculiar tenets and manners known as Quakerism, he suffered for many years continual persecution. In 1671, he sailed for the West Indies and the American Colonies, to propagate the doctrines of the sect he had originated; and on his return to England, in 1673, he was again imprisoned, but soon released through the influence of William Penn. After the accession of William III. to the throne, the public worship of the Society of Friends became tolerated and legalized. Died in London in 1691.

Francis Joseph Charles, Emperor of Austria and King of Hungary; born in 1830; was the son of the Emperor Francis I., and nephew of the Emperor Ferdinand I. The revolution of 1848 compelled Ferdinand to abdicate, and his brother resigning his claims to the throne in favor of his own son, the latter was at the early age of 18 called to rule an empire shaken by civil war. He took part in the campaign against the Hungarians, and was present at the capture of Raab in June, 1849. Restored to the mastery of his dominions, he proceeded to undo the work of 1848. The Hungarian constitution was suspended, the absolute authority of the Habsburg monarchy in the Austrian dominions proclaimed, and the imperial ministers were declared responsible only to the emperor. The absolute régime was maintained during the first ten years of his reign, though his own sentiments inclined to a more liberal rule. It was not till Austria had sustained severe reverses abroad that the system fell. The demand of Napoleon III. that the question of the Lombardo-Venetian states should be referred to a European conference being refused, war was declared. The Austrians were defeated at the battle of Solferino on June 24, 1859, and the emperor was compelled to sign the treaty of Villafranca, by which all claims to Lombardy were resigned. A dispute between Austria and Prussia as to Schleswig-Holstein led to war between the two nations in 1866. Here again the Austrians were completely defeated, and were compelled to accept the North German Confederation under the leadership of Prussia, and to give up Venice to Italy. After these disasters the emperor restored national self-government to Hungary, and in June, 1867, was declared king of that country. After these events the emperor's influence in foreign politics was chiefly directed to forming a closer alliance with Germany and Italy. In 1878, the treaty of Berlin allowed Austria to occupy Bosnia and the Herzegovina. In 1887 the emperor took part in a series of military councils held to provide for the defense of Galicia against Russia. By the suicide of the Crown Prince Rudolph in 1889, he was deprived of all hope of a direct successor, and his nephew, Francis Ferdinand, became the heir-apparent. The assassination of Francis Ferdinand at Serajevo, Bosnia, June 28, 1914, precipitated the great European War. After a notable reign of 68 years, Francis Joseph died at Schönbrunn, Nov. 21, 1916, and the crown passed to his grand-nephew, Charles Francis Joseph.

Franklin, Benjamin, born in 1706; statesman, philosopher, and publisher; was the fifteenth of seventeen children of a soap-boiler of Boston, Mass. Quarreling with his brother, he went to Philadelphia almost penniless. Here, in 1729, he purchased the "Pennsylvania Gazette," formed a club called "The Junto," and began to acquire political influence. He was chosen clerk of the provincial assembly in 1736, and in 1753 became postmaster-general for British North America. In 1754, when a rupture with France was expected, he sat as a delegate in the Congress at Albany, and in 1756 for a third time held a military command. In 1757 he was sent to England as agent for Pennsylvania, and his reputation as a practical philosopher having preceded him, he was received with great respect, Edinburgh, Oxford, and St. Andrews conferring upon him the degree of doctor of laws. In 1764 he revisited England as colonial agent, and was mainly instrumental in securing the repeal of the stamp act. When the rupture with England took place he was elected a member of the American Congress, signed the Declaration of Independence, and subsequently aided in framing the Constitution of the United States. In 1776 he was appointed ambassador to France, and held the post until 1785. He returned to America to assume the office of governor of Pennsylvania, to which he was twice re-elected, retiring from public life in 1788. Among his scientific discoveries was the identity of lightning with electricity, which he demonstrated by his famous kite experiment. Died, 1790.

Frederick II., usually called "the Great," was born in 1712; was King of Prussia from 1740 to 1786. During his reign the power of Prussia was greatly extended. The Seven Years' War (1756–63), in which he took part with England, secured to him a decided influence in the affairs of Europe, and added Silesia to his dominions; in 1772 he shared in the partition of Poland, and obtained as his portion all Polish Prussia and a part of Great Poland; and, in 1779, by the Treaty of Teschen, he obtained Franconia. Thus, at his death, his kingdom was one-half larger in area than it had been at his accession; his army was as well organized as any in Europe; and the internal affairs of the country were directed by him with vigor, and, on the whole, with prudence. He was in many respects one of the greatest figures in modern history. The "History of Friedrich II. of Prussia, commonly called Frederick the Great," by Thomas Carlyle, brings out clearly and forcibly the good and the bad sides of his character. Died, 1786.

Frederick Charles, Prince of Prussia, born in 1828; known as the "Red Prince" from the color of his favorite hussar uniform; was the eldest son of Prince Charles, brother of the German Emperor William, his mother being a sister of the Empress Augusta. He served in the first Schleswig-Holstein War, and, having become a

general of cavalry, with command of the third army corps, he commanded the right wing of the Prussian army during the Danish War of 1864. In the Austrian War of 1866, he commanded the first army, and to him the crowning victory of Sadowa was mainly due. In the Franco-German War he commanded the second army, which he led to victories at Thionville, Gravelotte, and St. Privat, and thus blockaded Bazaine in the entrenchments of Metz. After Bazaine's surrender, with 170,000 men, the prince hastened westward to check the other French forces in their attempts to relieve Paris. After a series of battles, the French army of the west was finally crushed at Le Mans. Died, 1885.

Freeman, Edward Augustus, born in 1823; an eminent historian, educated at Trinity College, Oxford. His first work was a "History of Architecture" (1849). After several minor works, his most important one on the "History of the Norman Conquest" appeared between 1867 and 1879, and was followed by that of "The Reign of William Rufus and Accession of Henry I." He also wrote histories of the "Saracens" and of the "Ottoman Power in Europe," and various other works, some of a more popular character, besides many articles and reviews. In 1884, he was appointed Regius professor of Modern History at Oxford. Died, 1892.

French, Daniel Chester, sculptor; born in Exeter, N. H., April 20, 1850; educated in Exeter, N. H.; Massachusetts Institution of Technology, Boston, one year; A. M., Dartmouth College; studied in Boston and in Florence, Italy; had studio in Washington, 1876–78; in Boston and Concord, Mass., 1878–87; and in New York, since 1887. Among his best known works are "The Minute Man of Concord," at Concord, Mass.; a statue of General Cass, in the capitol at Washington; statue of Rufus Choate, Boston courthouse; John Harvard, at Cambridge, Mass., and Thomas Starr King statues; "Dr. Gallaudet and His First Deaf-Mute Pupil," the Milmore Memorial; and colossal "Statue of the Republic," at World's Columbian Exposition. Received medal of honor, Paris Exposition, 1900.

French, Sir John, British general, was born at Ripple Vale, Kent, 1852. After first serving in the navy, he entered the army in 1874. He took part in the Sudan campaign, 1884-85, was commander of the 19th Hussars, 1889-93, and became staff adjutant. In 1899 he was promoted major-general of cavalry in Natal. In 1900 he became lieutenant-general in command of the cavalry in the Boer war. He directed the Colesberg campaign, 1899-1900, and the cavalry operations leading to the relief of Kimberley and the capture of Bloemfontein and Pretoria. He was advanced to the rank of general in 1907, and was made field-marshal in 1913. As commander of the British forces in France, 1914-15, he conducted the heroic retreat from Mons and contributed brilliantly to the German defeat at the battle of the Marne. In December, 1915, he was made commander-in-chief of the armies in the United Kingdom and created viscount.

Frick, Henry Clay, manufacturer; born in West Overton, Pa., December 19, 1849; began life as a clerk for his grandfather, a flour merchant and distiller; later embarked in small way in coke business. Later he became president and in 1897 chairman of board of directors of H. C. Frick Coke Company, the largest coke producer in the world, operating nearly 40,000 acres of coal and 12,000 coke ovens, with daily capacity of 25,000 tons. He attracted public notice by his vigorous management during the famous strike at Homestead, 1892, when he was shot and stabbed by one of the strikers. Chairman of board of Carnegie Bros., 1889-92, and became chairman of board of the Carnegie Steel Company in 1892; also connected with numerous other enterprises. Died, 1919.

Froebel (*frö'bĕl*), **Friedrich,** the founder of the famous kindergarten system, was a devoted German educationist on the principles of Pestalozzi, which combined physical, moral, and intellectual training, commencing with the early years of childhood. Born, 1782; died, 1852.

Froude (*frood*), **James Anthony,** an English essayist and historian, was born in Devonshire, in 1818, and educated at Oxford. In 1849 appeared from his pen that remarkable book, "The Nemesis of Faith." His reputation, however, rests chiefly on his "History of England from the Fall of Wolsey to the Defeat of the Spanish Armada." Died, 1894.

Fuller, Melville Weston, chief justice of the United States, was born in Augusta, Me., February 11, 1833. He was graduated from Bowdoin College in 1853, and attended a course of lectures at Harvard Law School. He was admitted to the bar, 1855; formed a law partnership at Augusta; was associate editor of "The Age," a Democratic paper there, president of the common council, and city solicitor. Went to Chicago in 1856, and practiced law until 1888. Was member of the Illinois State Constitutional Convention, 1862, and of the legislature, 1863–65. Chief Justice of the United States, from 1888 to 1910. Died, 1910.

Fulton, Robert, an American engineer, was born in Pennsylvania in 1765; began life as a miniature portrait and landscape painter, in which he made some progress, but soon turned to engineering. He was one of the first to apply steam to the propulsion of vessels, and devoted much attention to the invention of submarine boats and torpedoes. In 1807 he built the steamboat "Clermont" to navigate the Hudson river, making a speed of five miles per hour between New York and Albany. Died, 1815.

Funston, Fred, American general, was born at New Carlisle, O., 1865. He graduated from Iola, Kan., high school and studied two years in Kansas state university, Lawrence. He was newspaper reporter, Kansas City, 1890; botanist in United States Death Valley expedition, 1891; commissioner for department of agriculture to explore Alaska and report on its flora, 1893; camped on the Klondike in winter of 1893-94; floated down Yukon, alone, in a canoe; joined insurgent army in Cuba, 1896; served eighteen months; was wounded; returned to United States; commissioned colonel of 20th Kansas volunteers, 1898; went to Philippines and took part in several battles. For crossing Rio Grande river at Calumpit on small bamboo raft in face of heavy fire and establishing rope ferry, by means of which the United States troops were enabled to cross and win the battle, he was promoted to brigadier-general of United States volunteers, 1899. He organized and led the expedition resulting in the capture of Aguinaldo, head of the Filipino insurrection, and was appointed brigadier-general of United States army, 1901. When commanding the department of California, with headquarters at San Francisco, he performed valuable services for the city during the earthquake-fire, 1906. He commanded the military occupation of Vera Cruz, Mexico, and was made major-general, 1914. In 1916 he was appointed to chief command of the United States forces on the Mexican border. Died, 1917.

Gainsborough (*gānz'bro*), **Thomas,** an English painter, born in Sudbury in 1727, was the first great landscapist of the English school. His works, highly prized by collectors, excel in richness of coloring and vigor of chiaroscuro. Died, 1788.

Galen, or **Galenus, Claudius,** born in Pergamus, in Mysia, about A. D. 130; a very celebrated physician, who practiced first in his native city, and afterwards in Rome, where he attended the emperors Marcus Aurelius and Lucius Verus. He was the author of a large number of medical and philosophical writings, of which upwards of eighty are still extant. Died about 200.

Galilei, Galileo, astronomer and natural philosopher; born in Pisa in 1564; was educated first in Florence, but afterwards returned to Pisa to study medicine, for which profession his father designed him. Here, after becoming known as an opponent of the Aristotelian maxims, he discovered, in 1582, the law of the vibrations of the pendulum. Soon afterward he began to study mathematics, and was appointed professor at Pisa when only 25. Thence he removed to Padua in 1592, and during his residence there invented a thermometer and constructed his first telescope, the invention of which he had heard of at Venice. He also made astronomical discoveries, and was reëstablished in 1610, at Florence, by his patron, Cosimo de' Medici. Here it was that his opposition to traditional views, and especially his advocacy of the Copernican doctrine that the sun was the center of the universe, brought him into conflict with the Inquisition, but proceedings were dropped on Galileo's promise not to teach the obnoxious doctrine. On the publication, however, in 1632, seventeen years after, of his "Dialogue" on the same subject, he was again summoned to Rome, condemned to imprisonment for life, and required to recant his opinion. He was confined at first in the house of one of the Inquisitors, his pupil, but was afterwards allowed to live in Florence, where he died, in 1642, having been blind four years.

Gallaudet (*găl-law-dĕt'*), **Thomas Hopkins,** an American philanthropist, was born in Pennsylvania in 1787, and died in 1851. He founded the first deaf and dumb asylum in the United States at Hartford, Conn.

Galli-Curci (*găl'-lē-kōōr'-chē*), **Amelita,** coloratura soprano of Italian-Spanish parentage, was born at Milan, Italy, 1890. She was educated at the Liceo Alessandro Manzoni and at the International Institute of Languages from which she graduated with first honors as a linguist. She studied music at the Milan Conservatory, graduating as a pianist. As Gilda in "Rigoletto" she made her operatic début in Rome, 1910, and thereafter sang in

leading theaters in Europe, and also in South America with Caruso and Titta Ruffo. Her first appearance in the United States, at Chicago, Nov. 18, 1916, was a sensational success. Her voice, largely self-trained, is of surpassing quality and remarkably even register. Her repertoire includes such operatic rôles as Lucia, Rosina, Violetta, and Juliette, and an immense range of concert music.

Galvani, Luigi, born in Bologna, September 9, 1737; a celebrated Italian physiologist, from whom "Galvanism" derived its name. He was educated for the profession of medicine, and, in 1762, was appointed lecturer on anatomy in the University of Bologna in which city he practiced. It was while holding this lectureship that he made those discoveries, partly by means of experiments on the muscles of frogs, which he made known to the world in 1791, in his treatise entitled, "De Viribus Electricitatis in Motu Musculari Commentarius." The now fully-established doctrine of animal electricity owes its origin to his patient investigations. Died, 1798.

Gambetta, Léon Michel, born in 1838; French statesman; son of a grocer of Cahors; went as a young man to Paris with the object of practicing at the bar, but did nothing remarkable till his thirtieth year. In 1868 he attracted notice by his conduct of the defense in the "procès Delescluze," and in the next year was elected deputy for both Paris and Marseilles, when he immediately became the most influential member of the Opposition. After the outbreak of the war, in the midst of the siege of Paris, he went to Tours in a balloon, and was chiefly instrumental in organizing the government and the conduct of the war. During the years between the treaty of peace that followed and 1879, Gambetta was chiefly occupied with the progressive development of Opportunism. In the latter year it was his influence which, in the main, brought about the abdication of MacMahon. On the election of M. Grévy, Gambetta became president of the chamber, and, in 1881, prime minister of France. Died, 1882.

Gardiner, Samuel Rawson, born in 1829; English historian; was educated at Winchester and Christ Church. In 1884, he was elected fellow of All Souls', and was for some years professor of modern history at King's College, London. His historical works include "The History of England from the Accession of James I. to the Disgrace of Chief Justice Coke," "Prince Charles and the Spanish Marriage," "England Under the Duke of Buckingham and Charles I.," "The Personal Government of Charles I.," and "Fall of the Monarchy of Charles I.," all these being republished as a continuous work in 1883–84; "An Introduction to the Study of English History" (with J. B. Mullinger), "History of the Great Civil War," and a complete "History of England." Died, 1902.

Garfield, James Abram, born in Orange Township, Cuyahoga County, Ohio, 1831; twentieth president of the United States. He was elected president in 1880, and was inaugurated in March following, but on the 2d of July, he was shot by an assassin (Guiteau) while at the Washington station of the Baltimore & Potomac Railway, and died at Elberon, N. J., September 19, 1881, after lingering for nearly three months. His early poverty, his manly independence, his hard-won attainments, and his incorruptible integrity had all caused his career to be watched as that of a man of exceptional powers and of brilliant promise; and his untimely death was mourned, not only by his own countrymen, but by the whole civilized world.

Garfield, James Rudolph, ex-secretary of the Interior; son of James Abram Garfield, twentieth president of the United States; was born in Hiram, Ohio, 1865; graduate of Williams College, Massachusetts, 1885; studied at Columbia Law School; admitted to the bar in 1888; member of Ohio Senate, 1896 to 1899; member of United States Civil Service Commission from 1902 to February, 1903; commissioner of corporations, Department of Commerce and Labor, 1903 to 1907. Secretary of the interior in cabinet of President Roosevelt, 1907–09.

Garibaldi (*gär-e-bäl'dē*), an Italian patriot, born in 1807; began life as a sailor. He associated himself enthusiastically with Mazzini for the liberation of his country, but being convicted of conspiracy, fled to South America, where, as both a privateer and a soldier, he gave his services to the young republics struggling there for life. Returning to Europe, he took part in the defense of Rome against France, but being defeated, fled to New York, to return to the Isle of Caprera, biding his time. He joined the Piedmontese against Austria, and, in 1860, set himself to assist in the overthrow of the Kingdom of Naples and the union of Italy under Victor Emmanuel. Landing in Calabria, he entered Naples, and drove the royal forces before him without striking a blow, after which he returned to his retreat at Caprera, ready still to draw sword, and occasionally offering it again in the cause of republicanism. Died, 1882.

Garrick, David, English actor, son of a captain in the army; was born in Hereford in 1717, and went to London with Dr. Johnson in 1736, to study law. On the death of his father, however, he joined his brother, a wine merchant, but soon decided to go on the stage. He made his first appearance, under the name of Lyddal, at Ipswich, in 1741, and soon after played "Richard" with marked success. In 1742, he went to Dublin; in 1747, became joint patentee of Drury Lane, two years later marrying Mademoiselle Violette. He acted at Drury Lane until 1776. He died in 1779, and was buried in Westminster Abbey.

Garrison, William Lloyd, born in 1805; American abolitionist, of humble birth; was apprenticed at the age of 13 to the printer of the "Newburyport (Mass.) Herald," for which paper he afterwards wrote. In 1826, he became owner and editor of the "Free Press," and in the next year editor of the "National Philanthropist," in which temperance and emancipation were advocated. In 1831 he started "The Liberator," and thereafter devoted himself entirely, at great personal risk, to the cause of slavery abolition. In 1847, "Sonnets and Other Poems" from his pen were published, and, in 1852, a selection from his speeches and writings. Died, 1879.

Gaskell, Elizabeth, born in 1810; English novelist (née Stevenson), married a Unitarian minister, and wrote "Mary Barton" (1848), "Moorland Cottage" (1850), and several contributions to "Household Words," which included "Cranford" and "North and South"; "Wives and Daughters" was appearing in the "Cornhill" at the time of her death. She also wrote a biography of Charlotte Brontë. She was a friend and helper of Thomas Wright, and was very active in charitable works during the cotton famine. Died, 1865.

Gates, Horatio, American general; born in England in 1728. He accompanied General Braddock in the expedition against Fort Duquesne. Subsequently he purchased an estate in Virginia, where he lived until the outbreak of the war in 1775, when he was appointed by Congress adjutant-general. He performed many services for the American cause, the greatest of which was the defeat of Burgoyne at Saratoga. In the latter part of the war he held a command in the South, but was defeated by Lord Cornwallis at Camden. Died, 1806.

Gatling, Richard Jordan, born in 1818; American inventor; a doctor by profession. In 1850, he invented a double-acting hemp-brake, and, in 1857, a steam plough; but his most celebrated invention was that of the revolving gun which bears his name, the conception of which came to him in 1861. In 1865 the gun was improved and tested, and was forthwith brought into use by the United States service; several European governments also adopted it. Among Gatling's later inventions were an improved method of casting steel cannon and a pneumatic gun for discharging explosives. Died, 1903.

Gauss, Karl Friedrich, born in 1777; German mathematician and astronomer, patronized by the Duke of Brunswick, who defrayed the expenses of his education at Brunswick and Göttingen, where in 1801 he produced "Disquisitiones Arithmeticæ." In 1807, he became professor and director of the observatory at Göttingen, and held the position until his death, 1855. During this period he brought out many works on pure mathematics, astronomy, and other sciences, among which the chief are "Theoria Motus Corporum Cœlestium, in Sectionibus conicis Ambientium," "Recherches sur la Géodésie supérieure," and invented the Heliotrope.

Geddes, Sir Eric, appointed first lord of the British admiralty, 1917, was born in India, 1876. He received his education in Oxford military college and at Merchiston Castle school, Edinburgh. He spent his early youth lumbering in the southern United States and in the employ of the Baltimore and Ohio railway. After railway service in India, he became deputy general manager of the North-Eastern railway of England. During 1916-17 he was director-general of military railways and inspector-general of transportation.

Genghis Khan, born in 1162; Emperor of the Mongols, whose real name was Temoutchin, the title meaning "the chief of the most powerful." Having consolidated the Tartar tribes, he marched against the Emperor of China, whose general he was, overran his empire (1212–1214), ravaged northern India, which he temporarily subdued, and penetrated into Russia through Persia. Having reached the Crimea, sacked numerous towns, and slaughtered millions of men, the Tartars returned. Died, 1227.

Genseric, born in 406; King of the Vandals, reigned at first with his brother Gonderic, afterwards alone, and

greatly strengthened the Vandal power in Spain. In 429 he invaded northern Africa, stamped out Christianity, and from his new capital, Carthage, made incursions on the inhabitants of Italy and Sicily. In 455, being invited to Rome by the widow of Valentinian to take part against his murderer Maximus, he caused the city to be sacked for fourteen days, and carried away among his prisoners the Empress Eudocia and her children, besides much treasure. Died, 477.

George is the name given to four (Hanoverian) kings of England. George I. (Lewis), son of Ernest Augustus, Elector of Hanover, by Sophia, granddaughter of James I., was born at Osnaburg, 1660, and died in 1727. He succeeded his father, 1698, and on the death of Queen Anne was declared her successor under the act of settlement which excluded the Roman Catholic descendants of James II. George was entirely ignorant of the English language, and was merely tolerated by the English people. George II. (Augustus), son and successor of the former, was born at Hanover, 1683; crowned in 1727, and died in 1760. George distinguished himself in the general European War of 1740, in which he was the ally of Austria against France, Spain, and Prussia, and commanded in person in the victory over the French at Dettingen, 1743. In 1756 war was renewed, and George allied himself with Frederick the Great of Prussia against France in the Seven Years' War. George III., grandson of the former, and son of Frederick, Prince of Wales, was born in 1738, and died in 1820, having reigned longer than any previous English monarch. George IV., son and successor of the former, was born in 1762, and died in 1830. He was an unpopular monarch, and was succeeded by his brother, William IV.

George V., King of Great Britain and Ireland, Emperor of India, and second son of Edward VII., was born at Marlborough House, London, June 3, 1865. After the death of his elder brother, Albert, in 1892, he became heir apparent to the British throne and took his seat in the House of Lords as Duke of York. Upon the accession of Edward VII. in 1901, he received the title of Duke of Cornwall. At this time he made a tour of the world, visiting all the great British colonies and on his return was created Prince of Wales. In July, 1893, he married Princess Victoria Mary of Teck, and six children were born to them. Upon the death of Edward VII., the new king ascended to the throne, under the title of George V., May 7, 1910, and was formally crowned in Westminster Abbey, June 22, 1911. He was crowned emperor of India at the durbar at Delhi, December 12, 1911.

George, Henry, American land reformer; was born in Philadelphia, in 1839, and, after being successively in a counting-house, a printer's office, and at sea, settled in California, and in 1866 joined the staff of a San Francisco paper. He afterwards became editor of two papers there, and wrote his first essay on the land question in "Our Land and Land Policy," published in 1871. In 1880 removed to New York, and the next year visited Ireland on his way to England. "Progress and Poverty" was written in 1879, and its author undertook lecturing tours in 1883 and 1889 in support of his principles. Besides this book he published "The Irish Land Question," "Social Problems," and "Protection or Free Trade." In 1886 he was a candidate for the mayoralty of New York. Died, 1897.

Gerard, James Watson, American jurist and diplomat, was born in Geneseo, N. Y., 1867. Graduating from Columbia university in 1900, and from the law school in 1902, he rose rapidly at the bar. From 1908 to 1911 he was associate justice of the supreme court of New York. In 1913 he was appointed American ambassador to Germany. During critical periods following the outbreak of the European war he discharged the duties of his position with marked ability. When diplomatic relations with Germany were severed in January, 1917, Gerard was recalled. He soon after published a notable book entitled "My Four Years in Germany," and in 1918 wrote "Face to Face with Kaiserism."

Gibbon, Edward, English historian; born in Putney in 1737, and educated at Westminster and Magdalen College, Oxford. While at the university he was received into the Catholic Church, but having been sent to a Calvinist at Lausanne became a Protestant again the next year. At Lausanne he met Voltaire, and fell in love with Mademoiselle Curchod, afterwards Madame Necker. He returned to London in 1758, and after a short term of service in the Hampshire militia, revisited the Continent, staying especially at Paris and Rome. When again in England he wrote "Mémoires Littéraires de la Grand Bretagne," and set to work on his great book, "The Decline and Fall of the Roman Empire," the first volume of which appeared in 1776 and the last in 1788. He entered parliament in 1774, as a supporter of Lord North, wrote the "Mémoire Justificatif," and obtained a place at the board of trade. From 1783 to 1793, he lived at Lausanne, Switzerland, and died (1794) soon after his return.

Gibbons, James, Cardinal, was born in Baltimore, 1834. He entered St. Charles College, Maryland, 1855; transferred, 1857, to St. Mary's Seminary, Baltimore; was ordained priest, 1861; became pastor of St. Bridget's, Canton (suburb of Baltimore); later was private secretary to Archbishop Spalding and chancellor of the archdiocese. He was made vicar apostolic of North Carolina, with rank and title of bishop, 1868; archbishop of Baltimore, 1877, and cardinal, 1886. Author: "The Faith of Our Fathers," "Our Christian Heritage." Died, 1921.

Gibson, Charles Dana, illustrator; born in Roxbury, Mass., September 14, 1867; educated at Flushing, L. I., also Art Students' League, New York, 1884–85; has done much illustrating in principal magazines; also illustrated numerous books. Author: "Sketches in London," "People of Dickens," "Drawings," "Pictures of People," "Sketches and Cartoons," "The Education of Mr. Pipp," "Sketches in Egypt," "The Americans," "A Widow and Her Friends," "The Social Ladder."

Gillett, Frederick Huntington, congressman, was born at Westfield, Mass., 1851. He graduated at Amherst college, 1874, at Harvard law school, 1877, and immediately began the practice of law at Springfield, Mass. After serving as member of the lower house of the state legislature, 1890-91, he was elected member of Congress continuously for the period 1893-1921, becoming Republican floor leader. In 1919 he was chosen Speaker of the House of Representatives.

Gilman, Daniel Coit, educator, born in Norwich, Conn., July 6, 1831; graduated at Yale, 1852 (A. M., 1855); continued studies in Cambridge, New Haven and Berlin (LL. D., Harvard, 1876; St. John's, Md., 1876; Columbia, 1887; Yale, 1889; University of North Carolina, 1889; Princeton, 1896; University of Toronto, 1903; University of Wisconsin, 1904); librarian, secretary of Sheffield Scientific School, and professor of physical and political geography, Yale, 1856–72; president of University of California, 1872–75; first president of Johns Hopkins University, 1875–1902; first president of Carnegie Institution, Washington, 1901–04. Author: "Life of James Monroe," "University Problems," "Introduction to De Tocqueville's Democracy in America," "Life of James D. Dana, geologist," "Science and Letters in Yale," editor-in-chief, "New International Encyclopædia." Died, 1908.

Giotto, Ambrogiotto Bondone, born in 1276; Italian painter and architect; pupil of Cimabue and friend of Dante, whose portrait he painted at Ravenna; was son of a citizen of Florence, and apprenticed to a woolstapler; painted frescoes at Assisi, and was probably the founder of the modern school of portrait painting. About 1299 he went to Rome, where he painted and worked in mosaics; and subsequently was employed at Padua and Florence, where his frescoes in the Peruzzi chapel of Santa Croce were discovered in 1863. He also painted the "Miracle of the Loaves and Fishes," at Naples, and designed the campanile of Florence. He died in 1337, and was buried in the cathedral there.

Girard (*zhe-rahrd'*), **Stephen,** an American philanthropist, born near Bordeaux, France, in 1750; rose from a humble sphere of life to become a trader in Philadelphia, in 1776, in which city he eventually became a merchant and banker, and amassed a large fortune. Dying in 1831, he bequeathed over $2,000,000 to the erection of a college for orphan boys, conducted on rigidly secular principles. This building, the finest in the Grecian style in the United States, was commenced in 1833, and completed in 1848.

Gladden, Washington, author, Congregational clergyman; born in Pottsgrove, Pa., February 11, 1836; graduate of Williams, 1859 (D. D., Roanoke College, Va., LL. D., University of Wisconsin and Notre Dame University, Ind.); held several pastorates and editorial positions prior to becoming (1882) pastor of First Congregational Church, Columbus, O.; especially known as writer upon social reforms. Author: "Plain Thoughts on the Art of Living," "From the Hub to the Hudson," "Workingmen and Their Employers," "Being a Christian," "The Christian Way," "The Lord's Prayer," "The Christian League of Connecticut," "Things New and Old," "The Young Men and the Churches," "Applied Christianity," "Parish Problems," "Burning Questions," "Santa Claus on a Lark," "Who Wrote the Bible," "Tools and the Man," "The Cosmopolis City Club," "The Church and the Kingdom," "Seven Puzzling Bible Books," "Social Facts and Forces," "Art and Morality," "The Christian Pastor," "How Much

is Left of the Old Doctrines," "Straight Shots at Young Men," "Social Salvation," "The Practice of Immortality," "Where Does the Sky Begin?" "Christianity and Socialism." Died, 1918.

Gladstone (*glăd'-stun*), **William Ewart,** statesman, orator, and man of letters; born in Liverpool in 1809, son of a Liverpool merchant, and of Ann, daughter of Andrew Robertson, Stornoway; was educated at Eton and Oxford, and entered parliament in 1832, as member for Newark in the Tory interest. Gladstone delivered his maiden speech on slavery emancipation, June 3, 1833; accepted office under Sir Robert Peel in 1834, and again in 1841 and 1846; as member for Oxford, separating from the Tory party, took office under Lord Aberdeen, and, in 1859, under Lord Palmerston, became chancellor of the exchequer; elected member for South Lancashire in 1865, he became leader of the Commons under Lord John Russell; elected for Greenwich, he became premier for the first time in 1868, holding office until 1874; after a brilliant campaign in Midlothian, he was returned for that county in 1880, and became premier for the second time; became premier a third time in 1886, and a fourth time in 1892. During his tenure of office, he introduced and carried a great number of important measures, but failed from desertion in the Liberal ranks to carry his pet measure of home rule for Ireland, so he retired from office into private life in 1895, and spent his last days chiefly in literary work, the fruit of which, added to earlier works, gives evidence of the breadth of his sympathies and the extent of his scholarly attainments. He died at Hawarden, May 19, 1898, and was buried in Westminster Abbey.

Glasgow, Ellen Anderson Gholson, novelist; born in Richmond, Va., April 22, 1874; private education. Author: "The Descendant," "Phases of an Inferior Planet," "The Voice of the People," "The Freeman and Other Poems," "The Battle Ground," "The Deliverance," "Virginia," and "Life and Gabriella."

Glass, Carter, American legislator and cabinet officer, was born at Lynchburg, Va., 1858. He was educated in private and public schools at Lynchburg. After learning the printer's trade and working for eight years in a printing office, he became owner of daily newspapers at Lynchburg. Entering politics, he served in the Virginia senate, 1899-1903. He was made member of congress in 1902, and was continuously reëlected for the period 1903-19. On December 16, 1918, he was appointed secretary of the treasury, retiring January 27, 1920, to enter the United States senate.

Godfrey de Bouillon, crusader, king of Jerusalem; set out in 1096; took Nicæa and Antioch; defeated the Saracens, and, in 1099, took Jerusalem. In the same year he was elected king, but refused to assume the title. At Ascalon he won a great battle over the sultan of Egypt. Died, 1100.

Goethals, George Washington, was born in Brooklyn in 1858. He was a student at college of city of New York, 1873-76; graduated from United States military academy, 1880. Appointed second lieutenant engineers, 1880; first lieutenant, 1882; captain, 1891; lieutenant colonel chief engineer volunteers, 1898; honorably discharged from volunteer service, 1898; major engineering corps, 1900; graduated from Army War College, 1905; lieutenant colonel engineers, 1907; colonel 1909. Chief of engineers during Spanish-American war; member board of fortifications (coast and harbor defense); chief engineer Panama canal, 1907-14. Governor of Panama canal zone, 1914–16. Made major-general, U. S. army, 1915. In 1917 he was for a time general manager of the Emergency fleet corporation, and in 1918 served as chief of division of purchase, storage, and traffic.

Goethe, Johann Wolfgang von, German poet, philosopher, and romance writer; was born in Frankfort-on-the-Main in 1749, of noble family, and received a liberal education. At sixteen, he went to Leipzig to study law, to which, however, he did not confine himself. After about two years' study of alchemy and mystical writers, he went to Strassburg in 1770, where he came under the influence of Herder. On his return to Frankfort, two years later, he published "Goetz von Berlichingen" and "Die Leiden des Jungen Werther," the latter of which was immensely popular. In 1775 he went to Weimar, where the grand duke gave him the office of chamberlain; and, in 1786, to Italy, where he traveled for two years, and conceived some of his greatest works. The dramas of "Iphigenia," "Egmont," and "Torquato Tasso" were produced between 1786 and 1790, in which year also the first fragments of "Faust" were published. In 1794, Goethe's botanical researches brought him into connection with Schiller. In 1796 he produced "Wilhelm Meister." The results of his scientific studies were, besides "The Metamorphosis of Plants," the "Beiträge zur Optik" (1791–92), and a book on the theory of color, "Farbenlehre," published in 1810, in opposition to Newton's theories. Meanwhile "Hermann und Dorothea" had appeared in 1797, and the greater part of "Faust" in 1808. In the latter year he accompanied the Duke of Weimar to Erfurt, and had an interview with Napoleon. Died, 1832.

Goldsmith, Oliver, born in 1728; English poet and romance writer; son of a poor Irish clergyman of Pallas, Longford, went as sizar, in 1744, to Trinity College, Dublin, where he led a miserable life until he took his degree five years later. After this — having failed to obtain ordination, took pupils for a time, and lost his money by extravagance — he went to Edinburgh in 1752, and from thence to Leyden; but, after staying there a year, found himself penniless, and traveled to London through France, Switzerland, and Northern Italy, supporting himself by flute playing. After a precarious existence as a surgeon, an author, and a literary hack, he produced, in 1759, his "Inquiry into the Present State of Polite Learning in Europe." This sold well, and gained for the author the acquaintance of Dr. Johnson. Soon after he was engaged to contribute to the "Public Ledger," writing the famous "Chinese Letters," afterward published as "The Citizen of the World." His next important work was the "Letters from a Nobleman to His Son." "The Traveler" followed in 1765, and "The Vicar of Wakefield" (sold for fifty guineas only) in 1766, but Goldsmith was improvident as ever. As a dramatist he became known as the writer of the "Good-Natured Man," brought out at Covent Garden in 1768, and "She Stoops to Conquer" in 1773, and as a poet by "The Deserted Village" (1770), and his last work, "The Retaliation." He wrote numerous other works, among which may be mentioned "Animated Nature." He died, heavily in debt, in 1774.

Gompers, Samuel, president of American Federation of Labor; born in England, January 27, 1850; cigarmaker by trade; has been advocate of the rights of labor, and connected with the efforts to organize the working people since his 15th year; one of the founders of American Federation of Labor and editor of its official magazine; has written a number of pamphlets on the labor question and the labor movement; with an intermission of one year, has been president of American Federation of Labor since 1882.

Goodwin, Nathaniel C., actor; born in Boston in 1857; studied under Wyzeman Marshall, then manager of Boston Theater; made début in Boston in "Law in New York," 1874; later starred as Captain Crosstree in "Black-eyed Susan," Rice's "Evangeline," "Hobbies," "The Member from Slocum," "In Mizzoura," "Nathan Hale," and other plays. Died, 1919.

Goodwin, William Watson, educator; born in Concord, Mass., May 9, 1831; graduate of Harvard, 1851; studied at universities of Göttingen, Berlin, and Bonn; Ph. D., Göttingen, 1855. Tutor at Harvard, 1856-60; first director of American School of Classical Studies, Athens, Greece, 1882-83; professor of Greek literature, Harvard, 1860-1901; professor emeritus, 1901; overseer of Harvard, 1903-9. Author: "Syntax of the Moods and Tenses of the Greek Verb," "Greek Grammar." Died, 1912.

Goodyear, Charles, the inventor of vulcanized rubber, was born in New Haven, Conn., in 1800. His career was a troubled one; he failed as an iron-founder, and when, after ten years' labor, amidst every disadvantage of poverty and privation, he, in 1844, produced his new method of hardening rubber by means of sulphur, he became involved in a fresh series of troubles, as well as poverty, consequent on the infringement of his inventions. His patents latterly amounted to sixty, and both medals and honors were awarded him in London and Paris. Died, 1860.

Gordon, Charles George, British general, was born in Woolwich, 1833. While serving in the Crimean war, 1854-56, he was wounded at Sebastopol. For his efforts in suppressing the Taiping rebellion, 1863-64, he received the sobriquet "Chinese Gordon." After holding several important positions in the British army, he took command, in 1874, of the forces which followed up Baker's explorations in Africa, in connection with which he suppressed the slave traffic on the Red sea. In 1884, as the emissary of England, he went to the Sudan to pacify the rebellious tribes under El Mahdi, the "false prophet of the Sudan." His journey to Khartum, made practically alone and unprotected, and the influence which his mere presence exerted upon the tribes of the desert indicated the remarkable power of his personality. He was killed when El Mahdi captured Khartum, 1885.

Gordon, George Angier, Congregational clergyman; born in Scotland, January 2, 1853; educated in common schools, Insch, Scotland; graduate of Harvard, 1881 (D. D., Bowdoin and Yale, 1893; S. T. D., Harvard, 1895); Minister of Old South Church, Boston, since 1884; lecturer in Lowell Institute Course, 1900; Lyman Beecher lecturer, Yale, 1901. Author: "The Witness to Immortality," "The Christ of To-day," "Immortality and the New Theodicy," "The New Epoch for Faith," University preacher to Harvard, 1886-90; Yale, 1888-1901; Harvard overseer since 1897.

Gorgas, William Crawford, born in Mobile, Ala., 1854; educated at University of the South, and Bellevue Hospital Medical College, New York. Appointed surgeon, U. S. A., 1880; was chief sanitary officer of Havana, 1898-1902; in 1901 eliminated yellow fever in Havana; was made chief sanitary officer of Panama Canal, 1904, and member of Isthmian Canal Commission 1907; he stamped out yellow fever, malaria and other infections in the canal zone making it as infection free as any region in the U. S. Was made surgeon-general, U. S. A., 1914; major-general 1915. Died, 1920.

Gorky, Maxim, pen name of Alexei Maximovitch Pyeshkoff, a self-educated Russian novelist, born in Nizhni-Novgorod, 1868; son of an upholsterer. After the death of his parents, he was engaged in various occupations until, through the influence of his friend Kalushni, his attention was turned to literary work, and his first story, "Makar Chudra," appeared in 1892. He is one of the most original and popular of modern Russian writers. In 1905, he was imprisoned for a time for political offenses. Among his works are "The Song of the Falcon," "The Song of the Petrel," "The Orloff Couple," "Malva," "Foma Gordyeeff," "Children of the Sun," and "The Barbarians."

Gouin, Sir Lomer, prime minister and attorney general of Quebec since 1905, was born at Grondines, province of Quebec, 1862. He was educated at Sorel and Lévis, province of Quebec. Admitted to province of Quebec bar, 1884; Queen's counsel, 1900; elected member provincial parliament for Montreal, 1897; appointed member of public instruction council, 1898; minister of colonization and public works, Quebec, 1900; reëlected by acclamation for Montreal (St. James division), 1900, 1904, and 1905; elected for Portneuf, 1908.

Gould, George Jay, American capitalist, eldest son of Jay Gould, was born in New York City, February 6, 1864; received private education. Early in life he began railway management, and became president of the Little Rock Junction Railway in 1888. In 1892 he was elected president of the Manhattan Elevated Railway Company of New York City; he was elected president and chairman of boards of directors of numerous railways and corporations in succeeding years.

Gould, Helen Miller, philanthropist, born in New York City, June 20, 1868; daughter of late Jay and Helen Day (Miller) Gould; identified with benevolent work; gave United States Government $100,000 at beginning of war with Spain; active member Women's National War Relief Association; gave freely to its work; at Camp Wyckoff made care of sick and convalescent soldiers her personal care, and gave $50,000 for needed supplies. Married F. J. Shepard in 1913.

Gounod, Charles François, French composer; born in Paris in 1818, and educated at the Conservatoire under Halévy and Zimmermann, whose daughter he married in 1852. In 1839, he gained the prize for composition, and, after visiting Rome and Vienna, became an organist in Paris, where, in 1849, a high mass by him attracted attention. "Sappho," his first opera, was produced in 1851, and the composer was soon after appointed director of the Orphéon. After some minor works, "Faust" appeared in 1859, being brought out at the Théâtre Lyrique. "Mereille" followed in 1864, and "Roméo et Juliette" in 1867. Of his later works the chief are "Jeanne d'Arc," "The Redemption," and "Mors et Vita." Died, 1893.

Graaf, Regnier de, Dutch physician and anatomist, was born in Schoonhoven, 1641. He rendered great service to anatomy through his use of injections into the blood vessels, which Swammerdam and Ruysch afterward brought to a state of comparative excellence. Author of works on the functions of the pancreas and on the generative organs. Died, 1673.

Gracchus (*grăk'-kus*), **Caius Sempronius,** a Roman orator and statesman who, as tribune, was the originator of many excellent laws; was born B. C. 159, and killed in a massacre organized by Opimius, 121. His brother, Tiberius Sempronius, born B. C. 163, was elected tribune, and was also killed, B. C. 133, in an uprising of the patricians against his proposal to distribute the public lands.

Grant, Frederick Dent, major-general United States Army; born in St. Louis, May 30, 1850; son of Ulysses S. and Julia D. Grant; graduated at West Point, 1871; assigned to fourth cavalry, was lieutenant-colonel United States Army when he resigned his commission, 1881; afterward United States minister to Austria; and police commissioner of New York, 1894-98. Became colonel of the 14th New York volunteer infantry upon the beginning of war for Cuba, and May 27, 1898, was appointed brigadier-general, United States volunteers. Served in Porto Rico one year, and after war commanded military district of San Juan; transferred to Philippines, April, 1899; commanded second brigade, first division, 8th Army Corps (Lawton's); occupied advance of southern line fighting battles of Big Bend, October 3, and Binacian, October 6, 1899; transferred November 1, 1899, to second brigade, second division, for the advance into Northern Luzon, where this brigade covered flanks and rear of McArthur's division; later detached to invade provinces of Batuan and Zamballes; assigned January, 1900, to district Northern Luzon, which he commanded during guerilla war (this district was first brought under control to accept civil government); transferred to separate brigade, Southern Luzon, October, 1901—order restored; transferred, April, 1902, to Sixth Separate Brigade, Samar, where he received surrender of last of insurgent forces; appointed brigadier-general United States Army, February 18, 1901; commanded department of Texas, 1902; January 15, 1904, department of lakes until September 28, 1904; major-general, 1906; commanded department of the East, 1904-08. Died, 1912.

Grant, Ulysses Simpson, born in 1822; American general and statesman; entered the army in 1843, and served with distinction in the Texas campaign of 1845. In 1848, he married, and in 1854, resigned his commission. During the Civil War he captured Fort Henry (February, 1862), and Fort Donelson; won the battle of Shiloh (April 6-7); defeated Price at Iuka (September 19), and for his capture of Vicksburg in July, 1863, was made major-general. He further distinguished himself by the relief of Chattanooga in November, and was voted a gold medal for his services. In March, 1864, he became lieutenant-general and commander-in-chief of the Federal Armies, and in little more than a year brought the war to a close. On July 25, 1866, he was named general of the armies of the United States, and in 1868, became president, being reëlected in 1872. He successively superintended the pacification of the Southern States, the restoration of the finances, and the disbanding of the army, and he obtained from England the payment of the Alabama claims. On his retirement from office he made a tour round the world. Having lost his moderate fortune in an unfortunate speculation, he wrote an account of his life, which to some extent financially relieved him. Died, 1885.

Grattan, Henry, born in 1746; Irish patriot, educated at Trinity College, Dublin, and called to the Irish bar in 1772; entered the Irish Parliament in 1775, and became an Opposition leader. In 1780 he moved that the crown was the only link between England and Ireland, and in 1782, by means of the volunteer movement, succeeded in obtaining legislative independence for his country. Died, 1820.

Gray, Asa, a distinguished American botanist; born in Paris, Oneida County, N. Y., in 1810; graduated in medicine in 1831; became Fisher professor of natural history in 1842 at Harvard, and in 1874, succeeded Agassiz as regent of the Smithsonian Institution. His writings did much to promote the study of botany in America on a sound scientific basis, and also to forward the theories of Darwin. In conjunction with Doctor Torrey, he wrote "The Flora of North America," and by himself various manuals of botany and "Natural Science and Religion." Died, 1888.

Gray, George, jurist; born in New Castle, Del., May 4, 1840; graduated at Princeton, 1859 (A. M., 1863; LL. D., 1889); studied law at Harvard; admitted to bar, 1863; practiced at New Castle, 1863-69; afterward at Wilmington; attorney-general of Delaware, 1879-85; United States senator, 1885-99; Democrat; member foreign relations and judiciary committees in senate; in 1896 affiliated with the national (gold standard) Democrats in the presidential election; member Peace Commission, Paris, 1898; appointed by the president member of the Joint High Commission at Quebec, 1898; made member of the International Permanent Court of Arbitration under The Hague convention, November, 1900, reappointed, 1913; judge United States Circuit Court, third judicial circuit, since 1899; chairman Anthracite Coal Strike Commission, 1902.

Gray, Thomas, an English poet, was born in London, 1716, and educated at Cambridge, in which university he became professor of modern literature in 1768. His "Odes" occupy a high rank in English poetry, and his well-known "Elegy written in a Country Church-

yard" (1749), is one of the most perfect compositions of its kind in the language. Died, 1771.

Greeley, Horace, born in 1811; American journalist and politician; son of a New Hampshire farmer; came to New York, and, after some failures, established in 1841, the "New York Tribune," in which he supported Lincoln and the Union. In 1848, he became a member of Congress, and, though not prominent there, was one of the founders of the Republican party in 1854. He ultimately, however, became a Democrat, and unsuccessfully opposed Grant for the presidency in 1872, but died the same year. He twice visited Europe. He was author of "The American Conflict," "What I Know about Farming," and "Recollections of a Busy Life."

Green, John Richard, English historian; born in Oxford in 1837, and educated at Magdalen College school and Jesus College; took orders in 1860, and was some time vicar of St. Philip's, Stepney, becoming in 1869 librarian at Lambeth. He was author of "A Short History of the English People," "A History of the English People," "The Making of England," and "The Conquest of England," published after his death by his wife, who assisted him in various other works, and herself wrote "Henry II." in the "Twelve English Statesmen" series. Died, 1883.

Greene, Nathanael, born in 1742; American general; educated himself, and broke with the Quakers on account of his later military pursuits; distinguished himself at the battle of the Brandywine; was defeated several times by Cornwallis, but won the battle of Eutaw Springs. Died, 1786.

Gregory I., Pope, called the "Great"; was appointed by the Emperor of the East, Governor of Rome, but, on inheriting his father's wealth, resigned it, and became Abbot of St. Andrew's, Rome. After being secretary to Pelagius II., he succeeded him as Bishop of Rome; renounced communion with the Eastern Christians because of the assumption of the title "Universal Bishop" by the patriarch of Constantinople; composed chants, and established a musical school, in which he himself taught, and collected and arranged fragments of ancient hymns. He was a great opponent of secular learning, but was author of numerous sacred works, of which the chief was his "Morals from the Book of Job." Died, 604.

Gregory VII., "Hildebrand," born in 1020; a man of modest birth, who became monk of Clugny and Archdeacon of Rome; exercised great influence over Leo IX. and succeeding popes, till he was himself appointed, in 1073, to succeed Alexander II. He attacked simony and concubinage in the Church, and carried the power of the papacy to a high pitch, declining to submit to ratification of election from the emperor, and attempting to enforce spiritual control over the sovereigns of Europe. He was firmly opposed by William I. of England and Philip I. of France; he was deposed by Henry IV. of Germany whom he afterward excommunicated and compelled to do penance in 1077. He died in Salerno, in 1085, where he had been taken after his rescue from the castle of St. Angelo by the Normans of Apulia.

Grévy, François Paul Jules, born in 1807; French statesman, came to the front at Paris as a defender of republicans in political cases, and in 1848, was elected a member of the constituent assembly. He joined the Côté Gauche, became vice-president of the Assembly, and opposed the presidency of Louis Napoleon. In 1868, his native department (the Jura) returned him for the Assembly, and, on resuming public life, he strongly opposed the second empire. He became president of the Assembly in 1871, and was reëlected three times. Between 1873 and 1876, when he was a private member, he strongly opposed the Monarchists, and he afterwards vigorously resisted the schemes of MacMahon, on whose resignation, in 1879, he became President of the Republic, in which office he displayed much tact, and in 1885, made peace with China on his own responsibility. In December of that year he was reëlected, but in 1887 was obliged to resign owing to the discovery of his son-in-law's (M. Wilson) implication in the decoration scandals. Died, 1891.

Grey, Lady Jane, born in 1537; grand-niece of Henry VIII.; was appointed heir to the throne by Edward VI. in contravention of the previous settlement of the succession, and having married a son of Dudley, Duke of Northumberland, was made queen and reigned ten days; she was beheaded with Lord Dudley in 1554.

Griggs, James M., congressman, lawyer; born in Lagrange, Ga., March 29, 1861; graduate of Peabody Normal College, Nashville, Tenn., 1881; taught school and studied law; admitted to bar, 1883; practiced at Alapaha, Berrien County, Ga.; was for short time in newspaper business; removed to Dawson, Ga., 1885; solicitor-general (prosecuting attorney) Pataula judicial circuit, 1888–93; judge of same circuit, 1893–96; member of Congress, 1897–1909; chairman of Democratic Congressional Committee, 1902. Died, 1910.

Grimm (*grim*), **Jakob Ludwig,** a German philologist, born at Hanau, 1785, associated in his literary labors with his brother, Wilhelm Karl, born 1786. Their principal joint work is the well-known and highly esteemed "German Dictionary" bearing their names, and published in 1859. Jakob, who died in 1863, was also the author of the "Legal Antiquities of Germany," a "History of the German Language," and "German Mythology" — all standard works. Wilhelm died in 1859.

Grosvenor, Charles Henry, lawyer; born in Pomfret, Windham County, Conn., September 20, 1833; went to Ohio, May, 1838; attended country log schoolhouse; taught school; studied law; admitted to bar, 1857; engaged in practice. Served in Eighteenth Ohio volunteers from 1861 to 1865, as major, lieutenant-colonel, colonel, and brevet brigadier-general. Member of Ohio Legislature, 1874–78 (speaker, two years); presidential elector, 1872 and 1880; trustee Ohio Soldiers' and Sailors' Orphans' Home, 1880–88, and president for five years; delegate at large to Republican National Convention, 1896 and 1900; member of Congress, 1885–91, and again from 1893 to 1907, eleventh Ohio district; member Committee on Ways and Means and chairman Committee on Mines and Mining, 55th, and member Committee on Ways and Means, Committee on Rules, and chairman Committee on Merchant Marine and Fisheries, 56th, 57th, 58th, and 59th Congresses. Author: "William McKinley, His Life and Work." Died, 1917.

Grosvenor, Edwin Augustus, educator, author; born in Newburyport, Mass., August 30, 1845; graduate from Amherst, 1867, Andover Theological Seminary, 1872 (A. M., Amherst, 1871; LL. D., Wabash, 1903, Alfred University, 1904); professor of history, Robert College, Constantinople, 1873–90; professor of European history, 1892–98, modern governments and their administration, 1898–1901, modern government and international law after 1901, Amherst. Author: "The Hippodrome of Constantinople"; "Constantinople" (2 vols.); "The Permanence of the Greek Type"; "Contemporary History."

Grote, George, born in 1794; historian and politician; educated at the Charterhouse; entered the family bankinghouse, but devoted his leisure time to literary work. He published many pamphlets on reform, and contributed to the "Westminster Review." In 1832 he was elected for the City of London, for which he continued to sit till 1841, as one of the "Philosophical Radicals." His "History of Greece" appeared between 1846 and 1856, and was followed by "Plato and Other Companions of Socrates." Died, 1871.

Grotius, Hugo, Dutch statesman and writer; born at Delft, 1583; entered public life as pensionary of Rotterdam; went to England in 1615 as a commissioner on the Greenland fisheries' question, and there met Casaubon. As a friend of Barnevelt, and a supporter of Arminius, he was imprisoned by the stadtholder, Maurice (1619), but two years after his wife contrived his escape, and he went to Paris for some years. After a short stay in Holland, and a residence of two years at Hamburg, he returned to Paris in 1635, as Swedish ambassador, where he remained till shortly before his death. Chief among his many works were "Poemata Sacra," "De Jure Belli et Pacis," and "Annotationes in Novum Testamentum." Died, 1645.

Grouchy (*groo-she'*), **Emmanuel, Marquis de,** a marshal of France; born in Paris, 1766. He served with distinction under Napoleon I.; received a marshal's baton in 1814, and, in 1815, refused to march his corps from Wavre to the assistance of the emperor at Waterloo, alleging his having received no order from Napoleon to that effect. It is not certain whether he intended to betray the cause of Napoleon, but his culpable indecision certainly contributed to the disaster which befell the French arms. Exiled in the same year, he was restored to his rank and honors in 1830, and died in 1847.

Guericke, Otto von, German philosopher; born in 1602 in Magdeburg, of which he became burgomaster, after traveling in France and England, and studying at Leyden. He invented the air-pump, and made experiments before the diet at Ratisbon in 1654. He also constructed the first electric machine, and described his "Magdeburg Hemispheres," in his "Nova Experimenta." Died, 1686.

Guffey, James McClurg, petroleum producer; born in Westmoreland County, Pa., January 19, 1839; educated in public schools and a term in commercial school; railroad and express clerk in South; returned to Penn-

sylvania, 1872; since then in oil and gas production; probably the largest individual oil producer in the United States; extensively engaged in silver and gold mining, with large bituminous coal holdings; well-known as a leader in Democratic politics, and a member for Pennsylvania on National Committee, but never held or was a candidate for office.

Guido (*gwē'do*) **Reni,** a famous Italian painter of the Bolognese school; born in 1575. After studying under the Caracci, he took up his residence in Rome, where he obtained the patronage of Pope Paul V. His pictures are characterized by an exquisite grace of expression and delicacy of touch. Among his masterpieces may be quoted "The Martyrdom of St. Peter" (in the Vatican), "The Assumption," and "The Massacre of the Innocents." Died, 1642.

Guiteras, Juan, professor of general pathology and tropical diseases, University of Havana, since August, 1900; born in Matanzas, Cuba, January 4, 1852; educated at La Empresa, Matanzas; M. D., University of Pennsylvania, 1873 (Ph. D.). In marine hospital service, 1879–89; served as expert in yellow fever in all epidemics since 1881; was professor of pathology, University of Pennsylvania; on staff of General Shafter as yellow fever expert in Santiago campaign, 1898. Prominent in Cuban politics in this country. Editor "La Revista de Medicina Tropical."

Guizot (*ge-zo'*), **François Pierre Guillaume,** a distinguished French scholar, historian, and statesman, was born in 1787. As an author, Guizot has been pronounced by the "Edinburgh Review," "the greatest French writer of his time, and scarce owning an equal in any other country." His chief works are a translation of Gibbon's "Decline and Fall," a "History of Civilization" (fifth edition, 1845), "Histoire de la Révolution d'Angleterre" (1827–56), a "Life of Oliver Cromwell," and a "History of France" (1870). Died, 1874.

Gustavus (*gus-tā'vus*) is the name of four kings of Sweden. Gustavus I. (Vasa) was born at Stockholm, 1496. He drove the Danish usurper, Christian II., from the country, and was crowned king, 1523; died, 1560. Gustavus II. (Adolphus), grandson of above, one of the greatest generals of history, was born, 1594; crowned, 1611; killed at the battle of Lützen, Germany, 1632. He defeated the Prussians and Poles, and as champion of the Protestant cause overran nearly the whole of Germany. Gustavus III., born in 1746, was crowned, 1771; assassinated by Ankarström, one of his nobles, 1792. Gustavus IV., born in 1778, succeeded his father, Gustavus III., 1792; was deposed, and died in Switzerland, 1837.

Gutenberg (*goo'ten-bairg*), **Johann,** the inventor of the art of printing; born in Mainz, Germany, 1400. In 1450, he entered into partnership with John Fust, a connection severed five years later by a lawsuit between the parties, in consequence of which Gutenberg was compelled to resign to Fust all the appliances and profits of his invention. Died, 1468.

Guyot, Arnold, born in 1807; Swiss geographer and geologist; came to America in 1848, and devoted his life to science; was professor of geology and physical geography at Princeton College; formed an intimacy with Agassiz, and made numerous maps, mathematical tables and text-books. His greatest works were "The Meteorological and Physical Tables", and "Earth and Man." Died, 1884.

Hadley, Arthur Twining, president of Yale from 1899 to 1921; born in New Haven, Conn., April 23, 1856; graduate of Yale, 1876; student of University of Berlin (LL. D., Harvard, 1899; Columbia, 1900; Johns Hopkins, 1902). Tutor, 1879–83, lecturer, 1883–86, Yale; appointed commissioner of statistics, Connecticut, 1885; professor of political science, Yale, 1886–91. Author: "Railroad Transportation, Its History and Laws," "Connecticut Labor Reports, 1885–86," "Economics: An Account of the Relations Between Private Property and Public Welfare," "The Education of the American Citizen," "Freedom and Responsibility." American editor of the tenth edition of Encyclopedia Britannica.

Haeckel, Ernst Heinrich, German naturalist, born in Potsdam, 1834; was appointed in 1861 professor of zoölogy at Jena. He afterwards traveled in all parts of Europe, and visited Egypt, Syria, and Asia Minor. In 1881, he went to India. His chief works are "Natural History of Creation," "The Origin of the Human Race," "Popular Lectures on Evolution." Died, 1919.

Haggard, Sir Henry Rider, English novelist; born in Bradenham, Norfolk, 1856; went to Natal in 1875, as secretary to Sir H. Bulwer, and was afterwards master of the High Court of the Transvaal. In 1879 he returned to England, and published in 1882, "Cetywayo and his White Neighbors." This was followed by several novels, the chief of which were "Dawn," "The Witch's Head," "King Solomon's Mines," "She," "Jess," "Cleopatra," "Beatrice," "Eric Brighteyes," and "Marie."

Hahnemann, Christian Samuel Friedrich, born in 1755; German physician, the founder of homœopathy, to which he was led by experiments made on himself with Peruvian bark. He practiced at Leipzig, but was obliged to retire on account of the hostility of the apothecaries there. He was invited to Köthen by the Duke of Anhalt, and afterwards spent eight years in Paris. He expounded his system in "Organon of the Healing Art," and other works. Died, 1843.

Haig, Sir Douglas, British general, was born in 1861, and was educated at Brasenose college, Oxford. Joining the army in 1885, he distinguished himself at Atbara and Khartum in the Sudan campaign, 1898, and was chief of staff during the Colesberg campaign in South Africa, 1899–1900. He was made major-general in 1904, chief of staff for India, and general commander at Aldershot in 1912. In the early months of the European war he commanded a British division in France and near the close of the year 1915 succeeded Sir John French as commander-in-chief of the British armies in France.

Hale, Edward Everett, author, chaplain United States Senate; born in Boston, April 3, 1822; studied in Boston Latin school; graduate of Harvard, 1839, S. T. D., 1879 (LL. D., Dartmouth, 1901, Williams, 1904); studied theology; licensed to preach; minister Church of the Unity, Worcester, Mass., 1846–56; prominent promoter of "Chautauqua" circles and "Lend-a-Hand" clubs. Editor "Lend-a-Hand Record." Author (stories): "The Man Without a Country," "Ten Times One is Ten," "Margaret Percival in America," "In His Name," "Mr. Tangier's Vacations," "Mrs. Merriam's Scholars," "His Level Best," "The Ingham Papers," "Ups and Downs," "Philip Nolan's Friends," "Fortunes of Rachel," "Four and Five," "Crusoe in New York," "Christmas Eve and Christmas Day," "Christmas in Narragansett," "Our Christmas in a Palace." Other works: "Sketches in Christian History," "Kansas and Nebraska," "What Career?" "Boy's Heroes," "The Story of Massachusetts," "Sybaris and Other Homes," "For Fifty Years" (poems), "A New England Boyhood," "Chautauquan History of the United States," "If Jesus Came to Boston," "Memories of a Hundred Years," "Ralph Waldo Emerson," "We, the People," "New England Ballads," "Prayers in the United States Senate." Died, 1909.

Hale, Eugene, United States senator from Maine, 1881–1911; born in Turner, Oxford County, Me., June 9, 1836; academic education (LL. D., Bates College, Colby University and Bowdoin College); admitted to bar, 1857; county attorney of Hancock County for nine years; member of Maine Legislature, 1867, 1868, and 1880; member of Congress, 1869–79. Was appointed postmaster-general by President Grant, 1874, but declined; was tendered naval portfolio by President Hayes, but declined; delegate to Republican National conventions, 1868, 1876, and 1880. Died, 1918.

Hale, Sir Matthew, English judge, born in 1609; was called to the bar in 1637. Though a Royalist, he was appointed head of the committee for prevention of delays and expenses of law in 1652; became a judge of common pleas in 1654, and sat in parliament till the Restoration, when he was made lord chief baron. In 1671, he became lord chief justice, and resigned just before his death. He wrote a "History of the Pleas of the Crown," "Difficiles Nugæ," and an essay on "Gravitation of Fluids." Died, 1676.

Hall, Granville Stanley, president and professor of psychology, Clark University, 1888–1920; born in Ashfield, Mass., February 1, 1846; graduate of Williams, B. A., 1867, A. M., 1870; Ph. D., Harvard, 1878; LL. D., University of Michigan, 1888; Johns Hopkins, 1902. Professor of psychology, Antioch (O.) College, 1872–76; studied in Berlin, Bonn, Heidelberg and Leipzig; lecturer on psychology in Harvard and Williams, 1880–81; professor of psychology, Johns Hopkins, 1881–88. Author: "Aspects of German Culture," "Hints Toward a Select and Descriptive Bibliography of Education" (with John M. Mansfield); "Adolescence" (2 vols.); editor and founder of "The American Journal of Psychology;" editor "The Pedagogical Seminary," "American Journal of Religious Psychology and Education."

Hallam, Henry, an English historian, born in Windsor in 1777. His greatest works comprise "View of the State of Europe During the Middle Ages," "The Constitutional History of England from the Accession of Henry VII. to the Death of George II.," and his masterpiece, the "Introduction to the Literature of Europe in the Fifteenth, Sixteenth, and Seventeenth Centuries." Died, 1859.

Haman, a courtier of Ahasuerus, King of Persia; out of motives of personal revenge, sought the extermination of the Jewish race in that kingdom, in which design he was thwarted by Esther, who effected his disgrace, about 485 B. C.

Hamilcar Barca, a Carthaginian leader, father of Hannibal, and head of a faction at Carthage; commanded in Sicily in the first Punic War, at the close of which he defeated the mercenaries, who had rebelled; was killed in battle with the Vettones when meditating a fresh attack upon the Romans, 228 B. C.

Hamilton, Alexander, American general and statesman; born in the island of Nevis in 1757; published, when 17, some papers on the rights of the colonies, and before he was 19 was captain of artillery. In 1777, he was Washington's aide-de-camp, in 1782, a member of Congress, and, in 1787, a delegate to the convention which drew up the American Constitution. Washington appointed him secretary to the treasury, and, in 1798, he became second in command of the army, of which he became afterwards commander-in-chief. He was killed (1804) in a duel with Colonel Burr, Vice-President of the United States.

Hamilton, Sir William, Bart., born in 1788; Scottish metaphysician, appointed in 1821 to the professorship of civil history in the University of Edinburgh. From 1836, when he became professor of logic and metaphysics, he was widely known as a philosophical writer. His chief books were an edition of Reid's works, "Discussions in Philosophy, Literature, and Education," and his "Lectures," published after his death. He left his library to the University of Glasgow. Died, 1856.

Hamlin, Hannibal, American statesman; born in Paris, Maine, in 1809; practiced as a lawyer, and became a member of the State Legislature. In 1842, he was elected as a Democrat to Congress; was United States senator from 1848 to 1857, when he was elected governor on the Republican ticket, but resigned immediately on again being elected senator. In 1861, he became vice-president under Lincoln, whose views he shared. He was again senator from 1869 to 1881, when he was named minister to Spain. He was chiefly instrumental in passing the "Wilmot proviso" through the House of Representatives. Died, 1891.

Hammond, James Bartlett, typewriter inventor; born in Boston, April 23, 1839; graduate of University of Vermont, 1861; newspaper correspondent during Civil War; graduate of Union Theological Seminary, 1865; studied philosophy and science at University of Halle, Germany; devoted many years to mechanical experiments; patented, 1880, marketed, 1884, a typewriting machine made on scientific principles; introduced "Ideal" keyboard and true alignment in the "Hammond Typewriter"; won highest honors in competitions. Collaborator on American translation of "Lange's Commentary on The Psalms," 1884. Died, 1913.

Hammond, John Hays, mining engineer; born in San Francisco, March 31, 1855; graduate of Sheffield Scientific School, Yale, Ph. B., 1876 (A. M., Yale); mining course at Royal School of Mines, Freiburg, Baden. Special expert of United States Geological Survey, 1880, examining California gold fields; later in Mexico, and afterward consulting engineer of Union Iron Works, San Francisco, and to Central and Southern Pacific railways; has examined properties in all parts of the world; became consulting engineer for Barnato Bros., 1893, and later for Cecil Rhodes, of whom he became a strong supporter; consulting engineer of Consolidated Gold Fields of South Africa, British South Africa Company, and the Randfontein Estates Gold Mining Company. Was one of four leaders in reform movement in the Transvaal, 1895–96; after Jameson Raid (with which he was not in sympathy), was arrested and sentenced to death; sentence was afterward commuted to fifteen years' imprisonment; and later was released on payment of a fine of $125,000; went to London and became interested in many large mining companies; returned to the United States and has traveled extensively, examining mines in United States and Mexico. Appointed by President Taft special ambassador to coronation of King George V.

Hampden, John, an English patriot and parliamentary leader, was born in London, in 1594. During the twenty-two years he held a seat in the House of Commons, he identified himself as an advocate of public opinion and champion of popular rights, when the latter were encroached upon by Charles I. and his government. He suffered imprisonment for his refusal to pay the obnoxious ship money; was one of the framers of the Grand Remonstrance; and also one of the five members illegally committed to prison by order of the king. Hampden was killed in the fight of Chalgrove Field, 1643.

Hancock, John, born in 1737; American politician, was one of the leaders in the revolt in Massachusetts, the seizure of his sloop, "The Liberty," being the occasion of a riot in Boston. He was very active in denouncing the "Boston massacre," and was one of the persons whose seizure was attempted by the expedition which led to the Lexington affair. He was president of the Continental Congress from 1775–77, and governor of Massachusetts, 1780–85 and 1787–93. Died, 1793.

Hancock, Winfield Scott, an American general; born in Pennsylvania in 1824; after graduating at West Point in 1844, served with great gallantry during the Mexican War. Appointed brigadier-general of volunteers in 1861, he took part in the campaign on the Potomac, fought at Antietam, and commanded a corps in the battle of Gettysburg, where he was wounded, 1863. In August, 1864, Hancock became brigadier-general in the regular army. In 1880 he was the Democratic nominee for President. Died, 1886.

Handel, George Frederick, the foremost composer of oratorio music, was born in Halle, Germany, in 1685. After producing some minor operas in Italy, he settled in England, in 1712, where he became chapel-master to George I. In 1738, appeared his oratorio of "Saul," and four years later his most sublime conception, "The Messiah." Died, 1759.

Hanna, Marcus Alonzo, an American merchant and politician; born in New Lisbon, O., 1837. He was appointed to the United States Senate as a Republican by Governor Bushnell, March 5, 1897, to fill vacancy. His term of service under the appointment expired in January, 1898, and he was elected for a full term, and served until his death in 1904.

Hannibal, born in 247 B. C.; Carthaginian general, son of Hamilcar Barca, who devoted him from an early age to war with the Romans. After attacking the allies of the latter in Spain, he marched into Italy, over the Pyrenees and Alps, and, arriving in 218, won the battles of the Ticinus and the Trebia, and next year defeated Flaminius on Lake Thrasymenus. After his great victory at Cannæ in 216, he wintered at Capua, but was unable to take Rome. In 203, he returned to Africa, and was defeated at Zama in the following year by Scipio Africanus. He became chief magistrate at Carthage, but was always hostile to Rome. Finally, when his surrender was demanded by the Romans, he fled to Bithynia, but seeing no way of escape, committed suicide by taking poison, 183 B. C.

Harding, Warren Gamaliel, twenty-ninth president of the United States, son of George Tryon Harding, a physician, was born at Corsica, Morrow County, Ohio, Nov. 2, 1865. He attended Ohio Central College at Iberia, 1879–82, entered newspaper business at Marion, 1884, and later became editor and publisher of the "Marion Star." He was member of the Ohio state senate, 1900–04, lieutenant-governor of Ohio, 1904–06, and Republican candidate for governor, 1910. In 1914 he was elected United States Senator for the term 1915–21. By the Republican National Convention, held at Chicago in June 1920, he was nominated for President. Strongly opposing the unconditional ratification of the Versailles Peace Treaty and acceptance of the League of Nations, he won overwhelming indorsement at the polls. Out of a popular vote of 27,000,000, he received upwards of 16,000,000, giving him a majority of more than 7,000,000, over J. M. Cox, his Democratic opponent. In his inaugural address, March 4, 1921, President Harding urged a return to normalcy through sane constructive measures. Upon his invitation, delegates of the leading nations met at an Arms Conference in Washington, November 1921, to consider the reduction of naval armaments and international relations in the Pacific. The deliberations resulted, February 1922, in the adoption by the Conference of several important treaties.

Hardy, Thomas, novelist, educated as an architect; born in Dorsetshire in 1840, the scene of his novels being laid in the south of England, the early Wessex. His chief works are "Desperate Remedies," "Under the Greenwood Tree," "Far from the Madding Crowd," "The Trumpet Major," "The Woodlanders," "The Mayor of Casterbridge," and "Wessex Tales," "Tess of the D'Urbervilles," etc.

Harlan, John Marshall, associate justice United States Supreme Court, 1877–1911; born in Boyle County, Ky., June 1, 1833; graduated at Centre College, Ky., 1850 (LL. D., Bowdoin, 1883; Centre College, and Princeton, 1884); studied law at Transylvania University; practiced at Frankfort; county judge, 1858; Whig candidate for Congress in Ashland district, 1859; elector on Bell and Everett ticket, 1860; removed to Louisville in 1867 and practiced law there. Colonel 10th Kentucky

regiment in Union Army, 1861–63; attorney-general Kentucky, 1863–67; returned to practice; Republican nominee for governor, 1871; and again in 1875, his name was presented by Republican convention of Kentucky for vice-president of United States in 1872; member Louisiana Commission, 1877; one of American arbitrators on Bering Sea Tribunal which met in Paris, 1893. Died, 1911.

Harmon, Judson, lawyer, governor; born in Hamilton County, O., February 3, 1846; graduated Denison University, 1866 (LL. D., 1891); graduated Cincinnati Law School, 1869. Judge common pleas court, 1876–78; superior court of Cincinnati, 1878–87—resigned; attorney-general United States, 1895–97; president Ohio Bar Association, 1897–98; member faculty law department, University of Cincinnati. Elected Governor of Ohio, 1908; re-elected, 1910.

Harold I., King of England, surnamed Harefoot on account of his fleetness in running, was second son of Canute the Great. He succeeded to the throne in 1037 and died three years later.

Harold II., son of Godwin, Earl of Kent, was proclaimed King of England in 1066, on the death of Edward the Confessor; and in the same year utterly defeated an invasion of the Norsemen, only to be a few days later overthrown himself by William Duke of Normandy, near Hastings, on the 14th of October.

Haroun Al Raschid, born in 763; Caliph of Bagdad, organized his dominions against the attacks of the Eastern Empire; massacred the Barmecides; compelled Nicephorus to resume payment of his tribute, and ravaged his dominions when the peace was not kept; sent an embassy to Charles the Great. He died in 809, when on an expedition against Khorassan.

Harper, William Rainey, president of University of Chicago 1891–1906; born in New Concord, O., July 26, 1856; graduated at Muskingum College, 1870 (Ph. D., Yale, 1875; D. D., Colby, 1891; LL. D., University of Nebraska, 1893, Yale. 1901, Johns Hopkins, 1902); principal Masonic College, Macon, Tenn., 1875–76; tutor, 1876–79; principal preparatory department Denison University, Granville, O., 1879–80; professor of Hebrew, Baptist Union Theological Seminary, Chicago, 1879–86; professor of Semitic languages, Yale, 1886–91, and professor Biblical literature, 1889–91; principal Chautauqua College Liberal Arts, 1885–91; head professor of Semitic languages and literature, 1891 to 1906. Author of many text-books. Died in 1906.

Harriman, Edward Henry, capitalist; born Hempstead, L. I., N. Y., February 25, 1848; son of clergyman; common school education. He became a broker's clerk, in Wall Street, at 14; later a stock broker on his own account. Was member New York Stock Exchange after 1870; president and director Southern Pacific Railway; director of Union Pacific Railway Co., Delaware & Hudson Railroad, Central Pacific Railway, Illinois Central Railway, Western Union Telegraph Company, Pacific Mail Steamship Company, Oregon Railroad and Navigation Company, Wells-Fargo and Company, Colorado Fuel and Iron Company, National City Bank, etc.; trustee Equitable Trust Company. Died, 1909.

Harris, Joel Chandler, author; born in Eatonton, Ga., December 8, 1848; served apprenticeship to printing trade; an editor of Atlanta "Constitution" twenty-five years. Author: "Uncle Remus: His Songs and His Sayings," "Nights with Uncle Remus," "Uncle Remus and His Friends," "Mingo," "Little Mr. Thimble-Finger," "On the Plantation," "Daddy Jake, the Runaway," "Balaam and His Master," "Mr. Rabbit at Home," "The Story of Aaron," "Sister Jane," "Free Joe," "Stories of Georgia," "Aaron in the Wild Woods," "Tales of the Home Folks," "Georgia, From the Invasion of De Soto to Recent Times," "Evening Tales," "Stories of Home Folks," "Chronicles of Aunt Minerva Ann," "On the Wings of Occasion," "The Making of a Statesman," "Gabriel Tolliver," "Wally Wanderoon," "A Little Union Scout," "The Tar Baby Story and other Rhymes of Uncle Remus," etc. Died, 1908.

Harrison, Benjamin, twenty-third president of the United States; born in North Bend, O., August 20, 1833. He was a great-grandson of Benjamin Harrison, signer of the Declaration of Independence, and grandson of William Henry Harrison, ninth president of the United States. He was graduated at Miami University; studied law in Cincinnati; removed to Indianapolis, Ind., in 1854, and laid the foundation of a fine legal practice; entered the Union Army in 1862, serving with conspicuous gallantry in the Atlanta campaign, finally returning to civil life at the close of the war with the rank of brevet brigadier-general; was the Republican candidate for governor of Indiana in 1876, but was defeated; entered the United States Senate in 1881, and June, 1888, was nominated for the presidency of the United States; elected in the ensuing November, and inaugurated March 4, 1889. His administration was quiet, successful and measurably popular. It was marked by the amicable settlement of the trouble with Chile and by the passage of the McKinley tariff bill. In 1892 he received again the nomination in the Republican National Convention, but by this time the able and persistent attacks of the Democracy on the high tariff policy led to a general revulsion against it, and he was defeated at the election by Cleveland. He thereupon pursued a private law practice, occasionally giving public addresses. He died in Indianapolis, Ind., March 13, 1901.

Harrison, William Henry, born in 1773; ninth President of the United States, distinguished himself in wars with the Indians, and in that of 1812–14 with Great Britain. He was for some time governor of the newly formed Territory of Indiana, and was made in 1828 minister to Colombia. After his recall he was an unsuccessful candidate for the presidency, but was elected in 1840 in opposition to the Democrat, Van Buren. Died, 1841.

Hart, Albert Bushnell, professor of government, Harvard; born in Clarksville, Pa., July 1, 1854; graduated at Harvard, 1880 (Ph. D., Freiburg, Baden, 1883; LL. D., Richmond College, 1902). Author: "Introduction to the Study of Federal Government," "Epoch Maps," "Formation of the Union," "Practical Essays on American Government," "Studies in American Education," "Guide to the Study of American History" (with Edward Channing), "Salmon Portland Chase," "Handbook of the History, Diplomacy, and Government of the United States," "Foundations of American Foreign Policy," "Actual Government," "Essentials of American History." Editor: "Epochs of American History" (three volumes), "American History Told by Contemporaries" (four volumes), "American Citizen Series," "Source-Book of American History," "Source Readers in American History" (four volumes), "The American Nation." Was joint editor: "American History Leaflets," "Harvard Graduates' Magazine," "American History Review."

Harte, Francis Bret, American writer; born in Albany in 1839; was at different times a miner, schoolteacher, printer, and editor. From 1864 to 1870 he was in San Francisco as secretary of the United States Mint, where, in 1870, he published "The Heathen Chinee." He was named American consul at Crefeld in 1878, and at Glasgow in 1880, and after leaving the latter in 1885 lived in London. Chief among his works are "Condensed Novels," "The Luck of Roaring Camp and Other Sketches," "Poetical Works," "Tales of the Argonauts," "The Twins of Table Mountain and Other Stories," "By Shore and Sedge," "A Millionaire of Rough and Ready," "Devil's Ford," "A Ward of the Golden Gate," etc. Died, 1902.

Harvard, John, born in 1607; son of a butcher in Southwark, was educated at Emmanuel College, Cambridge, and in 1637 married and came to New England, but died next year (1638), and left one half of his estate to be devoted to the foundation of a college at Cambridge, Massachusetts, which subsequently became Harvard University.

Harvey, George Brinton McClellan, editor of "North American Review;" born in Peacham, Vt., February 16, 1864; educated at Peacham Academy; was consecutively reporter "Springfield Republican," "Chicago News," and "New York World"; managing editor "New York World"; insurance commissioner, New Jersey; colonel and aide-de-camp of governors Green and Abbett, New Jersey; constructor and president of various electric railroads; bought "North American Review," March, 1899; president of Harper & Brothers, October, 1900-15; bought "Metropolitan Magazine," 1903; editor of "Harper's Weekly," 1903-13.

Harvey, William, born in 1578, English physiologist; discovered the circulation of the blood. He studied at Cambridge and at Padua, and on his return to England, became physician at St. Bartholomew's hospital and delivered the Lumleian lectures. His great discovery was described in "Exercitatio Anatomica de Motu Cordis et Sanguinis," published in 1628. He was afterwards physician to Charles I. and warden of Merton College, Oxford. Died, 1657.

Hastings, Warren, born in 1732; English administrator in India; went to Bengal as a writer in 1750, but was seven years later appointed agent of the East India Company at the court of the Nabob of Bengal. In 1764, he returned to England, where he remained four years studying Eastern literature. On his return to India he became a member of the council of Madras, and in 1772 Governor of Bengal, a position which, in 1774, became that of Governor-General of India. He was now involved in quarrels with his council, and sent in his resig-

nation, which, however, when accepted, he disavowed. The Supreme Court decided in his favor, and he was reappointed. During his first term of office he sold the vale of Rohilcund to Sujah Dowlah and obtained the execution of Nuncomar, his enemy. During his second term, in order to obtain money, he took those measures against the Rajah of Benares and the Nabob of Oude which were afterwards charged against him, but left the affairs of the company in a very prosperous condition. Three years after his return he was impeached before the lords for high crimes and misdemeanors, but, after a trial which proceeded at intervals for seven years, and in spite of the eloquence of Burke and Sheridan, he was acquitted in 1795. He was ruined by the expense, but was granted an annuity by the court of directors. Died, 1818.

Hawthorne, Nathaniel, an eminent American romancist, was born at Salem, Mass., in 1804. He graduated at Bowdoin College in 1825, and in 1837 he published his "Twice-told Tales," — a work highly spoken of by the "North American Review." In 1846, he was appointed surveyor of the port of Salem, and in 1853, United States Consul at Liverpool, England, a position he held for four years. Hawthorne's reputation will mainly rest upon "The Scarlet Letter," "The House of the Seven Gables," and "The Blithedale Romance," works of the very highest order of merit. Died, 1864.

Hay, John, an American statesman and writer; born in Salem, Ind., 1838. He was graduated from Brown University, and settled in Illinois as a lawyer, but went to Washington in 1861, as one of Lincoln's private secretaries, acting also as his aide-de-camp. He served under generals Hunter and Gillmore with the rank of major and assistant adjutant-general. He was subsequently in the United States diplomatic service, stationed at Paris, Vienna, and Madrid. In 1897, he was made ambassador to England, and in 1898, secret ary of state. His literary reputation rests upon "Pike County Ballads," "Castilian Days," a volume of travel; and "Life of Abraham Lincoln" (with J. G. Nicolay). As secretary of state, Mr. Hay gained a standing equal to that of the most eminent men who have held that high office. In coolness, foresight, and statesmanlike appreciation of current and coming events he had no superior among contemporary diplomats. Died, 1905.

Haydn, Joseph, a celebrated musical composer; born in Austria, 1732, and studied under Porpora. In 1791, Haydn produced in London six grand symphonies followed at Vienna, in 1798, by his "chef-d'œuvre," "The Creation." Died, 1809.

Hayes, Rutherford Birchard, the nineteenth president of the United States, succeeding Grant, was born in Ohio, 1822, and practiced law in Cincinnati. Married, in 1852, Lucy Ware Webb. He supported Scott in 1852, Frémont in 1856, and Lincoln for the presidency. He entered the army as major of the 23d Ohio Infantry, and participated in the campaigns of West Virginia and the battles around Winchester; was severely wounded at South Mountain; elected to Congress from Ohio in 1864; twice governor of Ohio; nominated for the presidency by the Republican Convention at Cincinnati, June, 1876, in opposition to S. J. Tilden, of New York; took his seat March 4, 1877. Died, 1893.

Hayne, Robert Young, an American statesman; born in South Carolina in 1791; was admitted to the bar in 1812; served in the war with Great Britain; and at its close returned to his practice in Charleston. He sat in the United States Senate from 1823 to 1832. He was a vigorous opponent of protection, and in 1832 boldly supported in Congress the doctrine of Nullification. Daniel Webster's reply ranks among his ablest speeches. In November, 1832, South Carolina adopted an ordinance of nullification, in December Hayne was elected governor, and the State prepared to resist the federal power by force of arms. A compromise, however, was agreed to and the ordinance was repealed. Hayne died September 24, 1840.

Hazlitt, William, born in 1778; critic and essayist, son of a Nonconformist minister; as an artist became acquainted with Leigh Hunt and Lamb, and published his "Essay on the Principles of Human Action," after which he contributed to the "Examiner" many essays, including "The Round Table," "Table Talk," criticisms on "The Spirit of the Age," and lectured on Elizabethan dramatists at the Surrey Institution. He also wrote "Characters of Shakespere's Plays," "View of the Contemporary English Stage," and a "Life of Napoleon." Died, 1830.

Hearst, Phœbe, philanthropist; born in 1842; maiden name Apperson; married in 1862 George F. Hearst, United States Senator from California, who died in 1891. She established and endowed several kindergarten classes for poor children, and a manual training school in San Francisco; several kindergartens, and a kindergarten training school in Washington, D. C.; made donations to the American University, Washington, and gave $250,000 to build National Cathedral School for girls; donated from $3,000,000 to $4,000,000 for buildings for the greater University of California, having previously paid the cost of a competition of the best architects of America and Europe for the plans. She maintained a school for mining engineers at the University of California as a memorial to her husband; built, endowed and gave thousands of dollars to free libraries, established working girls' clubs, and did much other educational and charitable work. Died, 1919.

Hearst, William Randolph, newspaper publisher; born in San Francisco in 1863; son of late Senator George F. and Phœbe Apperson Hearst; educated in public schools, San Francisco, and Harvard. Editor and proprietor of "San Francisco Examiner," 1886; bought "New York Journal," 1895; later bought "Advertiser," to secure news franchise, and made it "New York Morning American"; started "Chicago American," 1900, "Chicago Morning Examiner," 1902, "Boston American," 1904, "Los Angeles Examiner," 1904. Elected to 58th and 59th congresses, 11th New York district; Democrat. President of National League of Democratic Clubs. Candidate for mayor of New York on Municipal Ownership ticket, 1905; and for governor, 1906. Promoter of the Independence League.

Hedin, Sven Anders, Swedish traveler; born in Stockholm, 1865, and educated at Stockholm and in Germany. He began his explorations in Persia in 1885, and has traveled through Khorassan and Turkestan, several times through Tibet and other parts of Central Asia. His books include "Through Asia, 1898," "Central Asia and Tibet," and "Scientific Results of a Journey in Central Asia, 1899–1902.

Hegel, Georg Wilhelm Friedrich (*hā'-gail*), a German metaphysician; born in Stuttgart, 1770, became, in 1801, a lecturer in Jena University; in 1816 entered upon the professorship of philosophy at Heidelberg, and two years later filled a similar chair at Berlin. The Hegelian system of philosophy is looked upon as an attempt to combine the real and the ideal, and, though perhaps but imperfectly understood so far, it is accounted in Germany as forming, or rather associating together, the salient doctrines of the Pantheistic school. Died, 1831.

Heine, Heinrich, German poet; born in 1799 in Düsseldorf of Jewish parents, and sent to Hamburg to prepare for a commercial life, but preferred studying law. At Bonn he was pupil of Schlegel, and at Berlin made the acquaintance of Varnhagen von Ense. In 1825, he renounced Judaism, and after 1830 lived at Paris, where he married Mathilde Mirat. He traveled much, but about 1847 had an attack of paralysis, and soon after became blind. His chief works are "Buch der Lieder," followed by other poems; "Reisebilder," "Der Salon," "Ueber Börne," a satire; "Deutschland ein Wintermärchen," and "Atta Troll." Died, 1856.

Helmholtz, Hermann Ludwig Ferdinand, a German scientist; born in Potsdam, 1821, became professor of physiology at Heidelberg, 1858. He ranks among the ablest of modern physicists; wrote many valuable works on physiology and the relations of physical forces; and invented the ophthalmoscope, an instrument for the examination of the inner structures of the eye. Died, 1894.

Hemans, Felicia Dorothea, née Browne, born in 1793; English verse-writer; wrote "Early Blossoms" before she was 15, and afterwards "Domestic Affections," "Hymns for Childhood," "The Better Land," "Casabianca," etc. She died in Dublin, 1835.

Heney, Francis Joseph, lawyer; born in Lima, N. Y., March 17, 1859; resident of San Francisco since 1864; educated at public primary, grammar and night schools, 1866–75, University of California, 1879–80, Hastings Law School, 1883–84. Admitted to bar, September, 1883; in cattle business in Arizona, 1885–89; conducted Indian trader store, Fort Apache, Arizona, 1886–88; practiced law, Tucson, Arizona, 1889–95; took prominent part in litigation by which titles under Mexican land grants in Arizona were settled, and in argument of three land-grant cases before United States Supreme Court; was attorney-general of Arizona, 1893–94; removed to San Francisco, 1895, and confined cases to civil business until urged by United States Attorney-General Knox to undertake land fraud cases at Portland, Ore.; discovered conspiracy of United States Attorney John H. Hall to protect guilty politicians in consideration of reappointment; secured removal and indictment of

Hall, and indictment of Senator Mitchell, George C. Brownell, and others.

Hennepin, Louis, a French recollet friar, missionary, and traveler in North America; born in Flanders about 1640. At length he embarked for Canada and arrived at Quebec in 1675. Between that period and 1682 he explored the regions afterward called Louisiana, and returning to Europe, published an account of his researches. The geographical portions of his works are feeble but they present much interest as descriptions of the manners of the aboriginal races which the author visited. He died in Utrecht about 1706.

Henry I., King of England; born in 1068, youngest son of William I., seized the throne on the death of William II. (1100), and forced Robert to be content with Normandy, but deprived him of this also after the battle of Tenchebrai; married Matilda, daughter of Malcolm III. and descendant of the Saxon kings; established "Justices in Eyre," the court of exchequer, and a standard of weights and measures, abolished the curfew, and compromised the Investiture question by an agreement with Paschal II. His charter was the foundation of the Great Charter. Died, 1135.

Henry II., born in 1133, grandson of last-named, and son of Matilda and Geoffrey Plantagenet; came to the throne in 1154, having married Eleanor of Aquitaine (divorced wife of Louis VII.), and acquired by the marriage Guienne and Poitou; put down private war and jurisdictions, and subdued the last great feudal rising, which was aided by William the Lion, of Scotland, whom he compelled to do homage; was engaged in a long quarrel with Becket as representative of the immunity of clerks from civil jurisdiction, and sanctioned the first expedition against Ireland, afterwards accepting the kingdom. His last years were much troubled by wars with his sons. The most important enactments of his reign were the Assizes of Clarendon and Northampton, and the Assizes of arms, besides the grant of charters to towns. He was the most powerful prince of his time, was offered the imperial throne, and possessed by various titles the greater part of France. Died, 1189.

Henry III., born in 1207, son of John by Isabella of Angoulême; came to the throne in 1216 when a minor, and in the course of a long reign provoked much hostility by his foreign favorites and his submission to papal exactions, discontent culminating in the Barons' War (1263–65), in which he was defeated at Lewes and compelled to submit to control of the government by De Montfort and his friends. These, however, quarreled among themselves, and at Evesham, De Montfort was defeated and slain. During this reign the Great Charter (with important clauses omitted) was frequently renewed, and Westminster Abbey was almost entirely built. Died, 1272.

Henry VII., born about 1457; first of the Tudor Dynasty, son of Edmund Tudor and Margaret Beaufort, a descendant of John of Gaunt; invaded England in 1485, and defeated Richard III. at Bosworth, after which he married Elizabeth, daughter of Edward IV. His reign was marked by three Yorkist risings, which he defeated, by the measures he enforced against the nobles, by his system of marriages with foreign princes, and the enactment of Poyning's law. Died, 1509.

Henry VIII., born in 1491; son of Henry VII., whom he succeeded in 1509; married Catherine of Aragon, wife of his deceased brother, his divorce from whom was the proximate cause of the Reformation. Papal jurisdiction was renounced, more especially by the Acts of Supremacy and of Appeals, but the king was strongly averse to doctrinal changes. The early years of the reign were marked by a war with France, in which Henry took part in person; attempts at union with Scotland were made, but defeated by French and papal influence; a system of balance was maintained in foreign relations; a large amount of ecclesiastical property was annexed to the Crown, which gained complete control over the Church: the rising called the Pilgrimage of Grace was suppressed; and the king became practically absolute, being granted by parliament the right of making laws by proclamation, and of settling the succession in his will. Died, 1547.

Henry II., King of France, was born in 1519; son of Francis I., whom he succeeded in 1547. By his alliance with the German Protestants, he acquired Metz, Toul, and Verdun, while he also regained Calais from the English. He carried on his father's war with Spain with some success until the disaster at St. Quentin, and died (1559) of a wound inflicted in a tournament held to celebrate its conclusion by the marriage of his daughter and Philip II.

Henry IV., of France, was born in 1553; as son of Anthony of Navarre, a descendant of Louis IX., was founder of the Bourbon Dynasty succeeding Henry III. in 1589. His marriage with Marguerite de Valois, in 1572, was the occasion of the Bartholomew massacres. In 1576, he quitted the court and became leader of the Huguenots and opponent of the League, being the rival of the Guises for the succession. He defeated them at Arques and Ivry, but was unable to conquer Paris without becoming a Roman Catholic, which he did in 1593. He concluded peace with Philip II. at Vervins, and issued the Edict of Nantes. The rest of his reign was occupied by domestic reforms. He was assassinated by Ravaillac, 1610.

Henry IV., of Germany, born in 1050; son of Henry III., began the Investiture disputes with the papacy, in the course of which he deposed Gregory VII., but was himself excommunicated and deposed, and was obliged to submit at Canossa in 1077, but, in 1084, again invaded Italy, and captured Rome. In Germany he had enemies in Rudolf of Swabia (whom he defeated finally at Wolksheim in 1080), in the Saxons, and in his sons, Conrad and Henry, by the latter of whom he was dethroned. Died, 1106.

Henry, Joseph, an eminent American physicist; born in Albany, N. Y., in 1797; was appointed professor of natural philosophy in the College of New Jersey at Princeton, in 1832; and, in 1846, was called to the office of secretary or director of the Smithsonian Institution at Washington, to the organization and wide reputation of which he had mostly contributed. Henry made most important discoveries in electro-magnetism. Died, 1878.

Henry, Patrick, born in Virginia in 1736; American orator and statesman; practiced as an advocate in Virginia, where he first came into prominence in 1763, by his pleading in the case of clerical incomes; was an active opponent of the Stamp Act, and the chief leader of the revolution in Virginia, being more extreme in his views than Washington. He was for some years governor of his State, during which he opposed the Federal Constitution as not democratic enough. He was an eloquent but reckless speaker, and was obliged to resume his profession in order to cover his heavy debts. Died, 1799.

Hepburn, William Peters, congressman; born in Wellsville, O., November 4, 1833; taken to Iowa Territory, April, 1841; educated in local schools and in a printing office; admitted to bar, 1854; in Union army, 1861–65; captain, major, and lieutenant-colonel, 2d Iowa cavalry; presidential elector, 1876 and 1888; member of Congress, 1881–87, and 1893–1909. He was Chairman of Committee on Interstate and Foreign Commerce, and author of the Hepburn Bill to regulate interstate commerce. Died, 1916.

Herbert, Victor, conductor, composer; born in Dublin, Ireland, February 1, 1859. Began musical education in Germany at 7, studying under leading masters; first position of prominence that of principal violoncello player in court orchestra, Stuttgart; heard in concerts throughout Europe before coming to the United States as solo violoncellist in Metropolitan Orchestra, New York, 1886; since then has been connected with Theodore Thomas's, Seidl's, and other orchestral organizations as soloist and conductor. Bandmaster of 22d Regiment Band, New York, since 1894; conductor of Pittsburgh, Pa., Orchestra, 1898–1904; Victor Herbert's New York Orchestra since 1904. Composer: "The Captive" (oratorio written for and performed at Worcester, Mass., Festival); "Prince Ananias," "The Wizard of the Nile," "The Serenade," "Cyrano de Bergerac," "The Ameer," "The Viceroy," "The Idol's Eye," "The Fortune Teller," "The Singing Girl," "Babette," "Babes in Toyland," "It Happened in Nordland" (all comic operas). Also several compositions for orchestra, songs, and a concert for violoncello and orchestra.

Herod the Great, born in 62 B. C.; King of Judæa; put to death his wife, Mariamne, and two sons; massacred the children of Bethlehem, and rebuilt the Temple. Died, 4 B. C.

Herodotus, born in Halicarnassus, in Caria, 484 B. C.; an eminent Greek historian, usually called "the Father of History." His great work, for which he appears to have collected the materials during long travel, is believed to have been written at Thurii. It comes down to 478 B. C.; and, except for the author's love of the marvelous, his history is considered one of the most trustworthy of all ancient histories, while in the grace of its style it is unrivaled. The best English translation of Herodotus is probably that by Canon Rawlinson (1858–60). Died, in Thurii, in Italy, about 424 B. C.

Herschel, William, Sir, an eminent astronomer; born in Hanover, in 1738, and died in 1822. Most of his life was spent in England. John Frederick William, his son, who was also distinguished in the same line, was born in England in 1792, and died in 1871.

Hezekiah, son of Ahaz, ascended the throne of Judah in 726 B. C. He uprooted idolatry, and obtained the help of God against the Assyrians under Sennacherib, who had invaded his dominions. Died, 697 B. C.

Higginson, Henry Lee, banker; born in New York, November 18, 1834; entered Harvard, 1851, but did not complete course. Employé in counting-house of S. & E. Austin, Boston; then went to Vienna; studied music; served in United States volunteers in Civil War, becoming major and brevetted lieutenant-colonel; severely wounded at Aldie, Va., June, 1863; member of Lee, Higginson & Company, bankers, Boston. He devoted a considerable sum to the organization of a symphony orchestra in Boston. Died, 1919.

Higginson, Thomas Wentworth, American writer; born in Cambridge, Mass., in 1823; at first a Unitarian minister, entered keenly into the movement against slavery, and was severely wounded during the Civil War. Among his works are "Malbone: an Oldport Romance," and "Oldport Days," "Harvard Memorial Biographies," "Brief Biographies of European Statesmen," "Common Sense About Women," "Women and Men," "Part of a Man's Life," and many other books. Died, 1911.

Hildreth, Richard, born in 1807; American historian; author of a "History of the United States," "Japan as It Was and Is," "The White Slave," a novel; was for some time consul at Trieste. Died, 1865.

Hill, David Jayne, diplomat; born in Plainfield, N. J., June 10, 1850; graduate of Bucknell University Pa., 1874; A. M. (LL. D., Colgate, University of Pennsylvania, Union); student in Universities of Berlin and Paris. President of Bucknell University, 1879–88; president of University of Rochester, 1888–96; resigned; spent nearly three years in study of public law of Europe; professor of European diplomacy in School of Comparative Jurisprudence and Diplomacy. Washington, 1899-1903. Assistant secretary of state of United States, 1898–1903; envoy extraordinary and minister plenipotentiary of United States to Switzerland, 1903–05; to the Netherlands, 1905–07; ambassador to Germany, 1908–11. Author: "Life of Washington Irving," "Life of William Cullen Bryant," "Elements of Rhetoric," "Science of Rhetoric," "Elements of Psychology," "Social Influence of Christianity," "Principles and Fallacies of Socialism," "Genetic Philosophy," "International Justice," "A Primer of Finance," "The Conception and Realization of Neutrality," "The Life and Work of Hugo Grotius," "The Contemporary Development of Diplomacy," "A History of Diplomacy in the International Development of Europe." Also numerous political pamphlets in English and German, and printed addresses.

Hill, James J., railway magnate; born near Guelph, Ont., September 16, 1838; Scotch-Irish descent; educated in Rockwood Academy; left his father's farm for business life in Minnesota; was in steamboat offices in St. Paul, 1856–65; agent of Northwestern Packet Company, 1865; later established general fuel and transportation business on his own account; head of Hill, Griggs & Company, same line, 1869–75; established, 1870, Red River Transportation Company, which was first to open communication between St. Paul and Winnipeg; organized, 1875, the Northwestern Fuel Company, and three years later sold out his interest, in the meantime having organized a syndicate which secured control of the St. Paul & Pacific Railroad, from Dutch owners of the securities; reorganized system as St. Paul, Minneapolis & Manitoba Railway Company, and was its general manager, 1879–82; vice-president, 1882–83; president 1883–90; it became part of Great Northern system, 1890; interested himself in building the Great Northern Railway, extending from Lake Superior to Puget Sound, with northern and southern branches, and a direct steamship connection with China and Japan, 1883–93; president of entire Great Northern system, 1893–1907. Gave $500,000 toward establishing Roman Catholic Theological Seminary at St. Paul, Minnesota. Died, 1916.

Hoar, George Frisbie, statesman; born in Concord, Mass., August 29, 1826; graduated from Harvard College in 1846, and afterwards from the Dane Law School, Harvard. He practiced law at Worcester, was elected to the State Legislature in 1852, to the State Senate in 1857; was member of Congress 1869–77, and United States Senator from 1877 until his death. He has left valuable memoirs of his observations during his long career. Died in Worcester, Mass., September 30, 1904.

Hobbes, Thomas, philosopher; born in Malmesbury in 1588, and educated at Oxford; met Descartes and Gassendi at Paris when tutor to members of the Devonshire family; was afterwards mathematical tutor to Prince Charles (Charles II.). He received a pension at the Restoration, but his chief works were censured by parliament; these were "The Leviathan" and "De Cive." He also wrote "Behemoth," a history of the Civil War. Died in 1679.

Hobson, Richmond Pearson, congressman; born in Greensboro, Ala., August 17, 1870; graduated from United States Naval Academy, 1889; also student at École National Superieur des Mines and École d'Application du Génie Maritime, Paris. Served on flagship "New York" in blockade duty, in bombardment of Mantanzas, in expedition against San Juan de Puerto Rico; commanded collier "Merrimac" and sunk her in Santiago harbor; prisoner in Spanish fortress, June 3 to July 6, 1898; inspector of Spanish wrecks; in charge of operations to save same; success with "Teresa"; on duty in far East, 1899–1900; directed reconstruction at Hong-Kong of three Spanish gunboats—"Isla de Cuba," "Isla de Luzon," and "Don Juan de Austria"; in charge of construction department, Cavite, P. I.; special representative Navy Department, Pan-American Exposition, 1901, Charleston Exposition, 1901–02; superintending naval construction, Crescent shipyard, Elizabeth, N. J., May-June, 1902; resigned from United States Navy, February 6, 1903, and member of Congress from the sixth Alabama district, 1907–15. Author: "A Study of the Situation and Outlook in Europe," "The Disappearing Gun Afloat," "The Yacht Defender, and the Use of Aluminum in Marine Construction," "The Sinking of the Merrimac," "Why America Should Hold Naval Supremacy," "Paramount Importance of Immediate Naval Expansion," "America Must be Mistress of the Seas."

Hodges, George, theologian; dean, Episcopal Theological School, Cambridge, Mass., 1894–1919; born in Rome, N. Y., 1856; graduated from Hamilton, 1877 (A. M., 1882; D. D., Western University of Pennsylvania, 1892; D. C. L., Hobart, 1902); ordained deacon, 1881; priest, 1882; assistant, 1881–89; rector, 1889–94, Calvary Church, Pittsburgh. Author: "The Episcopal Church," "Christianity Between Sundays," "The Heresy of Cain," "In This Present World," "Faith and Social Service," "The Battles of Peace," "The Path of Life," "William Penn," "Fountains Abbey," "When the King Came," "The Cross and Passion," "A Child's Guide to the Bible," "Religion in a World at War." Died, 1919.

Hoe, Robert, manufacturer, inventor; born in New York, 1839; educated at public schools; entered printing press factory of R. Hoe & Company, founded by his grandfather Robert. He developed the printing press from the "Hoe cylinder" of the 1846 patent to the present double-sextuple Hoe, and also presses of greatly improved type for printing in colors; also manufacturer of circular saws and saw-bits. Had large factories in New York and London. One of founders Metropolitan Museum of Art. Died, 1909.

Hofmann, Heinrich, German historical painter, born in Darmstadt, 1824. After studying in Düsseldorf and at the Antwerp Academy, he resided in Italy, 1854–58. He finally settled, 1862, in Dresden, where he became professor of art in the academy. While he chose his subjects from the whole field of literature and mythology, Hofmann is most widely known for his idealized scenes from the life of Christ. Several of these have been extensively reproduced in engravings, especially his "Christ in the Temple," painted in 1882. Died, 1902.

Holmes, Oliver Wendell, jurist; born in Boston, Mass., March 8, 1841; graduated from Harvard, 1861; Harvard Law School, 1866 (LL. D., 1895; Yale, 1886); served three years 20th Massachusetts volunteers; wounded in breast at Ball's Bluff, October 21, 1861, in neck at Antietam, September 17, 1862, in foot at Marye's Hill, Fredericksburg, May 3, 1863. Engaged in practice in Boston; editor "American Law Review," 1870–73; member law firm of Shattuck, Holmes & Munroe, 1873–82; professor of law, Harvard Law School, 1882; associate justice, 1882–99, chief justice, 1899–1902, Supreme Judicial Court, Massachusetts; associate justice Supreme Court of United States since December 4, 1902. Author: "The Common Law" (lectures at Lowell Institute), "Speeches."

Holmes, Oliver Wendell, born in Cambridge, Mass., 1809; a distinguished American author and man of letters. He published one or two novels, besides essays and poems, but is best known for his three works, "The Autocrat of the Breakfast Table," "The Professor at the Breakfast Table," and "The Poet at the Breakfast Table." These first appeared in the "Atlantic Monthly," and are full of a quaint knowledge, breadth of thought, and genial humor which will keep them favorites wherever the English language is spoken. Died, October 7, 1894.

Homer, the greatest name in epic poetry, has come down to us as, unfortunately, little better than a name

and many theories of the origin of the Homeric poetry hardly leave us even the name. The traditions agree in making Homer an Asiatic Greek, born probably at Smyrna about the year 850 B. C. He is represented as blind, and as reciting his poems from place to place. All scholars agree that the poems were not written, but handed down from memory, as there is little evidence that writing was practiced at so early a period. One theory of their authorship is that they are the work or compilation of a company of poets, or Homeric guild, who composed, collected, and handed down in this form these legends of early history. The *Iliad* and the *Odyssey* are sometimes referred also to different writers, and sometimes to the early and later periods of Homer's genius. They are the greatest epics of any age; the *Iliad* is called the "beginning of literature."

Hoover, Herbert, mining engineer and administrative official, was born at West Branch, Iowa, 1874. After graduating in mining engineering at Stanford University, 1895, he engaged in the practice of his profession in various parts of the United States, Australia, and China. In 1902 he located in London where he became identified with several mine-operating companies. During 1915–16 he was chairman of the American Relief Commission in London, and was also made chairman of the Commission for Relief in Belgium, directing the work with marked efficiency. In 1917 he was appointed United States food administrator by President Wilson, and in 1921 was made secretary of commerce by President Harding. In the same year, under plans accepted by Lenine, Secretary Hoover took charge of international famine relief for Russia.

Hopkins, Mark, American educator, born in 1802; principal of Williams College from 1836 to 1872, and professor of moral philosophy; wrote "The Law of Love and Love as a Law" and "An Outline Study of Man." Among his pupils was President Garfield. Died, 1887.

Hopkinson, Francis, born in 1737; American writer, one of the signers of the Declaration of Independence; wrote "The Battle of the Kegs" (1778), "The Pretty Story" (1774), "The Political Catechism" (1777), and other works in prose and verse. Died, 1791. His son, Joseph (died in 1842), judge of the United States District Court, wrote "Hail Columbia!"

Horace, Quintus Horatius Flaccus, one of the greatest of Latin poets, born at Venusia, 65 B. C.; studied at Rome under Orbilius Pupillus, and completed his education at Athens. He then joined the Roman army, and fought under Brutus at Philippi, thereby occasioning the confiscation of his patrimonial estate. On his return to Rome, he embraced literature as a profession, and was so fortunate as to find a liberal and lifelong patron in Mæcenas. His poetical works consist of odes, satires, and epistles — all replete with elegance of diction and perfect propriety of thought and expression, and withal pervaded by a certain atmosphere of calm and well-bred philosophy, that renders them irresistibly attractive to the minds and tastes of cultivated men. Died, 8 B. C.

Hornaday, William Temple, director of the New York Zoölogical Park since 1896; born in Plainfield, Ind., 1854; educated at Iowa Agricultural College; studied zoölogy and museology in this country and Europe; as collecting zoölogist, visited Cuba, Florida, the West Indies, South America, India, Ceylon, the Malay Peninsula, and Borneo, 1875–79. Chief taxidermist United States National Museum, 1882–90; in real estate business, Buffalo, N. Y., 1890–96. Author: "Two Years in the Jungle," "The Extermination of the American Bison," "Taxidermy and Zoological Collecting," "The American Natural History," "Campfires in the Canadian Rockies," "Campfires on Desert and Lava," "A Searchlight on Germany," and "Sleepy America."

Hosmer, Harriet, American sculptor, born in Watertown, Mass., 1830; was a pupil of Gibson at Rome, and executed busts of "Daphne," "Œnone," "Beatrice Cenci," and "Zenobia in Chains." She devised a method for converting Italian limestone into marble. Died, 1908.

House, Edward Mandell, special personal representative of President Wilson to Europe in 1915 and 1916, and later at important councils of the Allies; was born at Houston, Texas, in 1858. He was educated in the schools of New Haven, Conn., and at Cornell university, graduating in 1881. While notably active and influential in Democratic politics, he has never been a candidate for office. In 1919 he was one of the American delegates to the international peace conference at Versailles.

Houston, Sam, an American general, was born in Virginia, 1793. He entered congress in 1823, and four years later became governor of Tennessee. After emigrating to Texas in 1832, he was elected to the chief command of the army which defeated the Mexicans under Santa Ana at San Jacinto, April 21, 1836. He was elected president of Texas the same year, and re-elected in 1841. After the admission of Texas into the Union as a state, Houston twice represented her in the national senate, and filled the gubernatorial chair in 1859. Died, 1863.

Howard, John, a noted philanthropist, was born in Hackney, Middlesex, 1726. Howard was left in easy circumstances at his father's death. A bitter experience as a French prisoner of war and observations made while acting as sheriff of Bedfordshire roused him to attempt some reform of the abuses and misery of prison life; he made a tour of the county jails of England, and the mass of information which he laid before the house of commons in 1774 brought about the first prison reforms; he continued his visitations from year to year to every part of the United Kingdom, and to every quarter of the continent; during 1785–87 he made a tour of inspection through the principal lazarettos of Europe, visited plague-smitten cities, and voluntarily underwent the rigors of the quarantine system. Died, 1790, at the Crimea while on a journey to the East.

Howe, Julia Ward, American author, was born in New York City, May 27, 1819. A philanthropist, interested especially in woman's suffrage, she was the wife of Dr. Samuel G. Howe, the philanthropist, and with him edited the anti-slavery journal, the "Boston Commonwealth." She is best known as the author of the "Battle Hymn of the Republic," written during a visit to the camps near Washington. Died, 1910.

Howell, Clark, editor, born in Barnwell County, S. C., September 21, 1863; lived in Atlanta, Ga., from infancy; graduated from University of Georgia, June, 1883. Entered newspaper work, succeeding Henry Grady as managing editor, "Atlanta Constitution," in 1889, and succeeded his father as editor-in-chief in 1897. Member of Georgia house of representatives six years (speaker, 1890–91); member from Georgia of Democratic national committee since 1892; member and president of Georgia senate, Atlanta district, 1900–06.

Howells, William Dean, American novelist, born in Martins Ferry, Ohio, 1837; was United States consul at Venice from 1861 to 1865. From 1872 to 1881 he edited the "Atlantic Monthly," but soon began to devote his time to novel-writing. Among his works are: "Their Wedding Journey," "The Rise of Silas Lapham," "A Hazard of New Fortunes," "A Modern Instance," "The Quality of Mercy," "Criticism and Fiction," "My Literary Passions," and "The Leatherwood God," completed in his eightieth year. Died, 1920.

Hubbard, Elbert, author, journalist, lecturer; born in Bloomington, Ill., 1859; common school education. Edited "The Philistine"; was proprietor "The Roycroft Shop," devoted to making de luxe editions of the classics. Author: "No Enemy but Himself," "Ali Baba of East Aurora," "As it Seems to Me," "A Message to Garcia," "Time and Chance," "The Legacy," "Forbes of Harvard," "One Day," "A Tale of the Prairies," "Old John Burroughs," "Consecrated Lives," "The Man of Sorrows," and a long series of interesting "Little Journeys" to the homes of great men and women. Died, 1915.

Hughes, Charles Evans, lawyer, born in Glens Falls, N. Y., April 11, 1862; graduate from Brown University, 1881, A. M., 1884; graduated from Columbia Law School, 1884. Teacher Delaware Academy, Delhi, N. Y., 1881–82; admitted to New York bar, June, 1884; practiced in New York, 1884–91; professor of law, Cornell University, 1891–93; active practice in New York, 1893–1906. Attorney for Armstrong commission of New York legislature, investigating methods of large life insurance companies. Governor of New York, 1906–10; justice of Supreme Court, 1910–1916; resigned to accept Republican nomination for president, but was defeated by Woodrow Wilson. In 1921 he became secretary of state in President Harding's cabinet.

Hughes, Thomas, English writer, born in 1823; educated under Arnold at Rugby, and at Oriel; was called to the bar in 1848, and sat in parliament as a liberal for Lambeth (1865–68) and Frome (1868–74). He became Queen's counsel in 1869, and county court judge in 1882. His chief works are "Tom Brown's School Days," "Tom Brown at Oxford," and "A Memoir of Daniel Macmillan." Died, 1896.

Hugo, Victor Marie, French poet and romance writer; born of noble parents in Besançon, 1802; began to write verse at the age of 14, and soon deserting classic models, became the founder, with Sainte-Beuve and others, of the French romantic school. In like manner his early royalism gave place to ardent republicanism. "Cromwell," "Le Dernier Jour d'un Condamné," "Marion Delorme," and, above all, "Hernani," were strongly censured by the Académie; but Charles X. would not prohibit the performance of the last. "Le Roi s'Amuse," was, however, interdicted by the ministry. Between the years 1830–40 appeared also "Nôtre-Dame de Paris,"

and several volumes of verse, and the poet was elected to the Académie in 1841. In 1845 he also became "pair de France." In 1848, he was elected by Paris to the Constitutional Assembly, and acted with the moderates, but in the next Assembly he became one of the orators of the left, and, having attempted to resist the *coup d'état* of Louis Napoleon, was banished in 1851. He lived chiefly in Jersey and Guernsey, and wrote "Les Contemplations" and "La Légende des Siècles." He refused to avail himself of the amnesties of 1859 and 1869, but returned to Paris in 1870. In 1866 appeared "Les Travailleurs de la Mer," and, after the return, "Quatre-vingt Treize," "L'Histoire d'un Crime," and many other works. "Hernani" was revived in 1867. Hugo became a senator in 1876. Chief among his lyrics were his early "Odes et Ballades," "Les Feuilles d' Automne," "Les Chants du Crépuscule," "Les Rayons et les Ombres," and "Chansons des Rues et des Bois." The romance "Les Misérables," was translated into many languages. He died, 1885, and was buried in the Panthéon, which was secularized for the purpose.

Hull, Isaac, an American naval officer; born in Derby, Conn., March 9, 1773. In July, 1812, he commanded the frigate "Constitution," which was chased by a British squadron for three days, but escaped by skillful sailing. While cruising in the Gulf of St. Lawrence he met the British frigate "Guerrière," which, after a bloody fight of half an hour, surrendered, August 19, 1812. The "Guerrière" was so injured in the battle that she soon sank. The British ship lost nearly 100 men; the "Constitution" had fourteen men killed and wounded, and within an hour or so was ready for another fight. This was the first naval battle of the War of 1812, and Congress gave Captain Hull a gold medal for his services. He died in Philadelphia, Pa., February 13, 1843.

Humboldt, Friedrich Heinrich Alex., Baron von, great traveler and naturalist, born in Berlin, 1769; devoted all his life to the study of nature in all its departments, traveling all over the continent, and in 1799, with Aimé Bonpland for companion, visiting South America, traversing the Orinoco, and surveying and mapping out in the course of five years, Venezuela, Colombia, Ecuador, Peru, and Mexico, the results of which he published in his "Travels." His chief work is the "Kosmos," or an account of the visible universe, in four volumes, originally delivered as lectures in Paris in the winter of 1827–28. He was a friend of Goethe, who held him in the highest esteem. Died, 1859.

Hume, David (*hūm*), an eminent historian, born in Edinburgh, 1711; after laying the basis of a great literary reputation by his "Treatise of Human Nature," produced "Essays, Moral, Political, and Literary," and other works. His celebrated "History of England," published between the years 1754 and 1761, for two generations esteemed the ablest work of its class, was considered by many critics open to objection on the score of skepticism and undue partiality. Died, 1776.

Hunter, John, the most eminent English anatomist of modern times; born near Glasgow in 1728; became surgeon of St. George's Hospital, London, and a Fellow of the Royal Society, and acquired high celebrity by his discoveries in comparative anatomy and physiology. Died, 1793.

Huss, or **Hus, Johann,** born probably in 1369; Bohemian reformer, attacked abuses in Prague University and among the clergy, and opposed German predominance. He was excommunicated by John XXIII. for giving adhesion to Wycliffe's doctrines, and afterwards wrote his "Tractatus de Ecclesiâ." Having gone to the council of Constance under a safe-conduct from the emperor, his enemies procured his imprisonment as a heretic, and, on refusal to retract, he was burned to death in 1415.

Huxley, Thomas Henry, an English biologist and essayist; born in Ealing, England, May 4, 1825. He was graduated at London University in 1845. In 1846–1850 he sailed around the world as a naval surgeon. In 1851 he was made F. R. S. by the Royal Society; he became professor of natural history in the School of Mines in 1854; Hunterian professor in the Royal College of Surgeons in 1863; president of the British Geological and Ethnological Societies in 1869; secretary of the Royal Society in 1872; Lord Rector of Aberdeen University in 1872; and president of the Royal Society in 1883. He was an able advocate of Darwinian evolution, and was perhaps best known to the popular apprehension by his agnostic speculations, in expounding which he came into controversy with the defenders of Theism and Christianity. He wrote a number of scientific works. He died in Eastbourne, England, June 29, 1895.

Huyghens, Christian, born in 1629; Dutch natural philosopher and astronomer; was compelled to leave Paris by the revocation of the Edict of Nantes. He had been invited to France by Colbert, and during his residence there visited England, and was made Fellow of the Royal Society. He applied the pendulum to clocks, ascertained the laws of collision of elastic bodies, and discovered the rings of Saturn. Died, 1695.

Hypatia, born about 370; daughter of Theon, head of the Neo-Platonic school of Alexandria, gave public lectures in philosophy, but was brutally murdered by the partisans of the Patriarch Cyril, 415.

Ibsen, Henrik, born in 1828; Norwegian dramatist, appointed director of the theater at Bergen in 1851, and, in 1857, of that at Christiania. Among his plays are "Brand," "Peer Gynt," "The Pillars of Society," "A Doll's House," "Ghosts," etc. Died, 1906.

Ingalls, Melville Ezra, railroad president; born in Harrison, Me., September 6, 1842; brought up on a farm; educated in Bridgton Academy and studied in Bowdoin College; graduate of Harvard Law School, 1863; practiced first at Gray, Me., but soon removed to Boston; member of Massachusetts Senate, 1867. President in 1870, receiver in 1871, of the Indianapolis, Cincinnati & Lafayette Railroad, and from bankrupt condition, with aid of reorganizations in 1873 and 1880, put its successor, the Cincinnati, Indianapolis, St. Louis & Chicago, upon a sound footing, consolidating it with other roads into the Cleveland, Cincinnati, Chicago & St. Louis Railroad, of which he was chairman until 1912 (comprising the "Big Four" system); also from October 1, 1888, until February, 1900, president of Chesapeake & Ohio Railway Company; president of Merchants' National Bank, Cincinnati. Was Democratic candidate for mayor of Cincinnati, 1903; president of National Civic Federation, 1905. Died, 1914.

Ingersoll, Robert Green, born in 1833; American lawyer; was colonel of a federal regiment, 1862–65; and, in 1866, State attorney-general. Was a well-known orator and anti-Christian lecturer. Died, 1899.

Innocent III., Pope, born about 1161; son of Count Trasimund, a Roman noble; elected in 1198, aimed at making the papacy supreme in all European affairs. In 1212, he deposed the Emperor Otho, setting up Frederick II. in his place. His dispute with John of England concerning the appointment of Langton to the See of Canterbury, lasted from 1207 to 1213. In that year John admitted Langton, and surrendered England to the pope, at the same time receiving it back as a papal fief. Innocent favored the fourth crusade (1200). Died, 1216.

Ireland, John, Roman Catholic Archbishop of St. Paul, 1888 to 1918; born in Ireland, September 11, 1838; came to United States in boyhood. Educated in Cathedral School, St. Paul; studied theology, France (LL. D., Yale, 1901); ordained priest, 1861; chaplain of 5th Minnesota regiment in civil war; rector cathedral, St. Paul; consecrated bishop of Maronea and coadjutor to Bishop Grace of St. Paul, 1875; succeeded to see of St. Paul, 1884. Author: "The Church and Modern Society." Died, 1918.

Irving, Sir Henry (John Henry Brodribb), actor, born in Keinton, near Glastonbury, in 1838; acted at the Theater Royal, Edinburgh, from 1856 to 1859, and afterwards for seven years at Manchester. He played in London in 1859, but attracted little notice till his appearance at St. James' Theater in 1866. He soon established a connection with the Lyceum, of which he became manager in 1878. There he played his chief parts, in conjunction with Miss Ellen Terry, producing, among other plays, "Hamlet," "The Merchant of Venice," "Faust," "Macbeth," "Henry VIII.," "The Bells," and other well-known productions. Died, 1905.

Irving, Washington, born in 1783; American man of letters, son of a New York merchant; was admitted to the bar in 1806, but devoted himself to literature. In 1810, he became a partner in his brother's commercial establishment, which failed in 1818. He lived in Europe from 1815 to 1832, acting as secretary to the American embassy in London from 1829 to 1831. From 1842 to 1846, he was United States minister to Spain. Among his works are "Knickerbocker's History of New York," "Geoffrey Crayon's Sketch Book," "The Life of Columbus," "The Chronicle of the Conquest of Granada," and lives of "Mahomet" and "Washington." Died, 1859.

Isabella of Castile, born in 1451; daughter of John II.; was married to Ferdinand of Aragon in 1469, and, in 1474, succeeded her brother, Henry IV., on the throne of Castile. Isabella promoted the expedition of Columbus. She was a wise and humane ruler, but her religious zeal led her to consent to the establishment of the Inquisition. Died, 1504.

Isaiah was one of the most eminent of the Hebrew prophets. He was the son of Amoz, but of his personal

history very little is known. He prophesied under Uzziah, Jotham, Ahaz, and Hezekiah, kings of Judah. His prophecies, though delivered later in point of time than several of those uttered by other prophets, occupy, in our Bible, the first place, both on account of their bulk, and for the sublimity and importance of the predictions.

Ito, Marquis Hirobumi, a Japanese statesman, born in the province of Choshu, in 1841. In 1871, visited the United States to examine the coinage system, and on return to Japan was successful in establishing a mint at Osaka. He became prominent in the Japanese cabinet in 1886, and made many reforms. Assassinated in Corea, 1909.

Jackson, Andrew, the seventh President of the United States, was born in North Carolina, March 15, 1767, of Irish parentage. After a harum-scarum youth, Jackson, in 1788, commenced the practice of the law in Nashville, Tenn., and became that State's sole representative in Congress in 1796, and senator in the following year. Between 1798 and 1804, he served as a judge of the Supreme Court of Tennessee; in 1806 he killed Charles Dickinson in a duel; in 1807, appeared as the champion of Aaron Burr; and, in 1812, upon the breaking out of hostilities with England, offered his services to the Government. In 1813, he was severely wounded in a duel fought with Colonel Benton, and defeated the Creeks at Talladega in the same year. In May, 1814, he received the appointment of major-general in the United States Army, and commanded in the battle won over the British Army at New Orleans, in January, 1815. This great victory raised the reputation of Jackson as a general to the highest point, and made him the idol of a large portion of the American people. In 1817–18 General Jackson conducted the Seminole War to a successful conclusion, and was appointed governor of Florida in 1821. Three years later he was an unsuccessful aspirant for the presidency, to which office he was, however, elected in 1828, and reëlected at the end of his four-years' term, in 1832. Among the chief occurrences during his double tenure of office were: his veto of a new charter to the Bank of the United States; the proclamation denouncing the South Carolina Nullification movement; and the senatorial censure passed on the president for his authorizing the removal of the public deposits from the Bank of the United States. Died, June 8, 1845.

Jackson, Thomas Jonathan, better known the world over as "Stonewall Jackson," an American general; born at Clarksburg, West Virginia, in 1824, and graduated at West Point Academy in 1846. After serving with distinction in the Mexican War, Jackson became a professor in the Military Institute at Lexington, Va., until the outbreak of the Civil War. Appointed brigadier-general in the Confederate service at the battle of Bull Run, July 21, 1861, his command on that occasion "stood like a stone wall," to use the words of a distinguished general present. In September, he received the rank of major-general; defeated General Banks at Front Royal, May 23, 1862; fought an indecisive battle with Frémont at Cross Keys, June 8th; commanded a corps in the battles of Gaines' Mill, June 27th, and Malvern Hill, July 1st; again defeated General Banks at Cedar Mountain, August 9th; captured Harper's Ferry with 11,000 Federal prisoners, September 15th; commanded a corps at Antietam, September 17th; and was made lieutenant-general for his services in largely contributing to the Federal defeat at Fredericksburg, December 13, 1862. On May 2, 1863, by a clever flank movement, he defeated the 11th corps of General Hooker's army at Chancellorsville; and on the evening of the same day was fired at by a patrol party of his own men, who mistook him and his staff, in the darkness, for a detachment of Union cavalry, and died of his wounds on the 10th.

Jacquard (*zhah-kahr*), **Joseph Marie,** a French mechanic and inventor, was born in 1752, and died in 1834. His invention of the Jacquard loom revolutionized the art of weaving.

James. The name of a number of sovereigns of European states, the most noted of whom were James I. (VI. of Scotland) of England, who was born in 1566, and crowned King of Scotland while an infant, on the abdication of his mother, Mary Queen of Scots, Elizabeth of England having declared in his favor. He succeeded to her throne in 1603, and died in 1625. James II., born in 1633, succeeded his brother, Charles II., in 1685; was driven from his kingdom by William Prince of Orange, in 1688, utterly defeated in Ireland, and died an exile in France, in 1701. James IV. of Scotland, "the handsomest and most chivalrous prince of his age," born in 1473, succeeded his father, James III., who was murdered after the disastrous defeat near Bannockburn, in 1488; James was killed in the sanguinary battle at Flodden Field, in 1513, in which nearly the entire Scotch peerage of mature age perished with their king.

James, St., one of Christ's favorite apostles, son of Zebedee and brother of St. John. He was martyred about 44, by order of Herod Agrippa.

James, Edmund Janes, educator, born in Jacksonville, Ill., May 21, 1855; educated at Illinois State Normal School and Northwestern and Harvard universities (A. M., Ph. D., 1877, University of Halle; LL. D., Cornell College, Wesleyan, Queen's College); principal high school, Evanston, Ill., 1878–79; principal Model High School, Normal, Ill., 1879–82; professor of public finance and administration, Wharton School of Finance and Economy, University of Pennsylvania, 1883–95; professor of political and social science, University of Pennsylvania, 1884–95; professor of public administration, director of extension division of the University of Chicago, 1896–1901; president of the Northwestern University, February 1, 1902, to September 1, 1904; president of University of Illinois since September 1, 1904. Author: "Relation of the Modern Municipality to the Gas Supply," "The Legal Tender Decisions," "The Canal and the Railway," "Federal Constitution of Germany," "Federal Constitution of Switzerland," "Education of Business Men in Europe," "Charters of City of Chicago," "Growth of Great Cities in Area and Population," "Government of a Typical German City — Halle," also over 100 papers, monographs, and addresses in transactions of societies, etc.

James, Henry, author, born in New York, April 15, 1843; educated in France and Switzerland, and Harvard Law School; began as contributor to periodicals, 1866; after 1869 lived in England; brother to Professor William James, of Harvard. Author: "Watch and Ward," "A Passionate Pilgrim," "Roderick Hudson," "Transatlantic Sketches," "The American," "French Poets and Novelists," "The Europeans," "Daisy Miller," "An International Episode," "Life of Hawthorne," "A Bundle of Letters," "Confidence," "Diary of a Man of Fifty," "Washington Square," "The Portrait of a Lady," "Siege of London," "Portraits of Places," "Tales of Three Cities," "A Little Tour in France," "Beltraffio," "The Bostonians," "Princess Casamassima," "Partial Portraits," "The Aspern Papers," "The Reverberator," "A London Life," "The Tragic Muse," "Terminations," "What Maisie Knew," "The Sacred Fount," "The Wings of the Dove," "The Better Sort," "Question of our Speech," "Finer Grain," and "The Outcry." Received British order of merit, 1916. Died, 1916.

James, William, born in New York, January 11, 1842. An eminent American psychologist and philosophical writer, professor of philosophy in Harvard University, 1897–1907. In 1899–1901 he was Gifford lecturer at the University of Edinburgh. Author: "Principles of Psychology," "The Will to Believe," "Talks to Teachers," "Human Immortality," "The Varieties of Religious Experiences," etc. Died, 1910.

Jasper, William, an American soldier, was born in South Carolina about 1750. He enlisted in the revolutionary army as a sergeant, and at Fort Moultrie, on June 28, 1776, recovered, through an act of great personal bravery, the American colors which had fallen outside the walls. Modestly refusing an officer's commission, he continued to serve under General Moultrie, winning distinction as the hero of numerous exploits. In the assault on Savannah, Oct. 9, 1779, he was mortally wounded while trying to plant his regimental flag on the parapet.

Jay, John, an eminent American statesman, was born in New York City, 1745, where he was admitted to the bar in 1768. In 1774, as a member of the first Continental Congress, he formed one of the committee of three which drew up the celebrated address to the people of Great Britain. He also largely assisted in framing the National Constitution, and, in 1777, was appointed chief justice of New York, and in the following year president of Congress. He next took part in negotiating the treaty of peace entered into at Paris, 1783, between Great Britain and the United States. On his return he was appointed secretary of foreign affairs, and in 1789 chief justice of the Supreme Court. In 1794 he proceeded on a special mission to England, where he concluded a treaty which met with violent opposition from the Anti-Federalist party. He afterward was governor of New York. Died, 1829.

Jeejeebhoy, Sir Jamsetjee, Indian philanthropist; a Parsee by birth and creed, born in Bombay in 1783; realized a fortune as a merchant, and employed it in releasing debtors from jail by paying their debts, and in founding a hospital and schools; in 1857 was made a baronet. Died, 1859.

Jefferson, Thomas, third President of the United States, was born in Virginia, 1743, and, after graduating at William and Mary College, was admitted to the bar in 1767. He practiced law with signal success, and in 1769, became a member of the Virginia House of Burgesses, and in 1773, a delegate to the first Continental Congress, where he assisted in framing the celebrated "Summary View of the Rights of British America." In 1775, he took his seat in the Continental Congress, and with a commanding voice in its deliberations, so that in the year following he was appointed chairman of the committee which drew up the Declaration of Independence. In 1779, he succeeded Patrick Henry in the governorship of Virginia. In 1783, he acted as chairman of the committee charged with the report to Congress of the treaty of peace entered into at Paris, 1783, and, two years later, succeeded Franklin as minister at Paris. On his return, in 1789, he entered General Washington's first cabinet as secretary of state. In this position he gradually came to be considered the head of the Democatic party. In 1793, he resigned office, and four years afterwards became Vice-President of the United States, and *ex-officio* president of the Senate. In 1801, he was elected to the presidency, and during his first administration the Louisiana Purchase was effected. He retired to private life, 1809, at the close of his second term. Died, 1826.

Jelliffe, Smith Ely, physician; born in New York, October 27, 1866; graduate of Brooklyn Polytechnic, 1886; medical department of Columbia University, 1889, Ph. D., 1899, A. M., 1900, Columbia. Began practice, 1889; interne St. Mary's Hospital, Brooklyn; spent one year in Europe; visiting neurologist, City Hospital, New York, since 1903; clinical professor, mental diseases, Fordham University, 1907–12. Author: "Essentials of Vegetable Pharmacognosy" (with Dr. H. H. Rusby), "Morphology and Histology of Plants" (with same), also "Nervous Diseases" in Butler's Diagnostics, "Outlines of Pharmacognosy." Reviser "May's Physiology," "Butler's Materia Medica," "Shaw on Nervous Diseases." Editor and translator: "Dubois' Psychoneuroses"; co-editor, "Encyclopedia Americana," "Scientific American," 1904; editor "Reissig Haus Arzt," 1905, "Medical News," New York, 1900–05; magazine editor "Journal of Nervous and Mental Disease," since 1902; also contributor to medical, botanical, and pharmaceutical press.

Jenks, Jeremiah Whipple, professor of political economy and politics, Cornell, 1891–1912, professor of economics and finance, New York university, since 1912; born in St. Clair, Michigan, September 2, 1856; graduated from University of Michigan, 1878, A. M., 1879, LL. D., 1903; Ph. D., University of Halle, 1885; studied law; admitted to Michigan bar; taught Greek, Latin, and German, Mt. Morris College; professor of political science and English literature, Knox College, 1886–89; professor of political economy and social science, Indiana University, 1889–91; expert agent of United States Industrial Commission on Investigation of Trusts and Industrial Combinations in the United States and Europe, 1899–1901, and consulting expert of United States Department of Labor on same subject. Special commissioner of War Department, United States, to investigate questions of currency, labor, internal taxation and police in the Orient, 1901–02. Appointed financial adviser to republic of China, 1912. Author: "Henry C. Carey als Nationalökonom, Jena," "The Trust Problem," "Vol. XVIII. Report of Industrial Commission of Industrial Combinations in Europe," "Report on Certain Economic Questions in the English and Dutch Colonies in the Orient." Editor and part author: (Reports United States industrial Commission) "Trusts and Industrial Combinations," Vol. I., 1900, Vol. XIII., 1901. Compiler: "Statutes and Digested Decisions of Federal, State, and Territorial Law Relating to Trusts and Industrial Combinations." Part author and compiler of "Reports of Commission on International Exchange." Frequent contributor to periodical literature on economic and political questions. Special expert on currency reform of government of Mexico, 1903; member of United States Commission on International Exchange in special chargé of reform of currency in China.

Jenner, Edward, famous as the discoverer of vaccination, was born in 1749, in Berkeley, England; died there, 1823. After many years devoted to the consideration of, and experiments made with, vaccine lymph as a specific for smallpox, Jenner was for the first time, in 1796, enabled to satisfy many medical men of the valid properties of this new agent as a preventive of the disease.

Jeremiah, in Scripture one of the greatest of the Hebrew prophets, and author of the book which bears his name, and of "Lamentations." He flourished in the Sixth Century, B. C.

Jeroboam. Two kings of Israel bore this name, viz., one who was elected, 975 B. C., by the ten tribes who had rebelled against Rehoboam. Died, 954. The other, a son of Joash, ascended the throne about 825 B. C., and filled it for forty-one years. Died, 784 B. C.

Jerome, or **Hieronymus, St.,** born about 343, in Stridon, in Dalmatia, of Christian parents, studied at Rome under Donatus; after traveling in Gaul and elsewhere, adopted a studious and ascetic life, spending four years in the desert of Chalcis, in Syria; was ordained priest in 379; visited Constantinople, where he became the friend and pupil of Gregory Nazianzus; returning to Rome, became secretary to Pope Damascus, but after his death (384) withdrew to the Holy Land, accompanied by Paula, Eustochium, and other Roman ladies devoted to the ascetic life. For the remainder of his days he presided over a monastery established by Paula at Bethlehem. Here he completed his translation of the Bible from Hebrew into Latin, known as the Vulgate. He wrote numerous commentaries on the Old and New Testaments, and was engaged in controversies with Rufinus, the Pelagians, and others. Died in 420.

Jerome, Jerome Klapka, English humorist, writer, and lecturer, was born at Walsall, England, 1859. He has been at various times clerk, school-master, actor and journalist; editor of "Idler," with Robert Barr, 1892–97, and of "To-Day," 1893–97. Author: "On the Stage and Off," "Idle Thoughts of an Idle Fellow," "Three Men in a Boat," "Diary of a Pilgrimage," "Novel Notes," "John Ingerfield," "Barbara," "Fennel," "Sunset," "New Lamps for Old," "Ruth," "Wood Barrow Farm," "Prude's Progress," "Rise of Dick Halward," "Sketches in Lavender," "Letters to Clorinda," "The Second Thoughts of an Idle Fellow," "Three Men on the Bummel," "Miss Hobbs," "Paul Kelver," "Tea Table Talk," "Tommy and Co.," "Idle Ideas in 1905," "Susan in Search of a Husband," "Passing of the Third Floor Back," "The Angel and the Author," etc.

Jerome, William Travers, lawyer; born in New York, April 18, 1859; educated at Williston Seminary and Amherst College (honorary A. M.); graduated from Columbia Law School, 1884; admitted to bar, 1884; justice of special sessions, 1895–1902; district attorney New York County, elected 1901; Democrat. Reëlected as independent candidate, 1905. Author: "Liquor Tax Law in New York."

Jesus Christ (Iesous, the Greek form of Joshua or Jeshua, contracted from Jehoshua, meaning, help of Jehovah, or saviour; Christos, anointed), the Son of God, the Saviour of men, whose birth, life, and death were predicted by prophets, and attended with miraculous manifestations of divine power; was born of the Virgin Mary, of the tribe of Judah, who was betrothed to Joseph, the descendant and heir of the house of David. Two genealogies of Joseph are given — one by Matthew, chapter one; the other by Luke, chapter three. The former is supposed to contain the list of heirs of the house of David, whether by direct or indirect descent; the other the direct ancestors of Joseph. It was foretold that Christ should be of the seed of Abraham and the son of David. The place of His birth was Bethlehem; the time, according to the received chronology, was in the year of Rome 754. Scholars are now almost unanimously agreed that this date is too late, and it is generally placed about four years earlier. The coming of a forerunner to the Saviour, John the Baptist, in the spirit and power of Elias, was foretold by an angel (Luke i: 17). The angel Gabriel announced to Mary that the power of the Highest should overshadow her, and that she should bear a son who should rule over the house of Jacob forever; and on the night of His birth an angel appeared to some shepherds, and announced the coming of a Saviour. On the eighth day He was circumcized according to the law of Moses, and on the fortieth was presented in the temple, where the aged Simeon pronounced Him to be the light of nations and the glory of Israel. Herod ordered the extirpation of all children of Bethlehem and its vicinity of the age of less than two years, for the purpose of effecting the death of Jesus. But Joseph, being miraculously warned of the danger, fled to Egypt with the Virgin and her child, and on his return, after the death of Herod, went to reside at Nazareth in Galilee, whence Jesus is called a Nazarene. We have no further accounts of the earlier years of Jesus, except the remarkable scene in the temple when He was 12 years old, and the general observation of Luke, that He remained in Nazareth with His parents and served them. At the age of about 30 (Luke iii: 23), He was baptized by John in the River Jordan, the Spirit of God descending upon Him like a dove, and a voice from heaven proclaiming, "Thou art my beloved Son; in thee I am well pleased." Previously, however, to entering on His office of divine teacher He retired to a

solitary place, where He passed forty days in fasting, meditation, and prayer, previous to the remarkable scene of the temptation described by the evangelists — Matt., chap. iv.; Mark i: 12-13; Luke, chap. iv. He was afterward transfigured in the presence of three of His disciples, when Moses and Elias appeared to Him from heaven, and His raiment became white and shining, and His face shone as the sun. On this occasion again, a voice came from heaven saying, "This is my beloved Son; hear ye him" (Matt., chap. xvii.; Mark, chap. ix.; Luke, chap. ix., verses 28-36). His mission is generally considered to have occupied three years, spent in acts of mercy (chiefly miraculous), in inculcating a purer system of morals, more exalted notions of God, and more elevating views of man and his destiny than had yet been presented to the world. His doctrine is embodied chiefly in the Sermon on the Mount (Matt., chap. v.-vii., and Luke, chap. vi.), containing the form of prayer He taught to His disciples, commonly called the Lord's Prayer; in His discourses to the Jews in John, chap. v.-viii. and x.; to His disciples, chap. xiv.-xvi.; and His intercessory prayer, chap. xvii. He chose twelve apostles to be the companions of His ministry, the witnesses of His miracles, and the depositories of His doctrine; and He was betrayed into the power of His enemies by one of these with the mockery of a friendly salutation. Betrayed by one, denied by another, and abandoned by all, He was carried before the Jewish priests, found guilty, and by them delivered over to the Roman magistrates, who alone had the power of life and death. Condemned to death as a disturber of the public peace, He was nailed to the cross on Mount Calvary, and it was in the agonies of this bitter death that He prayed for the forgiveness of His executioners, and with a touching act of filial love commended His mother to His favorite disciple. The evangelists relate that from the hour of noon the sun was darkened and three hours after, Jesus, having cried out, "It is finished!" gave up the ghost. The veil of the temple, they add, was torn asunder, the earth shook, rocks were rent, and the tombs opened. The centurion who was present, directing the execution, exclaimed, "Truly this was the Son of God!" The body of Jesus was taken down by Joseph of Arimathea and placed in a tomb, about which the Jewish priests, remembering His prophecy that He should rise on the third day, set a guard, sealing up the door. Notwithstanding these precautions His prophecy was fulfilled by His resurrection on the first day of the week (Sunday), and He appeared repeatedly to His disciples to encourage, console, and instruct them. On the fortieth day after His resurrection, while with them on the Mount of Olives, after He had given them instructions to teach and proselytize all nations, promising them the gift of the Holy Spirit, a cloud received Him out of their sight, and He was taken up to heaven. While the disciples stood gazing after Him two men in white apparel appeared to them, and predicted His coming again in like manner as they had seen Him go. See the closing chapters of the four evangelists and Acts i: 1-14.

Joan of Arc. See Arc, Joan of.

Joffre (*zhō'-fr'*), **Joseph Jacques Césaire,** distinguished French general, the hero of the Marne, was born at Rivesaltes, Pyrenees, 1852. He studied military engineering at the École Polytechnique, and served in the artillery during the Franco-Prussian war. He was made captain in 1874, and, after winning repeated promotion in various fields of service, became professor in the French war school. In 1911 he was appointed chief of staff and, following the outbreak of the European war in 1914, was made commander-in-chief of the allied forces in France. By his notable victory of the Marne in September, 1914, the German advance was stopped and Paris was saved. His defense of Verdun in 1916 ranks high among great military achievements. In appreciation of his services to the nation he was created marshal of France. When America joined the Allies in 1917 Joffre was made a member of the Anglo-French mission to the United States. He was everywhere welcomed amid scenes of unparalleled enthusiasm, and was honored with many notable gifts and tokens of esteem. In 1918 he was elected to a seat among the "forty immortals" of the French academy.

John, St., called the Baptist, son of Zacharias, a priest of the Jews, and of Elizabeth, who was the cousin of Mary, the mother of Jesus. He early exercised the apostolic call, and began to preach in the valley of the Jordan, where Jesus received baptism at his hands. He afterwards suffered death by command of Herod.

John, St., the Apostle; born about 4 A. D.; was one of the earliest of Christ's disciples. During the crucifixion our Lord commended His mother to John's care, and he "took her to his own home." John afterwards became Bishop of Ephesus. According to Tertullian, he was plunged into a caldron of boiling oil during the persecution under Domitian, but received no injury. He was subsequently exiled to the island of Patmos, where he wrote the "Book of Revelation." He was also author of the Gospel and Epistles which bear his name. Died about 99 A. D.

Johnson, Andrew, seventeenth president of the United States, was born in Raleigh, N. C., in 1808. By trade a tailor, and a self-educated man, he became a member of the legislature of Tennessee (his adopted State); was elected to congress, 1843–53, and became governor of Tennessee in 1853, and again in 1855. In 1857, he was elected to the national senate, and, in 1862, appointed military governor of his state. Elected vice-president of the Union by the Republican party in 1864, he was sworn in as president in 1865 following the assassination of Abraham Lincoln. His opposition to the measures adopted by congress for the reconstruction of the southern states involved him in a struggle, which ended in 1868 with his impeachment on charges of high crimes and misdemeanors against the state. He was brought to trial in March, and acquitted on the 26th of May following. In January, 1875, he was again elected to the United States senate. Died, 1875.

Johnson, Hiram W., governor of California, 1911–17; was born in Sacramento, California, 1866; studied law. In 1906 was associated with Francis Heney in the San Francisco graft prosecutions. When Heney was shot down in open court Johnson took his place and sent Abe Ruef, leader of the grafters, to the penitentiary for fourteen years. Elected governor of California on a platform designed to free the state of the domination of the Southern Pacific railroad and similar influences. Procured passage of twenty-three progressive amendments to state constitution. In 1912 nominated vice-president on the Progressive ticket. Elected U. S. senator, 1916.

Johnson, John A., journalist, governor of Minnesota from 1904 until his death in 1909; born in St. Peter, Minn., 1861; educated in public schools, St. Peter. Care of family devolving upon him at 12, went to work in printing office in St. Peter, and continued in that business, becoming member of firm of Essler & Johnson, publishers of the St. Peter "Herald," of which he was editor. Was state senator from St. Peter district, and prominent candidate for presidential nomination, 1908.

Johnson, Samuel, a distinguished English writer and lexicographer, was born in Lichfield, England, 1709. He was educated in his father's library and at Oxford. After a varied and precarious early career, he slowly gained foremost place in the literature of his day. Among many noted works the most useful was his "Dictionary." In 1759 he wrote his celebrated romance of "Rasselas," which he composed in the evenings of one week in order to defray the funeral expenses of his mother. He died at London, 1784. His remains were interred in Westminster Abbey and his statue was placed in St. Paul's cathedral. Among his works are "Lives of the Poets," "The Rambler," and "The Vanity of Human Wishes."

Johnson, Tom Loftin, capitalist, politician, born in Georgetown, Ky., 1854; went to Indiana in boyhood; educated there; clerk in street railway office, Louisville, Ky., 1869–75; invented several street railway devices; bought a street railway in Indianapolis; later acquired large street railway interests in Cleveland, Detroit, and Brooklyn; was also iron manufacturer in Cleveland. Member of congress, 1891–95; prominent advocate of the "single-tax" theories of Henry George. He retired from business and devoted his entire time to taxation questions, municipal reform and official duties; mayor of Cleveland, 1901–10. Died, 1911.

Johnston, Albert Sydney, a distinguished American Confederate general, was born in Kentucky in 1803, and graduated at West Point in 1826. In 1837 he superseded General Houston as commander-in-chief of the Texan army; next became Texan war secretary, and served as a colonel of American regulars during the Mexican war. In 1857, he commanded the expedition sent against the Mormons of Utah; and in 1861 was made military commander of the department of Kentucky and Tennessee, by the Confederate government. After the surrender of Fort Donelson, he formed a junction with the army of General Beauregard, and fell in the battle of Shiloh, April 6, 1862.

Johnston, Joseph Eggleston, born in 1807; American soldier, joined the Confederate army, and became commander of the Confederate forces in South Carolina in February, 1865, but surrendered with his army in the following April. Died, 1891.

Jókai, Maurice, Hungarian novelist, born in 1825; took part as a journalist in the revolution of 1848;

wrote about 200 novels, including "Timar's Two Worlds," "Black Diamonds," "The Romance of the Coming Century," etc. Died, 1904.

Jonathan, son of Saul, and the bosom friend of David, who bewailed his untimely death in one of the most beautiful of his songs. Also, a son of Mattathias, and brother of Judas Maccabeus. He succeeded his brother Judas in the leadership of the Jews, and was made high-priest by Alexander Balas. After some vicissitudes of fortune, he renewed the league his brother had formed with the Romans, and was at last treacherously slain by Tryphon.

Jones, Paul (real name John Paul), a brilliant American naval commander in the Revolution, was born in Scotland in 1747. After the conclusion of peace with Great Britain, he became rear-admiral in the Russian service, but was dismissed on account of a private quarrel, and died in Paris (1792) in poverty.

Jonson, Benjamin, or **Ben,** born about 1573; dramatist, was educated at Westminster under Camden. It is uncertain whether he studied at Cambridge. After following the trade of a bricklayer, he went as a volunteer to Flanders, and on his return became an actor, also writing plays in conjunction with others. His first independent work, "Every Man in His Humour," was followed by "Every Man Out of His Humour," "Cynthia's Revels," "Sejanus," "Volpone," "The Alchemist," and many others. Died, 1637.

Jordan, David Starr, president of Leland Stanford Jr. University, 1891–1913, chancellor 1913–16; born in Gainesville, N. Y., January 19, 1851; graduate of Cornell, M. S., 1872; M. D., Indiana Medical College, 1875 (Ph. D., Butler University, 1878; LL. D., Cornell, 1886, Johns Hopkins, 1902). Professor in various collegiate institutions, 1872–79; assistant to United States Fish Commission, 1877–91; professor of zoölogy, 1879–85, and president, 1885–91, Indiana University; president of California Academy of Sciences, 1896–1904 and since 1908; also United States commissioner in charge of fur seal investigations, etc. Author: "A Manual of Vertebrate Animals of Northern United States," "Science Sketches," "Fishes of North and Middle America," "Footnotes to Evolution," "The Story of Matka," "Care and Culture of Men," "The Innumerable Company," "Imperial Democracy," "Animal Life," "Animal Forms" (with V. L. Kellogg and H. Heath), "The Strength of Being Clean," "Standeth God Within the Shadow," "To Barbara" (verse), "The Philosophy of Hope," "The Blood of the Nation," "Food and Game Fishes of North America" (with B. W. Evermann), "A Guide to the Study of Fishes," "Voice of the Scholar," "The Call of the Twentieth Century," etc.; numerous papers on ichthyology in proceedings of various societies and government bureaus.

Joseph. In Scripture, one of the twelve patriarchs, the favorite son of Jacob, said to have been born in Mesopotamia. He was sold by his envious brothers and taken to Egypt as a slave, but rose to be prime minister. Also the name of the husband of Mary, mother of the Saviour. Two German emperors bore this name. Joseph I., born in 1678, was made King of Hungary and of the Romans; he succeeded his father Leopold I. as emperor in 1705, and died in 1711. Joseph II., born in 1741, succeeded his father, Francis I., in 1765, and died in 1790.

Joshua, or **Hoshea,** son of Nun; commander of the Israelites after the death of Moses, led them into the Holy Land, and obtained many victories over the tribes of Canaan.

Josiah succeeded his father, Amon, as King of Judah in 641 B. C. He died in a war with Pharaoh Necho, King of Egypt, in 609 B. C.

Joubert, Petrus Jacobus, born in 1831; one of the triumvirate who organized a Transvaal revolt against the British Government in 1880, held the chief command in the engagements at Laing's Nek, Ingogo River, and Majuba Hill. In 1899, was commander-in-chief of the Boer forces in the war with England. Died, 1900.

Joule, James Prescott, born in 1818; electrician, pupil of Dalton; made discoveries in electro-magnetism, and, in 1843, established his theory of the mechancial equivalent of heat. Died, 1889.

Jourdan, Jean Baptiste, Comte, born in 1762; French marshal; served in the wars of the republic, and, in 1799, was appointed commander of the army of the Danube by the Directory. In 1797, he became president of the Council of Five Hundred, but was expelled in 1799, owing to his opposition to Bonaparte, by whom, however, he was afterwards employed. He subsequently followed the fortunes of Joseph Bonaparte. He owed his title to Louis XVIII., but joined in the revolution of 1830. Died, 1833.

Jowett, Benjamin, M. A.; born in 1817; successively scholar, fellow, and master of Balliol College, Oxford, and Regius professor of Greek since 1855. His works include translations of Plato and Thucydides. He contributed a paper "On the Interpretation of Scripture" to "Essays and Reviews." Died, 1893.

Judas Iscariot, one of the twelve disciples chosen by Jesus, and the one who betrayed his Master for thirty pieces of silver; after which he very properly "went and hanged himself."

Jude, St., or **Judas.** One of the apostles, brother of St. James the Less, and supposed to have been martyred at Berytus about the year 80. The "Epistle" which bears his name is one of the smallest and least important books in the canon of the New Testament, and one whose canonical authority has been much disputed both in ancient and quite modern times.

Judith. A heroine of Israel, whose name has been given to one of the Apocryphal books of the Bible. She is said to have by artifice gained the tent of the Assyrian general, Holofernes, at Bethulia, whom she decapitated during his sleep; bearing away his gory head in triumph. The most general opinion among critics is that the history of Judith is a Jewish romance, written, probably in the age of Maccabees, in order to animate the Jews in their struggles against the Assyrians.

Judson, Harry Pratt, president of the University of Chicago, since 1907; born in Jamestown, N. Y., December 20, 1849; graduate of Williams, 1870 (A. M., 1883; LL. D., 1893; LL. D., 1903, Queens University, Canada). Teacher and principal of high school, Troy, N. Y., 1870–85; professor of history, University of Minnesota, 1885–92; was co-editor of "American Historical Review." Author: "History of the Troy Citizens' Corps," "Cæsar's Army," "Cæsar's Commentaries" (co-editor), "Europe in the Nineteenth Century," "The Growth of the American Nation," "The Higher Education as a Training for Business," "The Latin in English," "The Mississippi Valley" (in Shaler's United States of America), "The Young American," "The Government of Illinois," "Graded Literature Readers" (co-editor), "The Essentials of a Written Constitution."

Jugurtha, a king of Numidia at the end of the Second Century, B. C., was the grandson of Masinissa, but illegitimate, and brought up by Micipsa, along with his own sons, and left a share of the kingdom by him at his death. He, however, murdered both of them, and made himself master of the whole. The Romans, therefore, made war upon him and after a long struggle he was conquered, made prisoner, led in triumph by Marius, and starved to death in prison at Rome, 104 B. C.

Julian, Julianus Flavius Claudius, surnamed "The Apostate," a nephew of the Emperor Constantine the Great, was born in Constantinople, A. D. 331, and was Emperor of Rome from A. D. 361 to 363. He was one of the best emperors of the later period, but he is chiefly remembered by his unwise and necessarily unsuccessful attempt to restore the effete and dethroned paganism of Rome.

Julius II., Pope (Cardinal Giuliano della Rovere), born in 1443; distinguished as a warrior and patron of the arts; became pope in 1503. He endeavored to extend the papal territory, and, after driving Cesare Borgia from the Romagna, formed the league of Cambrai with Maximilian and Louis XII. against Venice (1508). After the submission of the republic, he turned his arms against France (1510). In 1511, the Holy league was formed, and the French army driven back over the Alps. Died, 1513.

Justinian I., Emperor of the East; born in 483; succeeded his uncle, Justin I., in 527. He issued a famous code, forming, together with his collections of "Pandects," "Institutiones," and "Novellæ," the "corpus juris civilis." Under Justinian, the boundaries of the empire were much extended through the victories of Belisarius and Narses over the Persians, Vandals and Ostrogoths. Died, 565.

Juvenal, a celebrated Latin poet and satirist, born in Aquinum; a friend of Martial and contemporary of Statius and Quintilian; his satires, sixteen in number, are written in indignant scorn of the vices of the Romans under the empire, and in the descriptions of which the historian finds a portrait of the manners and morals of the time (60–140).

Kant, Immanuel, a celebrated German philosopher; born in Königsberg, 1724; was the son of a saddler, of Scotch descent, and fortunate in both his parents. He entered the university in 1740, as a student of theology; gave himself to the study of philosophy, mathematics, and physics; wrote an essay, his first literary effort, on motive force in 1746; settled at the university as a

private lecturer on a variety of academic subjects in 1755; became professor of logic and metaphysics in 1770, when he was 46, and continued until his retirement, in 1797, from the frailties of age; he spent the last seven years of his life in a small house with a garden in a quiet quarter of the town. His great work, the "Critique of Pure Reason," was published in 1781, and it was followed by the "Critique of Practical Reason" in 1788, and the "Critique of Judgment" in 1790. His works inaugurate a new era in philosophic speculation, and by the adoption of a critical method dealt a death-blow to speculative dogmatism on the one hand and skepticism on the other. It was, he says, the skepticism of Hume that first broke his dogmatic slumber, so that had Hume not been, he had not been, and the whole course of modern thought might be different. Kant by his critical method did for philosophy what Copernicus did for astronomy; he centralized the intelligence in the reason or soul, as the latter did the planetary system in the sun. Kant was a lean, little man, of simple habits, and was never wedded. Died, 1804.

Kauffmann, Angelica, painter; born in Coire in 1741; in 1766 went to England. She was elected a member of the Royal Academy in 1768. In 1781 she married the Venetian artist, Antonio Zucchi, and thenceforward lived in Italy. Died, 1807.

Kean, Charles John, actor; born in Waterford, in 1811; son of Edmund Kean; was educated at Eton; made his début at Drury Lane in 1827, but did not establish his reputation till 1838, when he acted as Hamlet, Richard III., and Sir Giles Overreach. In 1842 he married Miss Ellen Tree, a celebrated actress. From 1850 to 1859 he was manager of the Princess's theater. Died, 1868.

Keats, John, born in 1795; poet, son of a livery stable proprietor in Finsbury; was educated at a school at Enfield, where he formed a lifelong friendship with the master's son, Charles Cowden Clarke. He was apprenticed to Mr. Hammond, a surgeon at Edmonton, whom he left in 1814, but pursued his studies at Guy's Hospital till 1817. He then determined to follow the bent of his genius. "Endymion," his first long poem, appeared in 1818. "Isabella or the Pot of Basil," "Hyperion," "Lamia," "The Eve of St. Agnes," and the "Odes" followed. Developing consumption, he went to Italy, 1820, for his health, and died at Rome, 1821.

Keifer, Joseph Warren, soldier and stateman, born in Clark County, O., 1836. He was educated at Antioch College, and, in 1858, began law practice at Springfield. While serving with the Ohio Volunteers in the field, 1861–65, he was four times wounded. He was state senator 1868–69; member of Congress 1877–85 and 1905–11, serving as speaker, 1881–83. During the war with Spain, 1898–99, he was major-general of volunteers. Author: "Slavery and Four Years of War."

Keller, Helen Adams, writer and lecturer, was born at Tuscumbia, Ala., 1880. By severe illness, at the age of nineteen months, she was deprived of both sight and hearing. Until she was seven, no serious attempt was made toward her education. She was then placed in charge of Miss Anna Mansfield Sullivan (Mrs. John A. Macy), of the Perkins Institute for the Blind, Boston, who came to her home. As a result of Miss Sullivan's teaching, she learned the deaf and dumb language by touch; she also learned to read by the braille system, and to write by using a special typewriter. At the age of ten, under the instruction of Miss Sarah Fuller, of the Horace Mann School, New York, she learned to speak. In 1892 Miss Keller went to Boston, where she has since lived, and, at sixteen, entered a preparatory school. She was accompanied to all classes by Miss Sullivan who repeated the lectures and discussions by touch. In 1900 Miss Keller entered Radcliffe College, and, with the continued aid of her devoted teacher, graduated with honors in 1904. She used textbooks printed in braille and wrote examinations on her own typewriter. After graduation she became well known as a writer and lecturer on educational possibilities for the blind. Author: "The Story of My Life," "Optimism," "The World I Live In," "Song of the Stone Wall," "Out of the Dark."

Kelly, Howard Atwood, physician; born in Camden, N. J., February 20, 1858; graduated from University of Pennsylvania, B. A., 1877, M. D., 1882; founder of Kensington Hospital, Philadelphia; associate professor of obstetrics, University of Pennsylvania, 1888–89; professor gynecology and obstetrics, Johns Hopkins University, 1889–99; professor of gynecology, Johns Hopkins University. Author: "Operative Gynecology" (two volumes), "The Vermiform Appendix and Its Diseases," also about 300 articles in medical journals.

Kembles, The, a celebrated family of actors. (1) John Philip, born in 1757; son of Roger Kemble, Manager of a traveling company; was educated for the Roman Catholic priesthood. His first appearance in London was in the character of Hamlet at Drury Lane (1783). He was manager of Drury Lane 1788–1802, and part proprietor of Covent Garden, 1803–17. Died in 1823. (2) Sarah Kemble (Siddons). (3) Charles, born in 1775; educated at the college of Douay, appeared at Drury Lane in 1794 as Malcolm in Macbeth; in 1803 joined his brother and sister at Covent Garden, of which he was manager for a short time in 1817; visited the United States in 1832; retired from the stage in 1840. Died in 1854. (4) Frances Anne, born in 1809; died, 1893.

Kempis, Thomas, à born at Kempen, near Düsseldorf; son of a poor but honest and industrious craftsman named Hamerken; joined, while yet a youth, the "Brotherhood of Common Life," at Deventer, in Holland, and at 20 entered the monastery of Mount St. Agnes, near Zwolle, in Overyssel; here he chiefly resided for seventy long years, became sub-prior, spending his time in acts of devotion and copying manuscripts, among others, that of the Bible in the Vulgate version. He produced works of his own, in chief the "Imitation of Christ," a work that in the regard of many, ranks second to the Bible, and is thought likely to survive in the literature of the world as long as the Bible itself; it has been translated into all languages within, as well as others outside, the pale of Christendom. Born about 1380; died, 1471.

Kent, James, an eminent American jurist; was born in Putnam County, N. Y., 1763. His most important work, "Commentaries on American Law," is a production of great literary merit, and a work of high authority in England as well as in the United States. Died, 1847.

Kepler, Johann, astronomer; born of poor parents at Württemberg, in 1571; studied at Tübingen under Mæstlin; in 1594 became professor of astronomy at Gratz; in 1600 visited Tycho Brahé at Prague, became his assistant, and on his death (1601), was appointed mathematician to the Emperor Rudolph. He was afterwards professor at Linz, and finally at Rostock. He died in 1630, at Ratisbon. Two of Kepler's laws — that enunciating the elliptic form of the planetary orbits, and that of the "equable description of areas" — are contained in "Astronomia Nova." His third law, that the squares of the periodic times of the planets are as the cubes of their mean distances, is to be found in the "Harmonice Mundi."

Key, Francis Scott, American poet, author of "The Star Spangled Banner," was born in Maryland in 1780. He was a lawyer of note, and brother-in-law to Chief-justice Taney. He wrote the words that have immortalized him when he saw the national flag floating over the ramparts of Baltimore in 1814. Died, 1843.

King, Henry Churchill, educator, was born at Hillsdale, Mich., 1858. He graduated from Oberlin College, 1879; Oberlin Theological Seminary, 1882; studied at Harvard, 1882–84; A. M. 1883; Berlin, 1893–94; D. D., Oberlin, 1897. After teaching mathematics at Oberlin, 1884–90, he became associate professor of philosophy, 1891, professor, 1892; professor of theology, 1897; dean, 1901, and president of Oberlin College, 1902. Author of numerous books on philosophy and education.

King, William Lyon Mackenzie, Canadian statesman and economist, was born at Kitchener (formerly Berlin), Ont., 1874, of a distinguished family. He graduated at Toronto University, 1895, A. M., 1897; studied at the University of Chicago and at Harvard University, A. M., 1898, Ph. D., 1899. After serving with distinction on several important public commissions, he was elected to the House of Commons for North Waterloo, 1908, as a Liberal. He was minister of labor for Canada, 1909–11, retiring upon the defeat of the Laurièr government. Under his leadership the Liberal party won a sweeping victory in the parliamentary elections, 1921, following which he became premier of Canada.

Kingsley, Charles, an English divine and popular writer; born in Devonshire, 1819. His best works embrace the well-known politico-economic novel "Alton Locke"; the powerful philosophical romance "Hypatia," and the historical novel entitled "Westward Ho!" His writings have gone through several English and American editions. In polemics, he belonged to the "broad" school of the Anglican Church. Died, 1875.

Kipling, Rudyard, author; born in Bombay, India, December 30, 1865; educated in United Services College, North Devon, England; assistant editor in India of "Civil and Military Gazette and Pioneer," 1882–89; traveled in Japan, China, Africa, and Australia. Author: "Departmental Ditties," "Plain Tales from the Hills," "Soldiers Three," "In Black and White," "The Story of the Gadsbys," "Under the Deodars," "Phantom 'Rickshaw," "Wee Willie Winkie," "Life's Handicap," "The Light that Failed," "Barrack-Room Ballads," "Many

Inventions," "The Jungle Book," "Second Jungle Book," "The Seven Seas," "Captains Courageous," "The Day's Work," "Stalky & Co.," "From Sea to Sea" (reprint of newspaper articles), "The Brushwood Boy," "The Absent-Minded Beggar," "Kim," "Just So Stories," "The Five Nations," etc.

Kirkland, James Hampton, chancellor, Vanderbilt University, since 1893; born in Spartanburg, S. C., September 9, 1859; graduate Wofford College, 1877 (A. M., 1878; Ph. D., Leipzig, Germany, 1885; LL. D., University of North Carolina, 1894; D. C. L., University of the South, 1902); professor of Greek and German, Wofford College, 1881-83; traveled and studied abroad, 1883-86; professor of Latin, 1886-93, Vanderbilt University. Editor: "Satires and Epistles of Horace." Has published monographs, philological reviews, etc.

Kitchener, Horatio Herbert, earl, "Kitchener of Khartoum", born in county Kerry, Ireland, 1850; educated at royal military academy at Woolwich; entered royal engineers, 1871. Was in Sudan campaign, 1883-5; governor of Suakin, 1886; sirdar of Egyptian army, 1892-99; became British major-general, 1896. He was raised to the peerage for his work at Khartoum, 1898; was chief of staff to Lord Roberts in South African war and succeeded Roberts as commander-in-chief during Boer war. From 1902-09 he was commander-in-chief in India; promoted to field marshal, 1909; British agent and consul-general in Egypt, 1911-1914; secretary of state for war from 1914 until his death on the cruiser Hampshire in 1916.

Kléber, Jean Baptiste, born in 1754, distinguished himself in the wars of the French revolution, and under the Directory became commander of the army of the Sambre and Meuse. He went to Egypt with Napoleon, and on his departure remained behind as commander-in-chief. He captured Cairo, and entered into an alliance with Murat Bey, but was assassinated by an Arab in 1800.

Knapp, Martin Augustine, jurist; born in Spafford, N. Y., November 6, 1843; graduate from Wesleyan University, Connecticut, 1868 (A. M., 1871, LL. D., 1892; honorary A. M., Syracuse University, 1892); admitted to New York bar, 1869; practiced at Syracuse, N. Y.; corporation counsel, 1877-83. Appointed interstate commerce commissioner by President Harrison, February, 1891; reappointed by Cleveland, 1897; by Roosevelt, 1902 and 1908; elected chairman of the commission, 1898. Appointed first chief judge of commerce court by Taft, 1910.

Kneisel, Franz, musician, director of Kneisel Quartette; born in Rumania (of German parentage), 1865; studied music; violin instruction under Grün and Hellmesberger; was concert-master of Hofburg Theater Orchestra, Vienna; later of Bilse's Orchestra, Berlin; was concert-master Boston Symphony Orchestra; especially prominent as violin soloist.

Knox, John, a Scottish divine and ecclesiastical reformer; born in Haddingtonshire, 1505, and was educated at St. Andrews University. In 1542, Knox became a fiery advocate of the Reformed faith, thereby encountering much persecution. In 1551, he was appointed chaplain to Edward VI. of England, and subsequently passed three years at Geneva, where he enjoyed the friendship of Calvin. On his return to his native country in 1559, he became the leading spirit of the Reformation of Scotland. Tried for treason, he was acquitted, and assisted in bringing about Queen Mary's abdication. Died, 1572.

Knox, Philander Chase, lawyer, statesman; born in Brownsville, Pa., May 6, 1853; graduate of Mt. Union College, Ohio, 1872; admitted to bar, 1875. Assistant United States district attorney, Western District of Pennsylvania, 1876–77; resigned; engaged in practice, 1877, with firm name of Knox & Reed, representing many large corporations, including the Carnegie Company; attorney-general of the United States, 1901-04. Senator from Pennsylvania, 1904-09; secretary of state, 1909-13. Visited Latin-American republics in 1912. Represented United States at funeral of Emperor Mutsuhito of Japan, 1912. In 1916 he was again elected United States Senator. Died, 1921.

Koch, Robert, M. D., born at Clausthal, Prussia, 1843; between 1879 and 1883 succeeded in identifying the germs of cattle disease, of consumption and of cholera. In 1884, he established the existence of a bacterium as the cause of cholera. Appointed professor of hygiene at Berlin, 1885; in 1890, brought out a lymph for the cure of consumption. Died, 1910.

Kohlsaat, Hermann Henry, capitalist, journalist; born in Albion, Edwards County, Ill., March 22, 1853; educated in common schools, Galena, Ill., and Skinner School, Chicago. Began business life as cash boy; H. H. Kohlsaat & Co. (incorporated) now own several large establishments and also do large wholesale bakery business; part owner in Chicago "Inter-Ocean," 1891-93; editor and publisher "Chicago Times-Herald," 1894 (amalgamated with "Chicago Record," becoming "Record-Herald," 1901); also of "Chicago Evening Post," 1894-1901; editor of Chicago "Record-Herald," 1910-12. Has been largely identified with local real-estate operations; presented statue of General Grant to City of Galena, Ill.

Kosciusko, Tadeusz, born in 1746; Polish patriot; came to America and became aide-de-camp to Washington; in 1789, received the appointment of major-general in the Polish army; distinguished himself in the campaign of 1792, especially at the battle of Dubienka; after the submission of Stanislaus retired to Leipzig; on the outbreak of the second Polish rising, in 1794, was chosen commander-in-chief; although scantily supplied with troops, succeeded in expelling the Russians from Poland, but was finally overwhelmed at Macieowice in October. He was imprisoned in a fortress near Petrograd, but released on the accession of the Emperor Paul. In 1798, he settled in France. He died in Soleure, Switzerland, 1817.

Kossuth, Louis, born in 1802; Hungarian patriot; in 1847, was returned to the diet as deputy for Pesth; became leader of the party of reform; held the office of minister of finance in the new Hungarian ministry, and after its fall was made president of the committee of national defense. In April, 1849, the Hungarians declared themselves independent, and Kossuth carried on the government from Debreczin, and afterwards from Szegedin; but, finding it impossible to act in conjunction with Görgey, he resigned in August, 1849. The ill-success of his countrymen in the field compelled him soon to flee to Turkey, whence he removed to England in 1851. His later years he spent chiefly in Italy. Died, 1894.

Kotzebue, August Friedrich Ferdinand von, born in 1761; German man of letters; in 1781, was attached to the Prussian embassy at Petrograd; afterwards entered the Russian service, and in 1817, was sent by the czar as consul-general to Prussia. His Russian sympathies made him unpopular in Germany, and led to his assassination in 1819.

Krauskopf, Joseph, rabbi, lecturer, author; born in Ostrowo, Prussia, January 21, 1858; came to America, 1872, and worked as clerk at Fall River, Mass.; graduated B. A., University of Cincinnati, 1883; also as rabbi from Hebrew Union College, 1883 (D. D., 1885); soon after graduation accepted call from Hebrew congregation, Kansas City; rabbi of the Reform Congregation Keneseth Israel, Philadelphia, 1887; founded Jewish Publication Society of America; founded, and president since organization, National Farm School, in which Jewish boys are trained in practical and scientific agriculture. Author: "The Jews and Moors in Spain" (lecture); "Evolution and Judaism."

Kreisler, Fritz, noted Austrian violinist, was born in Vienna, 1875. At seven he entered Vienna conservatory, winning first prize three years later. In 1887 he won first prize at the Paris conservatory. With Rosenthal, he toured the United States during 1888–89. Returning to Europe, he completed studies at Vienna and entered the Austrian army, in which he served as captain at the front, 1914–15. After the World War he resumed concert tours in the United States.

Kropotkin, Prince Peter, born in 1842, Russian nihilist; in 1872 went to Belgium and Switzerland, became an internationalist; after his return to Russia, lectured under assumed names; was imprisoned, but escaped to England. For many years he took active part in the agitation in Europe against existing social arrangements. Died, 1921.

Kruger, S. J. Paul, born in 1825, Boer statesman; formed with Joubert and Pretorius the provisional government (December, 1880) of the Transvaal, or South African Republic; held a high position during the war with England; was elected president in 1883, 1888, 1893, and 1898. Died, 1904.

Krupp, Alfred, a metal and steel founder, was born in Essen, 1812, where through his father he became the proprietor of a small foundry which grew in his hands into such dimensions as to surpass every other establishment of the kind in the world. The Bessemer process was early introduced into England in the manufacture of steel, which Krupp was the first to employ in the manufacture of guns. The works developed to an immense extent, employing over 100,000 persons, and supplying artillery to most of the countries of Europe. Died, 1887.

Ladd, George Trumbull, an American educator; born in Painesville, O., January 19, 1842; he was educated at Western Reserve College and Andover Theological Seminary; was pastor of Spring Street Congregational Church, Milwaukee, Wis., 1871–79; and professor of philosophy at Bowdoin College, 1879–

81. He was professor of philosophy, Yale University, from 1881 to 1905, when he was made emeritus professor. His works include "Principles of Church Polity," "Doctrine of Sacred Scripture," and "Elements of Physiological Psychology." Died, 1921.

La Farge, John, artist, born in New York, March 31, 1835; studied architectural decoration; then studied painting with Couture and William M. Hunt. Began painting with religious subjects and decorative work; painted flowers, a few portraits, and many landscapes; for a short time made illustrations for books and magazines; then devoted himself to mural painting, mostly of religious or ecclesiastical character; afterward was for years devoted to the making of stained glass windows, for which he invented the new methods known in Europe as "American," changing and reforming entire art of the glass-stainer, from the making of the new glass by new methods to the painting of same; much of his work was in churches and residences in Boston, New York, Chicago, Cleveland, Philadelphia, Washington, Detroit, and elsewhere. Author: "Lectures on Art," "Letters from Japan." Died, 1910.

Lafayette, Marie Jean Paul Roch Yves Gilbert Motier, Marquis de, born in 1757; educated at the College of Plessis; took part in the American War of Independence, and was entrusted by Washington with the defense of Virginia; was one of the earliest leaders in the French Revolution, presenting his "Declaration of Rights" to the Constituent Assembly, and receiving the command of the National Guard in July, 1789; retained his post till 1791, but, by opposing mob violence, excited the animosity of the Jacobins, which was increased by his letter denouncing the clubs (June, 1792). After vainly attempting to make his presence felt in Paris, he fled over the frontier, but was captured by the Austrians (August, 1792), and remained in prison till released by Napoleon in 1797. After holding office under the Bourbons, he took part in raising Louis Philippe to the throne (1830), but afterwards opposed his government. Died, 1834.

La Follette, Robert Marion, lawyer, statesman; born in Primrose, Wis., June 14, 1855; graduate of University of Wisconsin, 1879 (LL. D., 1901); admitted to bar, 1880. District attorney, Dane County, 1880-84; member of Congress, 1885-91; as member of Ways and Means Committee, he took prominent part in framing McKinley Bill. Elected governor of Wisconsin, 1901, 1903, and 1905. Led movements for direct primaries, adequate railway taxation, and control of railway rates by state commission. He was elected to the United States Senate in 1905, in 1911, and again in 1916.

Lagrange, Joseph Louis, Count, mathematician; of French extraction, born in Turin in 1736; became professor of mathematics in that town at the age of 19. In 1766, he succeeded Euler as director of the Academy of Berlin. Removing to Paris in 1787, he remained there during the Revolution, and was afterwards patronized by Napoleon. Died, 1813.

Lamar, Joseph Rucker, jurist, born at Ruckersville, Ga., 1857. He received his education at University of Georgia, Bethany College, Washington and Lee University. Admitted to the Georgia bar, 1879; member of Georgia legislature, 1886-89; commissioner to codify the laws of Georgia, 1895; served as associate justice of Supreme Court of Georgia, 1901-05; in 1910 he was appointed by President Taft associate justice of United States Supreme Court. Died, 1916.

Lamartine, Alphonse Marie Louis de, born in 1790; French author and statesman; held diplomatic posts in Italy from 1820 to the accession of Louis Philippe; traveled for about two years in the East; returning in 1833, sat in the National Assembly till the revolution of 1848, when he became minister of foreign affairs, but retired, owing to what he considered the absence of liberal views among his colleagues. His chief prose works are "Histoire des Girondins," "Souvenirs d'Orient," "Le Tailleur de Pierres de St.-Point," and "Histoire de la Restauration." Died, 1869.

Lamb, Charles, essayist and poet, was born in the Temple, where his father was clerk to a bencher, in 1775; received his education at Christ's Hospital; became a clerk in the South Sea House, and afterwards in the India House, retiring on a pension in 1825. His life was devoted to the care of his sister, Mary, who was subject to fits of insanity. Most of the "Essays of Elia" were published in the "London Magazine" between 1820 and 1826; others appeared in the "New Monthly" and the "Englishman's Magazine." Lamb also wrote "Rosamund Gray," "John Woodville," a drama; studies of the Elizabethan dramatists, and many short lyrics. Died in Edmonton, 1834.

Landis, Kenesaw Mountain, jurist, born in Millville, O., November 20, 1866; educated in public schools, Logansport, Ind.; graduate of Union College of Law, 1891; admitted to bar, 1891. Practiced law in Chicago, 1891-1905, except for two years while he was private secretary to secretary of state Gresham; judge of United States District Court, northern district of Illinois, since March 28, 1905.

Landor, Walter Savage, born in 1775, descended from a good Warwickshire family; was educated at Rugby and Trinity College, Oxford, where he won a high reputation as a scholar. He next passed three years of solitude in South Wales, and there wrote "Gebir," "Simonidea" appeared in 1806, and "Count Julian" in 1812. In the year 1811 he married, and his agricultural schemes at Llanthony Abbey resulting in failure (1814), went abroad with his wife, with whom he lived very unhappily at Florence and other places, and at last separated from her in 1835. From 1837 to 1858 he resided at Bath, and from 1858 till his death in 1864, at Florence.

Landseer, Sir Edwin Henry, youngest son of John Landseer, was born in London in 1802; showed his genius at an early age; was elected A. R. A. in 1826, and R. A. in 1830; declined the presidency in 1865. Among his chief works are "High Life" and "Low Life," "Bolton Abbey in the Olden Time," "The Old Shepherd's Chief Mourner," "Dignity and Impudence," "Night and Morning," and "Children of the Mist." Died, 1873.

Lanier, Sidney, American poet, was born in Macon, Ga., in 1842, and graduated at Oglethorpe college in 1860. During the civil war he served in the Confederate army, and later engaged in law practise with his father at Macon. His intense interest in music and literature led him to give up the law, and in 1873 he located in Baltimore where he joined an orchestra. He also lectured on literature, won recognition by his poems and critical writings, and in 1879 became lecturer in English literature at Johns Hopkins university. His most widely known works are his "Science of English Verse" and "Poems." His poems entitled "Corn" and "The Marshes of Glynn" contain passages which rank high in American literature. By his untimely death in 1881 the South lost one of her most gifted poets.

Lansing, Robert, lawyer, born at Watertown, N. Y., 1864; educated at Amherst; admitted to bar, 1889; member firm of Lansing and Lansing, 1889-1907; associate counsel for U. S. in Bering sea arbitrations, 1892-93; counsel for U. S. in Bering sea claims commission, 1896-97; solicitor for U. S. in Alaskan boundary tribunal, 1903; counsel North Atlantic coast fisheries arbitration at The Hague, 1909-10; agent of U. S. American and British claims arbitration, 1912-14; counselor for department of state, 1914-15. Upon the resignation of W. J. Bryan in June, 1915, he was appointed secretary of state and served until February 13, 1920. In 1919 he was one of the American delegates to the international peace conference at Versailles.

Laotse (i. e., the old Philosopher), a Chinese sage; born in the province of Ho-nan about B. C. 565, a contemporary of Confucius, who wrote the celebrated "Tao-te-King" canon, that is, of the Tao, or divine reason, and of virtue, one—and deservedly so on account of its high ethics—of the sacred books of China; he was the founder of one of the principal religions of China, Confucianism and Buddhism being the other two, although his followers, the Tao-sze, as they are called, are now degenerated into a set of jugglers.

Laplace (*lah-plahs'*), **Pierre Simon,** an illustrious French astronomer and mathematician; born in Calvados, in 1749. In 1768, through the influence of D'Alembert, he became professor of mathematics in the military school, and, in 1785, a titular member of the Academy of Sciences. In 1796, his "Exposition of the System of the Universe" attracted general attention, and opened to him the doors of the French Academy. In 1817, he became president of that body, and was created a marquis. The grandest monument of his genius—the "Traité de la Mécanique Céleste"—has placed him as a scientist among the greatest names either of ancient or of modern times. Died, 1827.

Lardner, Nathaniel, born in Hawkhurst, in Kent, 1684; a distinguished Unitarian minister, celebrated as the author of "The Credibility of the Gospel History." He was also the author of a "Collection of Jewish and Heathen Testimonies." Died, 1768.

Larned, Josephus Nelson, author, born in Chatham, Ont., May 11, 1836; educated in public schools, Buffalo; on editorial staff of "Buffalo Express," 1859-72; superintendent of education, Buffalo, 1872-73; superintendent of Buffalo public library, 1877-97. Author: "Talks About Labor," "History for Ready Reference," "Talk About Books," "History of England for Schools," "A Multitude of Councilors," "Primer of Right and Wrong," "History of the United States for Secondary

Schools," "Seventy Centuries — a Survey." Editor: "The Literature of American History." Died, 1913.

La Salle, Robert Cavelier de, born in 1643; French traveler; traced the Mississippi to its mouth in 1682; in 1684, attempted to establish a fortified settlement on the Gulf of Mexico, but was murdered by his companions, in Texas, in 1687.

Lassalle, Ferdinand, founder of Socialism in Germany; born in Breslau, in 1825, of Jewish parents. He attended the universities of Breslau and Berlin; became a disciple of Hegel; took part in the Revolution of 1848, and was sent to prison for six months. In 1861, his "System of Acquired Rights" started an agitation of labor against capital, and he was again thrown into prison; and on his release founded an association to insure universal suffrage and other reforms. Died, 1864.

Laurier, Sir Wilfrid, the first French-Canadian Premier of the Dominion, was born in St. Lin, Quebec, 1841. He was admitted to the bar in 1864, and in 1871 was elected as a liberal to the Quebec Provincial Assembly. In 1874 he was elected to the Federal Assembly, and his high personal character, his undoubted loyalty to the connection of the colony with Great Britain, together with his great oratorical powers, which earned for him the title "Silver-tongued Laurier," soon gave him high rank in the Liberal party. He was minister of inland revenue in the Mackenzie ministry of 1877; defeated at general election of 1878, but was immediately afterward elected for district of Quebec East; was reëlected at the general elections of 1878, 1882, 1887, 1891 and 1911. On the retirement of Blake in 1891 he was chosen as leader of the Liberal party, and at the general election of 1896 he led his followers to a notable victory. His tariff legislation during 1897, giving Great Britain the benefit of preferential trade with Canada, aroused much enthusiasm both in the colony and at home, and he was warmly welcomed when he went to London to attend the Jubilee festivities. He was then appointed a member of the privy council and made a G. C. M. G. In 1900 he secured the approval both of the dominion and of the empire by the prompt despatch of Canadian troops to aid the mother country in South Africa, and led his party to another victory at the polls in November. He was again returned to power in 1904 and in 1908, and in 1907 attended the imperial conference in London. The Liberal ministry under the leadership of Laurier for fifteen years was defeated in 1911, and Robert Borden as head of the Conservative party became premier. Died, 1919.

Lavoisier, Antoine Laurent, born in 1743; French chemist; after studying at the Collège Mazarin, obtained the post of farmer-general (1769), and devoted much of his time to chemical experiments, resulting in a new theory of chemistry, the "anti-phlogistic" (1773–75), on which the modern science is based. In arriving at his results he was much indebted to Priestley, who made known to him his discovery of oxygen. During the revolution he was accused of adulterating tobacco, and guillotined in 1794.

Lawson, Thomas William, banker and broker, yachtsman, author; born in Charlestown, Mass., February 26, 1857; educated at public schools, Cambridge, Mass.; in business as banker and broker since April, 1870; now senior member of firm of Lawson, Arnold & Company, members of Boston and New York Stock Exchanges; Republican; prominent as yachtsman; contributor to magazines, reviews, and newspapers since 1875. Author: "The Krank," "History of the Republican Party" (large illustrated 4to.), "Secrets of Success," "Collection of Poems and Short Stories from Magazines," "Lawson History of the America's Cup," "Frenzied Finance," "Friday the Thirteenth," "The Remedy."

Lea, Henry Charles, author; born in Philadelphia, September 19, 1825; private education (LL. D., University of Pennsylvania, Harvard and Princeton); member many learned societies in Europe and the United States; in publishing business, 1843–80, then retired. Author: "Superstition and Force," "An Historical Sketch of Sacerdotal Celibacy in the Christian Church," "Studies in Church History," "A History of the Inquisition of the Middle Ages," "Chapters from the Religious History of Spain," "Formulary of the Papal Penitentiary in the Thirteenth Century," "A History of Auricular Confession and Indulgences in the Latin Church," "The Moriscos of Spain: Their Conversion and Expulsion," "History of the Inquisition of Spain," also many articles in periodicals. Died, 1909.

Lee, Robert Edward, born in 1807; American general, educated at West Point, entered the corps of engineers; served in the Mexican War; was superintendent of West Point, 1852–55; after the outbreak of Civil War was placed in command of the army of Northern Virginia (May, 1862); repelled McClellan, and relieved Richmond; defeated the Northern army near Manassas Junction; was beaten by McClellan at Antietam (September); gained the victories of Fredericksburg (December), and Chancellorsville (May, 1863); was defeated at Gettysburg (July); fought several battles against Grant, and defended Petersburg for ten months; became general-in-chief of the Confederate Armies in February, 1865; surrendered at Appomattox on April 9, 1865. Died, 1870.

Le Gallienne, Richard, journalist, author; born in Liverpool, Eng., January 20, 1866; in business seven years, but abandoned it for literature; for some time in journalism and literary work in United States. Editor: "Izaak Walton, The Compleat Angler," "Hazlitt's 'Liber Amoris,'" "Hallam's 'Remains,'" Author: "My Ladies' Sonnets," "Volumes in Folio," "George Meredith," "The Book-Bills of Narcissus," "English Poems," "The Religion of a Literary Man," "Prose Fancies," "Robert Louis Stevenson and Other Poems," "Retrospective Reviews," "Prose Fancies," second series, "The Quest of the Golden Girl," "If I were God," "Omar Khayyam, a Paraphrase," "The Romance of Zion Chapel," "Young Lives," "Worshiper of the Image," "Travels in England," "The Beautiful Lie of Rome," "Rudyard Kipling, a Criticism," "The Life Romantic," "Sleeping Beauty," "Mr. Sun and Mrs. Moon," "Perseus and Andromeda," "An Old Country House," "Odes from the Divan of Hafiz," "Painted Shadows."

Lenormant, François, a distinguished archæologist; born in Paris in 1837; a man of genius and of vast learning; his chief works "Manuel d'Histoire Ancienne de l'Orient," "Lettres Assyriologues," "Les Premières Civilisations," and "Les Sciences Occultes en Asie." Died, 1883.

Leo I., "the Great," Pope; born about 390; succeeded Sixtus III. in 440; zealously opposed the Manichæans and Pelagians, and secured the condemnation of the Eutychian heresy at the general council of Chalcedon (451). He induced Attila to spare Rome (452), but it was pillaged by Genseric (455). Died, 461.

Leo X., Pope (Cardinal Giovanni de' Medici); son of Lorenzo the Magnificent; born in Florence in 1475; was banished with his family in 1494; traveled in Germany and Flanders, and formed a friendship with Erasmus; on his return to Italy became legate to Julius II.; was taken prisoner at Ravenna (1512); became pope in 1513. In his efforts to extend the papal dominions he allied himself at one time with France, at another with the empire. In 1515 he signed the famous concordat with Francis I. His pontificate is one of the most brilliant periods in the history of art and literature, and is also memorable as the time when the Reformation began. Died, 1521.

Leo XIII. (Gioacchino Pecci), Pope; son of Count Ludovico Pecci; born in Carpineto, in the Papal States, in 1810; educated at the Collegio Romano and the Academy of Noble Ecclesiastics; administered the districts of Benevento, Spoleto, and Perugia successively; became archbishop of Damietta, 1843, and bishop of Perugia, 1846; was nuncio to the King of the Belgians, 1843–46; was created a cardinal, 1853, and in 1877 became chamberlain. He was elected pope as representative of the Moderates in 1878, and down to his death in 1903 was one of the foremost figures of modern times.

Leonidas was a Spartan King who succeeded his brother, Cleomenes I., 491 B. C. In 480 B. C., he, with a few soldiers, defended the Pass of Thermopylæ against Xerxes and his Persian Army, nearly a million strong, the Greeks perishing to a man after killing five times their number.

Leopardi, Giacomo, modern Italian poet; born near Ancona, 1798; a precocious genius; an omnivorous reader as a boy, and devoted to literature; of a weakly constitution, he became a confirmed invalid, and died suddenly; had sceptical leanings; wrote lyrics inspired by a certain somber melancholy. Died, 1837.

Leopold I., King of the Belgians, son of the Duke of Saxe-Coburg; born in 1790; in his youth served in the Russian Army; visited England in 1815, and married Princess Charlotte, who died two years later; he declined the throne of Greece in 1830, but accepted that of the Belgians in 1831, and proved a wise, firm, constitutional sovereign; in 1832 he married the French Princess Louise; he was succeeded by his son Leopold II. Died, 1865.

Leopold II., King of the Belgians; born in 1835; son of the preceding; married Archduchess Maria of Austria in 1853, and succeeded his father in 1865. His reign was marked by quarrels of the Liberals and Roman Catholics. He was the leading spirit of the International African Association. Died, 1909.

Le Sage, Alain René, French novelist and dramatist; born in Sarzeau in Brittany, in 1668; educated in the Jesuit College at Vannes; went to Paris in 1692; learned Spanish, and translated or imitated several Spanish dramas;

in 1707 produced "Le Diable Boiteux," and soon afterwards a comedy called "Turcaret." "Gil Blas" was published in three parts. Died, 1747.

Lesseps, Ferdinand, Vicomte de, born in 1805; after holding various consular posts, went to Madrid as ambassador in 1848. While in Egypt, in 1854, he proposed the scheme of the Suez canal to Said Pasha, and, a company having been formed, the canal was begun in 1859, and completed in 1869. He was also author of the Panama canal scheme. Died, 1894.

Lessing, Gotthold Ephraim, born in Kamenz, Lusatia, in 1729; educated at the Meissen Fürstenschule and the university of Leipzig; between 1749 and 1760 lived chiefly in Berlin, where Mendelssohn and Nicolai were his literary associates; was secretary to General Tauentzien, governor of Silesia, 1760–65; in 1770 became librarian to the Duke of Brunswick at Wolfenbüttel. By publishing Reimarus' "Wolfenbüttel Fragments," of which he was supposed to be the author, he incurred the hostility of the Church. His chief works are "Laokoon," a treatise on art, and the following dramas: "Miss Sarah Sampson," a tragedy; "Minna von Barnhelm," a comedy; "Emilia Galotti," a tragedy; and "Nathan der Weise." Died, 1781.

Lewis, Meriwether, American explorer, was born near Charlottesville, Va., 1774. With William Clark he made, 1803-06, a notable journey to the Pacific, known as the "Lewis and Clark Expedition." Died, 1809.

Lieber (*lē'ber*), **Franz,** born in Berlin, 1800; after suffering imprisonment for his political opinions, came to America (1827), and was made professor of history in Columbia College, South Carolina. He edited the "Encyclopædia Americana" (1829–33), and wrote "Political Ethics" (1838), "Civil Liberty and Self-Government" (1853), "Guerilla Parties" (1862), etc. Died, 1872.

Liebig (*lē'big*), **Justus, Baron von,** chemist, born in Darmstadt, 1803; studied at Bonn and Erlangen; went to Paris, and attracted the attention of Humboldt by a paper on fulminic acid; was appointed professor at Giessen (1824), where his laboratory became celebrated, and afterwards at Munich (1852). Among his chief works are "Organic Chemistry in its Application to Agriculture" (1840), and "Annalen der Chimie," edited in conjunction with Wöhler. Died, 1873.

Liliuokalani, Lydia Kamekeha, queen of the Hawaiian Islands; born in Honolulu, H. I., December 2, 1838; made vice-regent when King Kalakaua left Hawaii, and after his death in San Francisco was proclaimed queen, January 29, 1891. Her attempts to abolish the constitution of 1887 and restore absolute monarchy, though abandoned, led to her dethronement, January 30, 1892. A provisional government was set up, and although President Cleveland declared in favor of her restoration to the throne, her efforts in that direction failed. After her dethronement she came to the United States. Hawaii being annexed to United States, July, 1898, she returned to the islands in August. Died, 1917.

Lincoln, Abraham, sixteenth President of the United States; born near Hodgensville, Kentucky, February 12, 1809. His father was a poor farmer, who, in 1816, removed from Kentucky to Indiana. In the rude life of the backwoods, Lincoln's entire schooling did not exceed one year, and he was employed in the severest agricultural labor. He lived with his family in Spencer County, Indiana, till 1830, when he removed to Illinois, where, with another man, he performed the feat of splitting 300 rails in a day, which gave him the popular *sobriquet* of "The Railsplitter." In 1834, he was elected to the Illinois Legislature. At this period, he lived by surveying land, wore patched homespun clothes, and spent his leisure hours in studying law. He was three times reëlected to the legislature; was admitted to practice law in 1837, and removed to Springfield, the State capital. In 1844, he canvassed the State for Henry Clay, then nominated for president. Clay was defeated, but the popularity gained by Lincoln in the canvass secured his own election to Congress in 1846, where he voted against the extension of slavery; and in 1854 he was a recognized leader in the newly-formed Republican party. In 1855, he canvassed the State as a candidate for United States senator, against Douglas, but without success. In 1856, he was an active supporter of Frémont in the presidential canvass, which resulted in the election of Buchanan. In 1860, Lincoln was nominated for the presidency by the Chicago Convention over Seward, who expected the nomination. The non-extension of slavery to the Territories, or new States to be formed from them, was the most important principle of his party. There were three other candidates — Douglas of Illinois, Northern Democrat; Breckinridge of Kentucky, then vice-president, and afterwards a general of the Confederate army, Southern Democrat; and Bell of Tennessee, Native American. With this division, Lincoln received a majority of votes over any of the other candidates, though a million short of an absolute majority; every Southern and one Northern State voted against him. He was installed in the president's chair, March 4, 1861. His election, by a sectional vote and on a sectional issue hostile to the South, was followed by the secession of eleven Southern States, and a war for the restoration of the Union. As a military measure he proclaimed, January 1, 1863, the freedom of all slaves in the rebel States. He was reëlected to the presidency in 1864. The war was practically brought to a close in April, 1865, through his efforts. On the 14th of the same month Lincoln was shot by an assassin, and died the next day. He was characterized by a strong sense of duty and great firmness.

Lind, Jenny (Madame Otto Goldschmidt), the Swedish nightingale, was born at Stockholm in 1820. Giving evidence of her power of song in childhood, she was put under a master at 9; too soon put to practice in public, her voice at 12 showed signs of contracting, but after four years recovered its full power, when, appearing as Alice in "Robert le Diable," the effect was electric; henceforth her fame was established and followed her over the world; in 1844 she made a tour of the chief cities of Germany; made her first appearance in London in 1847, and visited the United States, 1850–52; she was married in Boston, 1852, and then left the stage, to appear only occasionally for some charitable object. She was plain looking, and a woman of great simplicity both in manners and ways of thinking. Died, 1887.

Linnæus, or **Carl von Linné** (*lĭn-nē'us* or *lĭn'nā'*), was born at Rashult, in the province of Smaland, Sweden, May 23, 1707. He was the most eminent naturalist of his day, for many years professor of physic and of botany in the University of Upsala. He was the son of a clergyman, whose real name was Bengtsson, but who, before going into orders, had assumed the name of Linnæus. He ascribed his love for the study of botany to his father, who was himself attached to the culture of his garden; but this love for the science was greatly developed during his residence, as a student, at the University of Lund, where a physician, who possessed a good library and a museum of natural history, received the young student into his house, and gave him every assistance and encouragement. In 1730, having received some further education at the University of Upsala, he became assistant and deputy to Rudbeck, then professor of botany in the university; and in 1741, having in the meantime traveled through Holland, France, England, and other countries in pursuit of knowledge, he was appointed to the professorship at Upsala, which he held nominally till his death. He was the author of numerous works, of which the most important is "Systema Naturæ," which was first printed in 1735 in twelve folio pages, and grew by 1768 into three volumes. In 1761 he was raised to the rank of the nobility, and then took the name of Von Linné. Although his system of classification has long been to a large extent superseded, he undoubtedly prepared the way for other discoverers and he did much to advance the study of natural science. His library and herbarium were purchased for the sum of one thousand pounds by Sir J. E. Smith, and were by him presented to the Linnæan Society of London, which was instituted in 1788, and incorporated in 1802, for the promotion of the science to which Linnæus had devoted his life. Died at Upsala, 1778.

Lippi (*lē'pē*), **Fra Filippo,** Italian painter, born in Florence, 1406; left an orphan, was brought up in a monastery, where his talent for art was developed and encouraged; went to Ancona, was carried off by pirates, but procured his release by his skill in drawing, and returning to Italy practiced his art in Florence and elsewhere, till one day he eloped with a novice in a nunnery who sat to him for a Madonna, and by whom he became the father of a son no less famous than himself. Lippi prosecuted his art amid poverty, with zeal and success to the last; distinguished by Ruskin as the only monk who ever did good painter's work. Botticelli was his pupil. Died, 1469.

Liszt (*list*), **Franz** (Abbé), one of the world's most brilliant pianists, was born October 22, 1811. He made his first appearance at a concert in his ninth year. He took orders and received the tonsure on April 25, 1865. In 1871 his native country of Hungary granted him a pension of £600 a year, and in 1875 he was named director of the Hungarian Academy of Music. One of his two daughters married Richard Wagner. Liszt died, 1886.

Livingston, Edward, American lawyer and statesman, was born, 1764; was elected to Congress in 1794; followed his profession at New Orleans (1804–23); represented that town in Congress (1823–29); entered the Senate (1829); became secretary of state (1831);

was minister to France (1833-35). He wrote a celebrated "System of Penal Law" (1833). Died, 1836.

Livingstone, David, born at Blantyre, in Lanarkshire, 1813. He worked during childhood and youth in a cotton mill; was sent to South Africa by the London Missionary Society in 1840; resided for several years at various stations near the Limpopo, discovering Lake Ngami in 1849, and penetrating to the Makololo country in 1851; in 1853-54 crossed Africa from the Zambezi to the Congo, and in 1854-56 made his way from Loanda to Quilimane, following the course of the Zambezi, and discovering the Victoria Falls; went to England in 1856, and published "Missionary Travels" (1857); returned to Africa as consul at Quilimane in 1858; explored the country north of the Zambezi (1858-64), discovering Lakes Shirwa and Nyassa, and in 1865 published his "Narrative" of the journey; undertook his third expedition in 1866, and spent the remainder of his life endeavoring to ascertain whether the Nile flowed from the water-system west of Lake Tanganyika. In November, 1871, he was found by Stanley at Ujiji. He died of dysentery at the village of Chitambo, 1873.

Livy, or **Titus Livius,** was born at Patavium (*Padua*), in the north of Italy, 59 B. C. He was the most eminent of the Roman historians, distinguished for the animation of his narrative and for the purity of his style, though not for the reliability of his historical statements. His "History of Rome" was written partly at Rome and partly at Naples, under the patronage of the Emperor Augustus. It consisted originally of 142 books; but of these only thirty-five have come down to us, and some of them in a very imperfect state. Of all but two, however, we possess fragments, with short epitomes from another hand. The "History" (or, as it was called by its author, "The Annals of the Roman People") begins with the foundation of the city, and ends with the death of Drusus, the younger brother of the Emperor Tiberius, 9 B. C. He died, 17 A. D.

Lloyd George, David, English statesman; born of poor parents in Manchester, 1863; educated at Llanystymdwy church school and privately; became solicitor in 1884; member of parliament since 1890; president of the board of trade, 1905-08. Author old age pension law of 1908, working men's insurance act of 1912; advocated the minimum wage law which settled the great coal strike of 1912. Chancellor of exchequer, 1908-1915; minister of munitions, 1915; secretary of state for war, succeeding Earl Kitchener, June, 1916; became prime minister and formed a new coalition cabinet, December, 1916. In the parliamentary election of 1918, following the successful termination of the great war, Lloyd George's ministry was given overwhelming indorsement. In January, 1919, Lloyd George headed the British delegation to the international peace conference at Versailles.

Locke, John, an English philosopher, born in Wrington, in Somersetshire in 1632. He was educated at Westminster and Christ Church College, Oxford. When, in 1672, Lord Shaftesbury was appointed lord chancellor, he made Locke secretary of presentations, and at a later period, secretary to the Board of Trade. As a philosopher, Locke stands at the head of what is called the Sensational School in England. His greatest work is the "Essay on the Human Understanding," in which he endeavors to show that all our ideas are derived from experience, that is, through the senses, and reflection on what they reveal to us. He died in 1704.

Lockwood, Belva Ann Bennett, lawyer, born in Royalton, N. Y., 1830; graduate of Genesee College, Lima, N. Y., 1857 (A. M., Syracuse University, 1871); taught school, 1857-68. Secured passage by Congress of bill giving women employees of the government equal pay for equal work. Studied law in Washington; graduate of National University, B. L., 1873; admitted to District of Columbia bar; secured passage of a bill admitting women to United States Supreme Court, and was admitted under it, 1879; was engaged in many important law cases, several before United States Supreme Court; for years identified with claims of North Carolina Cherokee Indians vs. United States. Prominent in temperance, peace, and woman suffrage movements; nominated, 1884 and 1888, by Equal Rights Party for president of United States; commissioned by State Department to represent United States at Congress of Charities and Corrections, Geneva, Switzerland, 1896. Writer on peace and arbitration and on political and social subjects. Died, 1917.

Lodge, Henry Cabot, author, statesman, was born in Boston, Mass., May 12, 1850; received a private school and collegiate education; was graduated from Harvard in 1871; then studied law at Harvard Law School and graduated in 1874, receiving the degree of LL. B.; was admitted to the Suffolk bar in 1876; in the same year received the degree of Ph. D. from Harvard University for his thesis on "The Land Law of the Anglo-Saxons." Devoting himself to literature, he published, 1877, "Life and Letters of George Cabot"; 1881, "Short History of the English Colonies in America"; 1882, "Life of Alexander Hamilton"; 1883, "Life of Daniel Webster"; 1886, "Studies in History"; 1889, "Life of Washington"; 1891,"History of Boston"; 1892, "Historical and Political Essays"; 1895, in conjunction with Theodore Roosevelt, "Hero Tales from American History"; 1897, "Certain Accepted Heroes, and Other Essays"; 1898, "Story of the Revolution," two volumes; 1899, "Story of the Spanish War". He served two terms as member of the House of Representatives of the Massachusetts Legislature; was elected to the 50th, 51st, 52d, and 53d Congresses; was elected to the Senate, 1893, and reëlected in 1899, 1905, 1911, and in 1916.

Lodge, Sir Oliver Joseph, British educator and physicist, was born at Penkhull, Staffordshire, 1851. He graduated at University college, London; was professor of physics, University college, Liverpool, 1881–1900; became principal of the University of Birmingham, 1900. In addition to making important discoveries in electricity, notably in connection with the development of wireless telegraphy, he interested himself in educational reforms and devoted much attention to psychic research. He publicly affirmed his belief in a life after death and his expectation that eventually communication would be possible between living persons and the spirits of the dead. Author of numerous scientific works.

Loeb, Jacques, professor of physiology, University of California, 1902-10; head of department experimental biology, Rockefeller Institute, since 1910; born in Germany, April 7, 1859; graduate of Ascanisches Gymnasium, Berlin; studied medicine at Berlin, Munich, and Strassburg; M. D., Strassburg, 1884. State examiner, Strassburg, 1885; assistant in physiology, University of Würzburg, 1886-88; same, University of Strassburg, 1888-90; biological station, Naples, 1889-91; associate in biology, Bryn Mawr, 1891-92; assistant professor of physiology and experimental biology, 1892-95, associate professor, 1895-1900, professor, 1900-02, University of Chicago. Author: "The Heliotropism of Animals and Its Identity with the Heliotropism of Plants," "Physiological Morphology," "Comparative Physiology of the Brain and Comparative Psychology," "Studies in General Physiology." Also various monographs relating to artificial parthenogenesis and kindred topics.

London, Jack, author, journalist, lecturer, born at San Francisco, 1876; went to sea, 1892, visiting Japan and China; studied at the University of California; joined first rush to the Klondike, 1897; traveled over U. S. and Canada studying social conditions; war correspondent in Russo-Japanese war; war correspondent, Mexico, 1914. Author: "The Son of the Wolf," "The Sea Wolf," "The Iron Heel," and "John Barleycorn." Died, 1916.

Long, John Luther, lawyer, author; born in Pennsylvania, 1861. Author: "Madam Butterfly," "Miss Cherry Blossom of Tôkyô," "The Fox-Woman," "The Prince of Illusion," "Naughty Nan," "Heimweh, and Other Stories."

Longfellow, Henry Wadsworth, an American poet; born in Portland, Maine, February 27, 1807; was graduated at Bowdoin College. While at college he distinguished himself in the study of modern languages, and published some short poems. In 1826 he accepted the professorship of modern languages at Bowdoin, being allowed three years to prepare himself for the post by study and travel in Europe. He was elected to the chair of modern languages and literature in Harvard University. After spending another year in Europe, studying Scandinavian languages and literature, he entered on his professorship in 1836. In 1839 he published "Hyperion, a Romance"; in 1847 "Evangeline"; in 1855 "Hiawatha"; in 1858 the "Courtship of Miles Standish"; in 1863 "Tales of a Wayside Inn"; in 1871 the "Divine Tragedy"; in 1874 "The Hanging of the Crane." He resigned his chair at Harvard in 1854. In 1868-69 he again traveled in Europe, and received the degrees of LL. D. and D. C. L. from the Universities of Cambridge and Oxford respectively. His poems are equally popular on both sides of the Atlantic. He died in Cambridge, Mass., March 24, 1882.

Lorimer, George Horace, editor-in-chief of "Saturday Evening Post" since March 17, 1899; born in Louisville, Ky., October 6, 1868; educated at Mosely High School, Chicago; college course at Colby and Yale. Author: "Letters From a Self-Made Merchant to His Son," "Old Gorgon Graham."

Lotze, (*lŏt'se*) **Rudolf Hermann,** a German philosopher; born in Bautzen, Saxony, May 21, 1817. He ranks among the greatest metaphysicians, and has given impulse to the recent development of physiological

psychology. Among his works are "Metaphysik" (1841), "Universal Pathology" (1842), "Logik" (1843), "On the Idea of Beauty" (1846), "Medical Psychology" (1852), "Microcosmus," "Ideas for a History of Nature," and "Humanity" (1856), "System of Philosophy" (1874–84). He died in Berlin, July 1, 1881.

Louis IX. was born in 1215 and succeeded his father, Louis VIII., in 1226, under the regency of his mother, Blanche of Castile. In 1229 the Albigensian crusade was brought to a close, and the county of Toulouse was incorporated with the French kingdom. Henry III. of England made some unsuccessful attempts to recover his lost provinces, and in 1259 yielded them to Louis. In 1248 Louis embarked on a crusade, wasted much time in Egypt (1248–50), where he was taken prisoner, and returned from Palestine in 1254 without having effected anything. He undertook another crusade in 1270, but died while besieging Tunis. He was canonized in 1297.

Louis XII., son of Charles, Duke of Orleans, was born in 1462, and succeeded Charles VIII. in 1498. He laid claim to the kingdom of Naples and the duchy of Milan. In 1499 he invaded Italy, and gained possession of Milan. With the assistance of Ferdinand of Aragon, he conquered Naples in 1500, but, having quarreled with his ally, was expelled in 1503. In 1508 he united with Ferdinand, Pope Julius II., and the Emperor, in the League of Cambrai against the Venetians. In 1511 Ferdinand joined Julius in the Holy League against the French, who were finally driven out of Italy by means of the Swiss in 1513. In the same year Henry VIII. invaded France, and was successful at Guinegate. In 1499 Louis married Anne, Duchess of Brittany, widow of Charles VIII. By his good government he earned the title of "Father of his People." Died, 1515.

Louis XIV. was born 1638, and succeeded his father, Louis XIII., in 1643. His mother, Anne of Austria, was nominally regent, but the government was carried on by Cardinal Mazarin. France was then engaged in the Thirty Years' War, in which Turenne and Condé gained many successes. Peace was made in Germany by the Treaty of Westphalia (1648), but the war with Spain continued till 1659. In 1660 Louis married Maria Theresa, daughter of Philip IV. The unpopularity of Mazarin's government occasioned the rising of the Frondeurs (1648–53). After his death (1661) Louis conducted the government himself, following in financial matters the advice of his minister, Colbert. In 1665, he invaded the Netherlands, in violation of his agreement with Spain. In consequence of his attack on Holland (1672), an alliance against him was formed between Spain, the Emperor, and the Elector of Brandenburg, and a war ensued, which was terminated by the Treaty of Nimeguen (1678). The Edict of Nantes was revoked in 1685. Another war, undertaken to check the growing power of France, was concluded by the Peace of Ryswick (1697). In 1701 began the war of the Spanish Succession between the rival claimants, Philip, Duke of Anjou, Louis's grandson, and the Archduke Charles of Austria, who was supported by England and the Emperor. Died, 1715.

Louis XV., "le Bien-Aimé," was born 1710, and succeeded his great-grandfather, Louis XIV., in 1715, under the regency of Philip, Duke of Orleans, a nephew of Louis XIV. Fleury became chief minister in 1726. The King's attempt to enforce the claim of his father-in-law, Stanislas, to the throne of Poland, led to a war with the Emperor (1733–38). France was next engaged in the war of the Austrian Succession, Louis supporting the claim of Charles, Elector of Bavaria (1741–48). During the Seven Years' War (1756–63) France was deprived by England of most of her colonial possessions. Died, 1774.

Louis XVI. of France, was born in 1754, and succeeded his father, Louis XV. in 1774. In 1770 he had married Marie Antoinette, daughter of Maria Theresa of Austria. The finances were in complete disorder, and Louis was not fortunate in his choice of ministers. Turgot and Necker were in turn dismissed, and succeeded by the incapable Calonne (1783–87) and Loménie de Brienne (1787–88). Necker was then recalled, and advised the summoning of the States-General, which had always been conformable to monarchical authority but had not been summoned since 1614. It was convoked in May, 1789, and in June was superseded by the National Assembly, which assumed the whole legislative authority. The dismissal of Necker was followed by the destruction of the Bastille, July 14, the declaration of the Rights of Man, and an attack by an armed mob, chiefly women, on the palace at Versailles in October. The king and the queen were forcibly removed by Lafayette to Paris. The revolution then begun culminated (so far as the king was concerned) in the insurrection of 1792, the storm of the Tuileries, the abolition of monarchy, the declaration of the republic and the execution of the king on the scaffold in January, 1793.

Louis Philippe (*-fe-leep'*), born in Paris, 1773, was the eldest son of Louis Philippe, Duc d'Orleans, commonly known as "Philippe Egalité." While still young he was educated in opinions of advanced political liberalism, and served in the revolutionary army against the Austrians, 1792, under Dumouriez, in whose conspiracy he became involved. After an exile of many years, during which he resided in many countries (the United States among others) and underwent singular vicissitudes, this prince shared in the restoration of his house, 1814; and, after the fall of the elder Bourbon dynasty in 1830, was popularly elected to the vacant throne, under the title of "King of the French." Louis cultivated peaceful relations with foreign powers, sought to strengthen his throne by gaining the support of the middle classes, and repressed all the extreme parties by what became known as the "Juste-milieu" policy. The extreme democrats hated him, and frequent attempts were made upon his life. The country prospered under his government, but a demand for reform in the electoral system became loud and general, and this being unwisely opposed by the king and his minister Guizot, led to the revolution of 1848, when Louis Philippe, deserted by all, fled with his queen to England, where he died, 1850.

Low, Seth, an American educator; born in Brooklyn, N. Y., January 18, 1850; was graduated at Columbia University in 1870; made a member of his father's mercantile firm in 1875; mayor of Brooklyn in 1881–85; and was elected president of Columbia University in 1890. In 1895, he erected for that institution a grand university library at a cost of $1,175,000. In honor of President Low's generosity and in accord with his desire, the trustees of Columbia founded twelve scholarships in the university for Brooklyn boys and the same number in Barnard College for Brooklyn girls, and also agreed to found eight annual scholarships. In 1899, he was appointed by President McKinley a member of the delegation to represent the United States at the International Peace Conference at The Hague. He was an unsuccessful candidate for mayor of Greater New York in 1897; and was again nominated for the office on a fusion ticket in 1901. He was elected after a hard-fought campaign, and was again candidate on the fusion ticket in the autumn of 1903, and defeated. Died, 1916.

Lowell, Abbott Lawrence, born in Boston, December 13, 1856; graduated from Harvard in 1877, and from Harvard Law School in 1880; practiced law in Boston, 1880-97; lecturer, 1897–99, professor of the science of government, 1900–03, Eaton professor, 1903–09, Harvard. In 1900 he became a trustee of the Lowell Institute of Boston. He is known as an authority in the field of comparative politics, and is the author of "Essays on Government," "Governments and Parties in Continental Europe," "Colonial Civil Service" (with Prof. H. Morse Stephens), "The Influence of Party upon Legislation in England and America," and other works. In January, 1909, upon the resignation of Dr. Eliot, he was elected president of Harvard University.

Lowell, James Russell, an American poet, was born in Cambridge, Mass., in 1819. He was educated at Harvard University. His "Legend of Brittany" appeared in 1844. In 1845, he published a prose work entitled "Conversations on Some of the Old Poets." His "Fable for Critics," and "The Biglow Papers," are racy with humor. In 1855, he succeeded Longfellow as professor of modern languages at Harvard; from 1857 to 1862, was editor of the "Atlantic Monthly," and from 1863 to 1872, of the "North American Review." He received the degree of LL. D. from the English University of Cambridge in 1874. Was Minister to Great Britain 1880–85. In 1869, he published "Under the Willows, and Other Poems," and "The Cathedral," an epic; in 1870, a collection of essays; in 1871, "My Study Windows"; in 1886, "Democracy"; in 1888, "Political Essays." He died in Cambridge, 1891.

Loyola, Ignatius de (*lō-yō'lah*), was born at Loyola, in the Basque Provinces, 1491. He was an ecclesiastic of the Roman Catholic Church, the founder of the order of Jesuits, or "the Society of Jesus." He was the son of a Spanish nobleman (Bertram de Loyola), and was early devoted to the profession of arms; but, being wounded at the siege of Pampeluna, in Navarre, in 1521, he devoted his life to the service of the Virgin, made a pilgrimage to Jerusalem, and founded the Society of Jesus on his return to Paris, in 1534. The institution of the society was confirmed by a bull of Pope Paul III., September 27, 1540; and in the following year Loyola was appointed the first General of the order. He was canonized by Pope Gregory XV. in 1622. Died in Rome, 1556.

Lubbock, Sir John, born in 1834; entered parliament

as a liberal in 1870; in 1871 passed the bank holidays act; represented London University, 1880–1900. He published "Pre-Historic Times," "Ants, Bees, and Wasps," "The Pleasures of Life," etc. Died, 1913.

Lucretius, Titus Carus, Roman poet of the First Century B. C.; wrote "De Rerum Natura," in hexameter verse, expounding the epicurean system of philosophy. He is said to have been driven mad by a love philtre, administered by his wife, and to have committed suicide.

Luke, St., one of the four Evangelists, was the associate of St. Paul in his mission of evangelizing the Gentiles. The time and place of his nativity are not known with any approach to authenticity, though it would appear from the style and substance of his writings that he must have received a liberal scholarship. Besides the Gospel called after him, he was author of "The Acts of the Apostles," written, like the former, in Greek.

Luther, Martin, one of the greatest of religious leaders, was born in Eisleben, Germany, 1483. After studying at the University of Erfurt, he became a monk of the Augustine order in that city, and, in 1508, was made professor of philosophy at Wittenberg. After a visit to Rome, in pursuance of a vow he had made, his ideas regarding the tenets and practices of the Roman Church underwent a gradual change. In 1512, he began openly to declare his heterodox views upon scriptural theology. These views, embodied in his celebrated "ninety-five propositions," at once plunged him into bitter controversy and exposed him to as bitter persecution. He soon found friends, however, among some of the most powerful of the German princes. Summoned by the pope to defend his opinions, through the intervention of the Elector of Saxony, it was arranged that a hearing should be given to Luther at Augsburg, before the papal legate. That interview was held, and it decided nothing. Luther then continued his public discussions, and also gave vent to his polemic innovations in writings — one of which, the "De Captivitate Babylonicâ Ecclesiæ," created so great a sensation that a papal bull was issued, condemning to a public *auto-da-fé* it and others of his productions. Luther, however, finding that the crisis had come, proceeded to the walls of Wittenberg, attended by a number of his friends and disciples, there burned the pope's bull, and by that act dissevered forever his remaining ties with the Church of Rome. After this Luther became the spokesman of a propaganda whose labors never rested till the spirit of the Protestant religion had taken deep and lasting root throughout Northern Germany, and thence extended among her Scandinavian neighbors. Cited to appear before the Diet of Worms, 1521, Luther appeared there, attended by a retinue of the Protestant princes and the nobles of Germany, and after ably pleading his cause — that of religious liberty — before the Emperor Charles V. in person, he was seized, on his returning home, at the instigation of his friend, the Elector of Saxony, and carried to the castle of Wartburg, where he remained about a year. Returning then to Wittenberg, he doffed his monastic character, married, published his translation of the New Testament in 1522, and his German version of the Old Testament in 1534. The closing years of the life of Luther were passed in comparative tranquillity. Died, 1546.

Lyell, Sir Charles, geologist, was born in Forfarshire in 1797; educated at Oxford; was called to the bar in 1825, but abandoned the legal profession in 1827; after travel[illegible] on the Continent, and contributing papers to the "Transactions" of the Geological Society, published "Principles of Geology," "The Huttonian doctrines for [illegible]30–33), which substituted th[illegible] thus raising geology to the [illegible]e old "catastrophic" theory to the rank of a branch of exact science. He became president of the Geological Society in 1836, and again in 1850. He visited America in 1841 and 1845, and published narratives of both expeditions, written in a popular style. In 1863 appeared "The Antiquity of Man," in which he gave his assent to the Darwinian theory. Died, 1875.

Lytton, Edward George Earle Lytton Bulwer-Lytton, Lord, an eminent English novelist, was born in London, of an ancient family, in 1803. In 1826, he graduated at Cambridge, and published, in 1827, his first novel, "Falkland." In the year following "Pelham" appeared — a work which placed him at once in the first rank of contemporary writers of fiction. Thenceforward his literary career was one of meteoric brilliancy; novel after novel, drama after drama, flowed from his pen almost without intermission. For a quarter of a century he reigned the great master of English fiction — the successor to Scott, the predecessor of Dickens. In 1866 he was created a peer of the realm. Among his principal novels are: "The Disowned," "Devereux," "Paul Clifford," "Eugene Aram," "The Pilgrims of the Rhine," "The Last Days of Pompeii," "Rienzi, the last of the Roman Tribunes," "Ernest Maltravers," and its sequel, "Alice, or the Mysteries," "Night and Morning," "Zanoni," "The Last of the Barons," "Lucretia, or the Children of the Night," "Harold, the Last of the Saxon Kings," "The Caxtons," "My Novel," "What Will He Do With It," and "A Strange Story." He is also author of the successful and favorite plays "The Lady of Lyons," "Richelieu," and "Money," and of the poems, "The New Timon," and "King Arthur." Died, 1873.

Macaulay, Thomas Babington, Lord, born in 1800; British historian and statesman; graduated at Cambridge, was called to the bar in 1826, and entered parliament for Calne in 1830, as a Whig. He was secretary of war (1839–41), and paymaster-general (1846–47), and, having represented Edinburgh for many years, was created a peer in 1857. His chief works were "History of England from the Accession of James II.," "Critical Essays," most of which were written for the "Edinburgh Review," and "Lays of Ancient Rome." Died, 1859.

Macdonald, Sir John Alexander, distinguished Canadian statesman; born in Glasgow in 1815; was called to the Canadian bar in 1836, and became receiver-general of Canada (1847), commissioner of crown lands (1847–48), attorney-general (1854–62 and 1864–67), (prime minister in 1858,) government leader in the assembly (1864–67), and minister of militia affairs (1862–65–67). He was chairman of the London Colonial Conference of 1866–67, and more than any other person was responsible for Canadian federation; was head of the new Dominion Government, and minister of justice and attorney-general, from 1867 to 1873, when he resigned on the Pacific Railway charges. From 1878 till his death in 1891, he was premier of the Dominion.

Machiavelli, Niccolo di Bernardo dei, born in 1469; Florentine writer and statesman; son of a jurist of good family; as secretary of state at Florence from 1498 to 1512, went on several important missions, but was deprived and exiled in the latter year by the Medici. His chief works were "Il Principe," "Istorie Fiorentine," "Arte della Guerra," some comedies and poems, and "Discorsi sulle Deche di Tito Livio." In 1521, he again took part in affairs for a short time, but died in poverty, in 1527, a few years later.

Mackenzie, Alexander, Canadian statesman; born in Perthshire, Scotland, 1822; early emigrated to Canada, where he became a contractor and journalist. After sitting in the Canadian Parliament for six years, he was elected to the Dominion Legislature, and was also provincial secretary and treasurer in Ontario till 1872. From 1873 till 1878 he was premier and minister of public works for the Dominion. He more than once declined the honor of knighthood. Died, 1892.

MacMahon, Marie Edme Patrice Maurice de, French soldier and statesman of Irish descent; born, 1808; served in the Algerian War of 1830, took part in the expedition to Antwerp in 1832, and in 1855, succeeded to Canrobert's command in the Crimea. For his services in Italy in 1859, he was made Duc de Magenta and marshal of France, and became governor-general of Algeria in 1864. On the outbreak of war with Prussia he was given the command of the first army corps. He shared in the disaster at Woerth, and was in chief command at Sedan, where he was severely wounded and made prisoner. On his return to France in March, 1871, he conducted the siege of Paris against the Communists, and reorganized the army. In 1873, he was named president of the Republic for seven years. In 1877, he began to entertain monarchical designs, but was defeated in the elections, and two years later retired rather than submit to the law against monarchical officers. He continued to live in retirement in Paris until his death in 1893.

Macready, William Charles, actor; born in London, in 1793; educated at Rugby; made his first appearance at Birmingham in 1810, and was engaged at Covent Garden in 1816. He played Richard III. in 1819, and removed to Drury Lane in 1822, and after a tour in the United States, appeared as Macbeth in 1827. He subsequently visited Paris, and held the management of Covent Garden and Drury Lane. In 1849, he nearly lost his life in a riot promoted by the friends of Forrest at the Astor Opera House, New York; and he made his last appearance at Drury Lane in 1851. Died, 1873.

Mac Veagh, Wayne, lawyer; born near Phoenixville, Chester County, Pa., April 19, 1833; graduated from Yale, 1853; admitted to bar, 1856; district attorney, Chester County, Pa., 1859–64; captain of infantry, 1862, and of cavalry, 1863, when invasions of Pennsylvania were threatened; chairman Republican State Committee of Pennsylvania, 1863; United States minister to Turkey, 1870–71; member Pennsylvania, constitutional convention, 1872–74; head of "Mac-

Veagh commission" sent to Louisiana, 1877, by President Hayes to amicably adjust disputes of contending parties there; United States attorney-general in cabinet of President Garfield, 1881, but resigned on accession of President Arthur, resuming law practice at Philadelphia; supported Cleveland for president, 1892; ambassador to Italy, 1893–97; chief counsel of United States in the Venezuelan arbitration, 1903. Died, 1917.

Madison, James, fourth President of the United States; was born in King George County, Virginia, March 16, 1751. He graduated at Princeton, N. J., in 1771, and studied law. In 1776 he was a member of the Virginia Convention, and, though too modest for an orator, he became one of the most eminent, accomplished, and respected of American statesmen. He was elected to the Federal Congress in 1779; in 1784, to the Legislature of Virginia, in which he supported the measures of Jefferson in the revision of the laws, and placing all religious denominations on an equality of freedom without State support. As a member of the convention of 1787, which framed the Federal Constitution, Madison acted with Jay and Hamilton, and with them published the "Federalist." He supported the adoption of the constitution, but opposed the financial policy of Hamilton, and became a leader of the Republican or Jeffersonian party. He declined the mission to France and the office of secretary of state, but in 1792 became the leader of the Republican party in Congress, and wrote the Kentucky Resolutions of 1798, which contain the basis of the States-rights doctrines. In 1801, Jefferson having been elected president, Madison was made secretary of state, which post he held during the eight years of Jefferson's administration. In 1808 Madison was elected president. The European wars of that period, with their blockades and orders in council, were destructive of American commerce. The claim of the English Government to impress seamen from American vessels was violently resisted. Madison vainly endeavored to avoid a war with England, which was declared in 1812, and continued for two years, at a cost of 30,000 lives and 100,000,000 dollars. He was one of the ten presidents elected for a second term, during which he approved the establishment of a national bank as a financial necessity — a measure he had opposed and vetoed. In 1817, he retired to his seat at Montpelier, Virginia, where he served as a rector of the University of Virginia, and a promoter of agriculture and public improvements. Without being a brilliant man, he was a statesman of eminent ability and purity of character. He died at Montpelier, June 28, 1836.

Maeterlinck, Maurice, Belgian author, was born in 1862. The following is a list of his works, some of which have been translated into English and have attracted considerable attention: "La Princesse Maleine," "Pelléas et Mélisande," "Alladine et Palomides," "Aglavaine et Selysette," "Douze Chansons," "Le Trésor des Humbles," "La Mort de Tintagiles," "L'Intruse," and "La Sagesse et la Destinée." He is also the author of the dramas "Ariane et Barbebleue" and "Sœur Béatrice," "Monna Vanna," "Joyzelle," and "Bluebird." Received Nobel prize for literature, 1911.

Magdalene, Mary, a Galilæan, belonging to Magdala, on the sea of Galilee, who followed Christ, stood by the cross, prepared spices for His sepulchre, to whom He first appeared after His resurrection, and who is supposed by some recent critics to be the sole voucher for His rising again.

Magellan, Ferdinand, Portuguese navigator, born about 1470; served his country first in the East Indies and Morocco, but, dissatisfied with King Manuel's treatment of him, offered himself to Spain; under Charles V.'s patronage he and Ruy Falero set out to reach the Moluccas by the west in 1519; he reached the Philippines, and died in battle in Mactan; on this voyage he discovered the Magellan Strait, 375 miles long and fifteen miles wide, between the South American mainland and Tierra del Fuego; he gave name to the Pacific from the exceptional calm he experienced on entering it. Died, 1521.

Magoon, Charles E., lawyer, administrator, born in Minnesota, December 5, 1861; educated at high school, Owatonna, Minn., and University of Nebraska; admitted to bar, 1882, and engaged in general practice; was judge advocate of Nebraska National Guard; law officer of Bureau of Insular Affairs, War Department, Washington, 1899–1904; general counsel, Isthmian Canal commission, 1904–05; governor Canal Zone, 1905–06; American minister to Panama, 1905–06; provisional governor of Cuba, 1906–09. Author: "The Law of Civil Government Under Military Occupation." Died, 1920.

Mahan (*ma-han'*), **Alfred Thayer,** an American naval officer and writer; born in West Point, N. Y., September 27, 1840; was graduated at the United States Naval Academy in 1859; served in the Civil War; was president of the Naval War College, Newport, 1886–89 and 1892–93; visited Europe in command of the "Chicago" in 1893, receiving many honors, among them degrees from both Oxford and Cambridge. He was retired at his own request, November 17, 1896. During the war with Spain he was a member of the Naval Board of Strategy; and in 1899 was appointed by President McKinley as one of the American delegates to the Universal Peace Conference at The Hague. His chief work, "Influence of Sea Power upon History," with its continuation, "Influence of Sea Power upon the French Revolution and Empire," gave him world-wide reputation. Died, 1914.

Maine, Sir Henry James Sumner, F. R. S., D. C. L., born in 1822; English jurist, educated at Cambridge, where, in 1847, he became Regius professor of civil law. After being reader at the Temple, he was law member of the council of India for seven years, and in 1870 became Corpus professor at Oxford. His chief works are "Ancient Law," "Village Communities," and "Early History of Institutions." In 1871 he became member of the secretary of state for India's council, and in 1877 master of Trinity Hall, Cambridge. Died, 1888.

Major, Charles, American novelist, born at Indianapolis, Ind., 1856. After receiving a common school education, he studied law and practiced at Shelbyville. In 1898 he wrote "When Knighthood Was in Flower," his most popular work, which was followed by many others. Died, 1913.

Malibran, Maria Felicita, born in 1808, French singer, daughter of Manuel Garcia; made her début in the Italian opera in 1825, and soon afterwards married M. Malibran, from whom she was divorced. In 1836 she married Charles de Beriot, the famous violinist. She met with much success in "Semiramis," and other operas, making tours in England, the Continent, and the United States. She died in 1836, of a fall while riding.

Malory, Sir Thomas, flourished in the Fifteenth Century; was the author of "Morte d'Arthur," being a translation in prose of a labyrinthine selection of Arthurian legends, finished in the ninth year of Edward IV., and printed fifteen years after by Caxton "with all care."

Malpighi, Marcello, born in 1628; Italian anatomist and chief physician to Pope Innocent XII.; lectured in Bologna, Pisa, and other places, and wrote works on the anatomy of plants, the physiology of the silkworm, and medical subjects. His name was given to the Malpighian genus. Died, 1694.

Malthus, Thomas Robert, F. R. S., born in 1766; English political economist; Fellow of Jesus College, Cambridge; published in 1798 his "Essay on Population," afterwards took orders, and held from 1805 the professorship of history and political economy in the East India Company's college, Haileybury. Died, 1834.

Mann, Horace, American statesman and educational reformer, justly styled the "father of the American public school," was born at Franklin, Mass., 1796. After graduating at Brown university in 1819, he studied law, and was admitted to the bar in 1823. For ten years, 1827–37, he served as a member of the Massachusetts legislature, following which he was for eleven years, 1837–48, secretary of the Massachusetts board of education. He was member of congress, 1848–53, and president of Antioch college from 1853 until his death in 1859. Horace Mann was indefatigable in his efforts toward the suppression of slavery, the promotion of temperance, and in the cause of education. Through his efforts the first normal school in the United States was established in 1839 at Lexington (now Framingham), Mass. He championed modern educational ideas with such vigor and force that he inspired the whole teaching body. Many of his educational reports are now quoted as classics in educational literature. His writings include: "Lectures on Education," "Report of an Educational Tour of Germany, Great Britain, and Ireland," and "On the Study of Physiology in Schools." Elected to American Hall of Fame, 1900.

Mannering, Mary, actress; born in London, England, April 29, 1876; daughter of Richard and Florence Friend (stage name taken from maiden name of her father's mother); educated at private schools; studied for stage under Herman Vezin; went on stage at 15; appeared in "Hero and Leander" at Shaftesbury Theater, London; toured English provinces two years, playing Shakesperian rôles; has since appeared in leading rôles in modern drama; married, May 2, 1897, J. K. Hackett.

Manning, Henry Edward, Cardinal, born in 1808; English Roman Catholic prelate, educated at Harrow and Balliol; was some time Fellow of Merton; subsequently took orders, and became Archdeacon of Chichester in 1840. In 1851 he joined the Roman Catholic Church, publishing "Grounds of Faith" in the next year. In 1865 he succeeded Wiseman as Archbishop of West-

minster, and ten years later was made cardinal. He approved the infallibility dogma of the Vatican Council of 1869, and carried on a controversy with Gladstone on the subject. He sat on several commissions, and took a leading part in bringing to a conclusion the dock strike of 1889. Died in 1892.

Mansfield, Richard, actor, was born in Helgoland, Germany, in 1857; studied for East Indian civil service, but came to Boston and opened a studio; studied art in England and later entered theatrical profession. Played small parts in comic opera; came to United States again and appeared at Standard Theater, New York, as Dromez in "Les Manteaux Noirs." Was very successful in a wide repertoire from Koko in "Mikado" to Richard III. Was head of his own company, and created such parts as Beau Brummel, Baron Chevrial, and the titular rôles in "Dr. Jekyll and Mr. Hyde." Appeared as Cyrano de Bergerac in 1898, and played Shylock, Henry V., Beaucaire, and Brutus in "Julius Cæsar." Married Beatrice Cameron, his leading woman. Author: "Blown Away," "Monsieur," "Ten Thousand a Year," and "Don Juan." Died, 1907.

Mansfield, William Murray, Earl of, was born at Perth, Scotland, March 2, 1705. He was a distinguished judge, from 1756 to 1788 chief justice of the King's Bench. He was remarkable for his accomplishments and for his eloquence, and was styled by Pope "the silver-tongued Murray"; but his political opinions were not popular, and, in the Gordon riots of 1780, his house in Bloomsbury Square, London, was burnt down by the mob. He died, 1793, and was buried in Westminster Abbey.

Mantell, Robert Bruce, actor; born in Irvine, Ayrshire, Scotland, February 7, 1854; professional début, Rochdale, England, as the Sergeant in "Arrah-na-Pogue," October 21, 1876; came to United States and played juvenile rôles with Mme. Modjeska, 1878; returned to England, and for three years supported Miss Wallis (now Mrs. Lancaster) as leading man. Later appeared in New York as Loris Ipanoff in "Fedora," with Fanny Davenport; afterward became a star, and has been at the head of his own company in classic and romantic plays, including "Hamlet," "Othello," "Richard III.," "Macbeth," "Romeo and Juliet," "Richelieu," "Lady of Lyons," "Corsican Brothers," "Monbars," and "Dagger and Cross."

Marat (*mah-rah'*)**, Jean Paul,** a fanatical democrat, born in Neûchatel, 1744. His father was an Italian, his mother a Genevese; studied and practiced medicine, went to Paris as horse-leech to Count d'Artois; became infected with the revolutionary fever, and had one fixed idea: "Give me," he said, "two hundred Naples bravoes, armed each with a good dirk, and a muff on his left arm by way of shield, and with them I will traverse France and accomplish the Revolution," that is, by wholesale massacre of the aristocrats. He had more than once to flee for his life, and one time found shelter in the sewers of Paris. In 1793 he was assassinated one evening as he sat in his bath, by Charlotte Corday, but his body was buried with honors in the Pantheon by a patriotic people, "that of Mirabeau flung out to make room for him." A few months later his body was cast out with execration.

March, Francis Andrew, American philologist; born in Milbury, Mass., in 1825; was made professor of English language and comparative philology at Lafayette College, Pennsylvania, in 1856; became president of the American Philological Association in 1873, and took the direction in America of Dr. Murray's "New English Dictionary on Historical Principles," in 1879. He wrote "Method of Philological Study of the English Language," "Comparative Grammar of Anglo-Saxon," and "Introduction to Anglo-Saxon." Died, 1911.

March, Peyton Conway, American general, son of Francis Andrew March, the philologist, was born at Easton, Pa., 1864. He graduated from Lafayette college, 1884, at the United States military academy, West Point, 1888, and at the artillery school, Fort Monroe, 1898. He served with distinction in the Philippines, 1898-1901, rising from second lieutenant to lieutenant-colonel. From 1903 to 1907 he was member of the general staff, and in 1904 was military attaché to observe the Japanese army in the Russo-Japanese war. In 1917 he was army artillery commander of the American expeditionary forces in France, and was promoted major-general. In February, 1918, he was appointed acting chief of staff of the United States army.

Marconi, Guglielmo, noted electrical engineer and pioneer inventor of wireless telegraphy, was born in Griffone, near Bologna, in 1874. His father was Italian, his mother was Irish. He was educated at Leghorn and Bologna Universities. It was at Bologna that his system of wireless telegraphy first attracted attention. In 1896, he visited England, and, with his invention, sent messages across the Bristol Channel from Penarth, near Cardiff, to Weston-super-Mare. He afterwards set up installations of wireless telegraphy between the South Foreland and the East Goodwin light-vessel, the South Foreland and Wimereux in France, Harwich and Chelmsford. His system was definitely adopted by the Admiralty in 1900. In December, 1901, Marconi succeeded in communicating across the Atlantic Ocean. In 1902, he set up a station at Glace Bay, Nova Scotia, and in October, 1907, began a public service of wireless telegraphy across the Atlantic. Received Nobel prize for physics, 1909.

Marcy, William Learned, American statesman, born at Southbridge, Mass., in 1786; died, July 4, 1857. He graduated at Brown University in 1808, studied law, and practiced in Troy, N. Y. He was an associate justice of the New York supreme court from 1829 to 1831, when he was elected United States Senator. He was elected governor of New York in 1832, 1834, and 1836. President Van Buren appointed him member of the Mexican Claims Commission, in 1839. In 1845, President Polk appointed him secretary of war; and he was secretary of state in President Pierce's cabinet, 1853–57. He left a reputation as a statesman of the highest order of abilities.

Margaret of Austria, born in 1480; daughter of the Emperor Maximilian and Mary of Burgundy; married first John of Castile, and secondly Philibert of Savoy; was made governor of the Low Countries in 1507, and negotiated both the League of Cambrai (1508) and the "Paix des Dames" (1529). Died, 1530.

Margaret of Denmark, born in 1353; succeeded her father, Waldemar IV., became queen also of Norway on the death of her husband, Haakon VI., but was soon expelled; recovered Norway in 1387, and, having defeated Albert of Mecklenburg in 1389, united the three Scandinavian kingdoms by the union of Calmar in 1397. Died, 1412.

Margaret of Valois, born in 1492; sister of Francis I. and grandmother of Henri IV.; married first the Duc d'Alençon, and secondly Henri d'Albret, titular King of Navarre; supported the Reformation, and wrote "Miroir de l'Ame Pécheresse," and "Contes et Nouvelles" (the "Heptameron"). Died, 1549.

Maria Theresa, born in 1717; Queen of Hungary, and daughter of the Emperor Charles VI.; married Francis of Lorraine in 1736, and was supported by England against the Elector of Bavaria, who claimed the empire, and was supported by France; carried on the Seven Years' War, with the help of France, against Prussia, who had obtained part of Silesia; took part, against her will, in the first partition of Poland. Died, 1780.

Marie de' Medici, born in 1573; Queen of France, daughter of Francis of Tuscany; married Henri IV. in 1600, and became mother of Louis XIII., during whose minority she was regent, but was overthrown by Richelieu after a long contest, and left France in 1631. Died, 1642.

Mario, Giuseppe, a famous Italian opera-singer, was born at Cagliari, Italy, in 1810, and was the son of General di Candia. In 1838, he made his first appearance in opera as "Robert," in "Robert le Diable." In this he achieved the first of many successes in Paris, London, St. Petersburg, and America. Mario married the famous singer Giulia Grisi, and retired from the stage in 1867. He died December 11, 1883.

Mark, the Evangelist. "John, whose surname was Mark," was the son of Mary, a woman of piety who lived in Jerusalem, where the disciples occasionally assembled at her house for prayer, and was cousin to Barnabas. He is also called Marcus. He accompanied the Apostle Paul and Barnabas to Antioch, Cyprus, and Perga in Pamphylia, returned to Jerusalem, and went afterwards to Cyprus, and thence to Rome. Ecclesiastical tradition speaks of a missionary expedition of Mark to Egypt and the west of Africa, of his suffering martyrdom about the year 62 or 66 (the Coptic Church still consider him their founder and first bishop), and of the transmission of his corpse to Venice, which city has chosen him for its patron saint. It is said that he wrote at Rome the gospel which bears his name.

Mark Antony, or **Marcus Antonius,** an eminent Roman, was born about 83 B. C. He was one of the most active partisans of Julius Cæsar down to the death of the latter. After the death of Cæsar, he endeavored to succeed to power, but was defeated by Octavianus, the great-nephew of the dictator, and was obliged to cross the Alps. He afterwards became reconciled to Octavianus; and Antony, Octavianus, and Lepidus divided the government between them under the title of Triumvirs. Cicero, who had attacked Antony in his Philippic orations, now fell a victim to Antony. Antony afterwards went to Asia, which he had received as his

share of the Roman world, and there the greater part of his remaining life was spent. There he became captivated by the charms of Cleopatra, and assumed the pomp and ceremony of an Eastern despot. After the sea-fight off Actium (September 2, 31 B. C.), he fled with Cleopatra to Alexandria, and put an end to his life in the following year, when Octavianus (Augustus) appeared before the city. Died, 30 B. C.

Marlborough, John Churchill, first Duke of; born in 1650; soldier and diplomatist; obtained a commission through the influence of his sister with the Duke of York, and first served under Turenne; deserted James II. at the Revolution, but, though created earl and commander-in-chief by William III., intrigued with his former master; after a period of disgrace, went to The Hague to organize the Grand Alliance; was appointed captain-general and duke under Anne, and won the victories of Blenheim (1704), Ramillies (1706), Oudenarde (1708), and Malplaquet (1709), but was recalled in 1711, and dismissed on a charge of peculation. He was restored by George I. in 1714, but never fully trusted. Died, 1722.

Marlowe, Julia, actress; born in the village of Caldbeck, Cumberlandshire, England, August 17, 1870; came, at age of 5, to United States with parents; lived in Kansas two years; moved to Ohio, locating finally in Cincinnati; attended public schools until 12th year; then joined juvenile opera company, which gave "Pinafore," "Chimes of Normandy," and other light operas. Was christened Sarah Frances Frost, but in the juvenile company was called Frances Brough (the latter a family name); later played a child's part in "Rip Van Winkle," and, the next season, played small parts in a company which gave classic dramas in the West; retired from stage and studied three years in New York; made metropolitan début as Parthenia in "Ingomar"; after 1888 starred in Shakesperean and other tragic and romantic rôles in United States; married Robert Taber, but afterward secured legal separation; married E. H. Sothern, 1911. Retired from stage, 1915.

Marshall, John, an eminent American jurist, was born in Fauquier County, Va., in 1755. He served in several battles of the Revolution, afterwards entered upon the study and practice of the law, and, in 1788, became a member of the convention of his native State, where he took an active part in promoting the settlement of its constitution, and supported the Federalist party. In 1797, he was a colleague of Gerry and General Pinckney on a special mission to the French Directory; in 1799, entered Congress, and there highly distinguished himself. In the following year he entered upon the duties of secretary of state, and, in 1801, was appointed to the chief-justiceship of the Supreme Court of the United States, a position he filled with high honor to himself and his decisions during the long period of thirty-four years. Marshall was a statesman of the first order. Died, 1835.

Marshall, Thomas R., was born in North Manchester, Ind., in 1854. He was educated in the common schools, and at Wabash college, A. B., 1873, A. M., 1876, LL. D., 1909. On his twenty-first birthday he was admitted to the bar at Columbia City, Indiana. He was a member of the firm of Marshall and McNagny, 1876-92; Marshall, McNagny and Clugston, 1892-1909. Governor of Indiana, 1909-13. Elected vice-president of the United States in 1912. Re-elected in 1916.

Martineau, Harriet, born in 1802; English writer of Huguenot descent, daughter of a Norwich surgeon; visited the United States in 1834, and the East in 1846, publishing descriptive works on her return; wrote "Deerbrook," "The Hour and the Man," and other novels, and many tales for children, and was also author of a condensation of Comte, and "History of England During the Thirty Years' Peace." Died, 1876.

Marx, Karl, German Socialist; born in 1818, in Trèves, where his father was a lawyer; educated at Bonn and Berlin; took an active part in the Liberal movement of 1840, and, after the suppression of the "Rhenish Gazette" (edited by him), he went to Paris, but had to leave it for Brussels on the demand of the Prussian Government. Having been expelled from Belgium, he was invited to Paris, but soon went to Cologne, where he attempted to revive the "Rhenish Gazette." He now settled in London, where he was engaged in literary work, and took an active part in the International Working Men's Association. After the secession of the Anarchist section in 1872, he took little further part in affairs, and died at Hampstead eleven years later (1883). His chief work was "Das Kapital."

Mary I., Queen of England; born in 1516, daughter of Henry VIII. by Catherine of Aragon; came to the throne in 1553, after a short struggle with Northumberland; restored the abbey lands taken by Henry VIII. and first-fruits to the papacy; deprived and imprisoned the Protestant bishops, and, having married Philip II. of Spain, persecuted the Protestants, contrary to the promises made before her accession. The end of her reign was marked by a war, in conjunction with Spain, against France, when Calais was lost by England. Died, 1558.

Mary of Guise, born in 1515; daughter of Claude, Duc de Guise; married James V. of Scotland in 1538, and became mother of Mary, Queen of Scots; as regent of Scotland, after her husband's death, opposed the Reformation, till deposed in 1559, by the Lords of the Congregation. Died, 1560.

Mary, Queen of Scots, or **Mary Stuart,** was born at Linlithgow, 1542; a daughter of James V. of Scotland. She was educated at the French court, and when 16 years of age married the Dauphin of France, who, in 1559, became Francis II. Francis and Mary assumed also the arms and title of the King and Queen of England, on the ground of Elizabeth's illegitimacy, and this step ultimately proved fatal to Mary. Soon after the death of her husband in 1560, she returned to Scotland, and, in 1565, married Henry Stuart, Lord Darnley. In 1566, Darnley murdered David Rizzio, an Italian whom he accused of improper relations with Mary. Twelve months afterwards he was himself murdered by the Earl of Bothwell, who married Mary after an interval of less than three months. These proceedings so incensed the nobles that they took up arms against her. She was forced to abandon Bothwell, and to surrender herself to the confederated lords. After a year's confinement, during which she was compelled to sign an act of abdication in favor of her son, she escaped into England to place herself under the protection of Elizabeth. By Elizabeth, however, Mary was treated as a prisoner. After nineteen years' confinement she was brought to trial on a charge of complicity in a plot against the life of Elizabeth, and was beheaded in 1587. In 1612 her remains were removed to Westminster Abbey by her son James I. of England.

Masaryk, Thomas Garrigue, Slovak scholar and patriot, first president of the new republic of Czecho-Slovakia, was born at Göding, Moravia, 1850. He began life as a blacksmith, later studied at Vienna and Leipzig and, in 1882, was made professor in the new Czech university at Prague. He sat in the Austrian parliament, 1891–93, resigning to devote himself entirely to moral education, becoming a leader of the so-called realistic movement in philosophy, literature, and politics. Elected deputy, 1907, he vigorously opposed German encroachment upon Austria and combatted Austrian aggression in the Balkans. In 1909 he exposed the forgeries upon which Austria based the forced annexation of Bosnia-Herzegovina. At the outbreak of the war in 1914 he went to Italy and thence to England. Later he organized the movement for Czecho-Slovak independence. In 1918 he was appointed provisional president and in 1920 was regularly elected president of Czecho-Slovakia. His wife is an American and he is well known in the United States for his lectures on political economy at leading universities. Author: "Russia and Europe," "Marxian Socialism," "The Problems of Small Nations in the European Crisis," and other important works.

Mather, Cotton, born in 1663; Puritan minister at Boston, where he carried on a witchcraft persecution, and wrote "Memorable Providences Relating to Witchcraft" and other works. Died, 1728.

Mather, Increase, father of the preceding; born in 1639 in Dorchester, Mass., where his father had been pastor; became president of Harvard in 1685, and visited England to obtain a new charter for his colony in 1688. He also wrote many works. Died, 1723.

Matthew, one of the twelve apostles of Christ, was also called Levi, and was the son of Alpheus. He appears to have resided at Capernaum, where he was a revenue officer or publican. Of his personal history nothing more is recorded in the sacred volume.

Matthias Corvinus, King of Hungary, born in 1443; was proclaimed king in 1458, soon after his release from imprisonment at Prague; maintained the throne against the emperor, and, after having engaged in successful wars with the Turks, received the Bohemian Crown from the pope on condition of extripating the Hussites. While thus engaged a revolt took place in Hungary, supported by Poland and other powers, which combination he routed. After this he engaged in two wars with the emperor, and captured Vienna in 1485, living there until his death in 1490.

Maupassant, Henri Guy de (*mō-pá-son'(g)*), French novelist, was born, 1850; pupil and follower of Flaubert, under whom he studied for seven years, beginning

to write in 1880. His chief works are "La Maison Tellier," "Les Contes de la Bécasse," "Yvette," "Contes du Jour et de Nuit," "Pierre et Jean," and "Afloat." In 1891 his mind became deranged. Died at Passy, 1893.

Maurice of Nassau, Prince of Orange, son of William of Orange, "the Silent," was born, 1567; became Stadtholder of the United Provinces and head of the army in 1587, and successfully carried on the struggle against Spain; refused peace in 1598, but consented to a truce in 1609; afterwards supported the Gomarists against the Remonstrants, and put to death Barneveldt, and concluded a treaty with France and England just before his death, 1625.

"Max O'Rell," nom de plume of Paul Blouet, French writer, born in 1848; graduated at Paris in 1864–65; entered the army in 1869, was taken prisoner at Sedan, and fought against the Commune, after which he went to England as a correspondent; was French master at St. Paul's School from 1876 to 1884, and lectured in England and America. Author: "John Bull et son Ile," "Les Filles de John Bull." Died, 1903.

Maxwell, James Clerk, physicist, born in Edinburgh in 1831; after being second wrangler and Smith's prizeman, became professor of natural philosophy at Aberdeen, and of physics and astronomy at King's College (1860–68). In 1871, he was elected professor of physics at Cambridge, where he made numerous researches, resulting in "The Kinetic Theory of Gases" and "Electricity and Magnetism." Died, 1879.

Mayo, William James and **Charles Horace,** distinguished American surgeons. The Mayo brothers, whose achievements rank high in modern medicine, are natives of Minnesota, the sons of a pioneer physician. William, the older, was born at Lesueur in 1861 and was educated in medicine at the university of Michigan. Charles, the younger, was born at Rochester, 1865, and was educated at Northwestern university and at Chicago medical college. Both settled in practise at Rochester, achieving notable success in operations for gall-stones, cancer, and goiter. In connection with their surgical work at St. Mary's hospital, they developed a clinical and nursing staff of specialists of continent-wide reputation. Some 3,000 physicians from various parts of the United States annually visit this clinic where more than 10,000 operations are performed in a single year. In 1917 the brothers Mayo turned over to the university of Minnesota securities amounting to $1,650,000, representing the bulk of their personal fortunes, for the establishment and maintenance of the Mayo Foundation at Rochester to be used perpetually for higher medical education and research, the expenses to be paid by them until a total fund of $2,000,000 has been accumulated.

Mazarin, Giulio, Cardinal, French statesman, of Italian parentage, born in 1602. After being in the diplomatic service of Spain, he went to France in 1634, as nuncio-extraordinary of the pope, and, having been favored by Richelieu, joined him five years later in opposition to the papacy, and became naturalized in France. In 1641, he was created cardinal, and, having succeeded to the place of Richelieu soon after, supported Anne of Austria, and, after having twice been exiled by his enemies' influence, was recalled by Louis XIV. in 1653, and remained supreme until his death (1661). He had a share in the Treaty of Westphalia, and negotiated the Treaty of the Pyrenees.

McAdoo, William Gibbs, American railway official and cabinet officer, was born at Marietta, Ga., 1863. He was educated at the university of Tennessee, studied law, and was admitted to the bar. After practising his profession in Chattanooga, he located in New York in 1892. Ten years later he was made president of the Hudson and Manhattan railway, which under his management completed the fourth tunnel under the Hudson river, in 1909. He was appointed secretary of the treasury, 1913. In 1914 he married Eleanor Wilson, the youngest daughter of the president. Following their transfer to government control in 1917, Secretary McAdoo was made director-general of railroads. In 1918 he was made general manager of the United States war finance corporation established by Congress, but, in December of that year, he resigned all his high official positions and reengaged in personal business affairs. At the Democratic National Convention of 1920 he was one of the leading candidates for the presidential nomination.

McBurney, Charles, surgeon; born in Roxbury, Mass., February 17, 1845; graduate of Harvard, 1866, A. M., 1869; College of Physicians and Surgeons, New York, 1870. In practice as surgeon, New York, 1870–1913; professor of clinical surgery, College of Physicians and Surgeons, 1892–1907. Was consulting surgeon to President McKinley after he was shot. Died, 1913.

McCall, Samuel Walker, congressman, lawyer, born in East Providence, Pa., February 28, 1851; graduate of Dartmouth College, 1874; admitted to bar, 1876; delegate to national republican conventions, 1888, 1900; member of Massachusetts house of representatives, 1888, 1889, and 1892; member of congress, 1893–1913; elected governor of Massachusetts, 1915, 1916, and 1917. Author: "Life of Thaddeus Stevens."

McClellan, George Brinton, American general, born in 1826; distinguished himself in the Mexican War, and drew up a report on the organization of European armies after a visit to the Crimea; during the Civil War commanded the army of the Potomac, but after indecisive engagements, was superseded in 1862. In 1864, as a Democrat, he was the unsuccessful opponent of Lincoln for the presidency. In 1877, he was elected governor of New Jersey. Died, 1885.

McCutcheon, George Barr, journalist, author, born on farm, Tippecanoe County, Ind., July 26, 1866; educated at Purdue University; city editor "Lafayette Courier," 1893. Author: "Graustark," "Beverly of Graustark," "Brewster's Millions," "Nedra," "Castle Craneycrow," "Jane Cable," "The Husbands of Edith," "Man from Brodney's," and magazine stories.

McGrath, Harold, journalist, author, was born at Syracuse, N. Y., 1871. In 1890 he entered journalism. Author: "Arms and the Woman," "Hearts and Masks," "Half a Rogue," "The Goose Girl," and various magazine stories.

McKim, Charles Follen, architect, born in Chester County, Pa., August 24, 1847; student of Harvard Scientific School, 1866; Ecole des Beaux Arts, Paris, 1867–70. Began practice, 1872; joined in partnership by Wm. R. Mead, 1877, and by Stanford White in 1879. Awarded Royal gold medal by King Edward for promotion of architecture, 1903. Was president of American Institution of Architects. Died, 1909.

McKinley, William, twenty-fifth President of the United States, born in Niles, O., January 29, 1843. He was educated at the public schools, and at the Poland, Ohio, Academy. In May, 1861, he volunteered for the army, and entered the 23d Ohio Infantry as a private. He served four years, rising by merit and faithfulness to the captaincy of his company, and to the rank of major when mustered out in 1865. He at once began the study of law; in 1867 was admitted to the bar, and commenced practice at Canton, O., where he afterward had his residence. In 1869 he was elected prosecuting attorney for Stark County, where his success attracted local attention. Entering politics, he was elected to Congress in 1876, and was reëlected for six successive terms. In 1882, his election was contested, and he was unseated, but triumphantly returned at the next election. His reputation in Congress rests chiefly on the tariff bill that bears his namé. It was drawn by him as chairman of the Ways and Means Committee, and passed by the fifty-first Congress. This bill and his able advocacy of it before the House distinguished him as the leader of the Republican party, on the tariff question. The Republican party went before the country in 1892 almost solely on the issue raised by the McKinley tariff, but a reaction against it had set in, and Cleveland was elected. Meanwhile McKinley failed of reëlection in his district, though largely reducing the adverse plurality created by a redistricting that changed the limits of the district. In 1891 he was elected governor of Ohio by a large plurality over former Governor James E. Campbell, a very popular Democrat, and reëlected in 1893 in the reactionary tidal wave of politics following a contrary tariff policy, that carried the Republican party back to power in Congress, having a plurality of over 80,000. By this time his name was frequently mentioned as a future candidate for the presidency. In 1895 a systematic canvass in McKinley's behalf was instituted by his supporters, and was continued until the election of 1896. He was elected after a campaign of more intense interest than had been displayed in any election since the Civil War.

President McKinley's first term is memorable chiefly for the occurrence of the Spanish-American War with its unexpected results. That his policy during 1896–1900 was acceptable was shown by his unanimous renomination and by his reëlection in 1900 by an electoral majority of 137. His second term began most auspiciously and ended tragically. On September 5, 1901, he visited the Pan-American Exposition in Buffalo, N. Y., that day having been set apart in his honor and called the "President's Day." On the afternoon of the following day, while holding a public reception in the Temple of Music, he was shot twice by Leon F. Czolgosz, an anarchist, who was at once arrested. The wounded president was first taken to the Emergency Hospital on the exposition grounds, for immediate treatment, and then removed to the residence of John G. Milburn, the president of the exposition. Hopes of his recovery were entertained

for several days, but on September 13th he sank rapidly and died the following day. His remains were laid in state in the capitol at Washington and later interred in his home city, Canton, Ohio.

McLean, Emily Nelson Ritchie, patriotic worker, daughter of Judge John Ritchie, was born at Frederick, Md., 1859. She received her education at Frederick Seminary and in post graduate courses. In 1883 she was married to Donald McLean. She was president-general of the national society of the Daughters of the American Revolution, for several years beginning with 1905, and became widely known for her addresses on patriotic and educational subjects. Died, 1916.

McMaster, John Bach, professor of American history in University of Pennsylvania since 1883; born in Brooklyn, June 29, 1852; graduate of College of City of New York, 1872, Ph. D., Litt. D., LL. D.; civil engineer, 1873–77; instructor in civil engineering, Princeton, 1877–83. Author: "A History of the People of the United States" (eight volumes published), "Benjamin Franklin as a Man of Letters," "With the Fathers," "Studies in American History," "Origin, Meaning, and Application of the Monroe Doctrine," "A School History of the United States," "A Primary School History of the United States," "Daniel Webster," "Brief History of the United States," "The Struggle for the Social, Political, and Industrial Rights of Man."

Meade, George Gordon, general in the United States army, was born in Cadiz, Spain, where his father was an agent of the United States navy, December 31, 1815. He graduated at West Point in 1835, and, after serving but one year in the army, resigned to begin practice as a civil engineer. He was frequently employed by the government, and reëntered its military service in 1842. He served with distinction on the staffs of Taylor and Scott in the Mexican War, and in scientific work. At the outbreak of the Civil War he was placed in command of a brigade of volunteers, soon rising to the command of a division, and joining his fortunes permanently to those of the army of the Potomac. He led his division through the Seven Days' battle, being severely wounded at Glendale, through the Antietam campaign, and at Fredericksburg, where he particularly distinguished himself. At Chancellorsville he commanded the fifth corps; and when Hooker resigned the command of the army, and while the army itself was in hasty movement northward to check Lee's invasion of the North in 1863, Meade was appointed to the command. He accepted it with the greatest reluctance, and altogether from a sense of duty. He had inclined to fight on the line of Pipe Creek, to the south of Gettysburg; but Reynolds fell into collision with Lee's advance at Gettysburg, other corps hurried to support, and Gettysburg became historical. When Grant assumed general command in 1864, Meade continued to command the army of the Potomac under him, and mutual goodfeeling enabled them to maintain this delicate relation without friction, and with the best results. At the close of the war, being major-general in the regular army, he commanded the military division of the Atlantic until his death at Philadelphia, November 6, 1872.

Medici, Lorenzo de', "il Magnifico"; born in 1448; son of Pietro, became dominant in Florence after the suppression of the Pazzi, by whom his brother, Giuliano, had been murdered (1478). His alliance with Venice and Milan excited the jealousy of the papacy, and Sixtus IV. excommunicated Florence on his account. He was reconciled, however, with Innocent VIII., and his son, Giovanni, was made cardinal. He was a great patron and collector of manuscripts. Died, 1492.

Meighen, Arthur, Canadian statesman, was born at Anderson, Ont., 1874. He was educated at St. Mary's Collegiate Institute and at Toronto University, graduating with honors, 1896. After teaching in high school at Caledonia, Ont., 1897–98, he studied law at Winnipeg, was admitted to the bar, and, in 1902, located at Portage la Prairie, Man. He was elected to the Dominion House of Commons, 1908, reelected 1911, and 1917; appointed solicitor-general of Canada, 1913; was made member of the imperial war cabinet, 1918; premier 1920–21.

Meissonier, Jean Louis Ernest, painter; born in Lyons in 1815; attracted attention by his "Little Messenger" in 1836, and continued to exhibit at the Paris Salon for many years, his best pictures distinguished for minute detail being the "Napoleon Cycle," among which the picture called "1814" was sold, in 1890, for $100,000. Meissonier served in the Italian campaign and the early part of the Franco-Prussian War, and was colonel at the siege of Paris. Died in Paris in 1891.

Melanchthon, Philip, born in 1497; German reformer; studied under Reuchlin, and was appointed professor of Greek at Wittemberg at an early age, thus becoming acquainted with Luther. He drew up the Confession of Augsburg, of which he sent a copy to the patriarch of Constantinople inviting his adhesion; and by his moderation as well as his writings did much to help the reformation. Died, 1560.

Melba, Nellie, operatic soprano, born at Melbourne, Australia, 1861. After studying under Marchesi in Paris she made her début as Gilda in "Rigoletto" in 1887. She first appeared in New York in "Lucia di Lammermoor" in 1893. Possessing a voice of remarkable purity, she excelled as a coloratura singer, taking important rôles in many operas. She sang also in concert with marked success.

Mellen, Charles Sanger, railway official; born in Lowell, Mass., 1851; entered railway service, 1869, beginning as clerk in cashier's office Northern New Hampshire R. R. and rose steadily to various important positions. He was general manager New York & New England R. R., 1892; 2d vice-president New York, New Haven & Hartford R. R., 1892–96; president of Northern Pacific Railway Co., 1896–1903, New York, New Haven & Hartford R. R. Co., 1903–13.

Mendelssohn-Bartholdy, Felix (*-bar-tōl'de*) a distinguished German musical composer, born in Hamburg, 1809, manifested a precocious taste and genius for music. In his 18th year he produced his famous "Overture to the Midsummer Night's Dream," as well as the opera of the "Wedding of Camacho." His fame was at once secured. In 1836, appeared his oratorio of "St. Paul," and in 1846, the magnificent one called "Elijah" — a masterpiece, second only to the greatest works of Handel. Mendelssohn's "Songs Without Words" are the most admired of his minor compositions. Died, 1847.

Mercier (*mâr'-syā'*), **Desiré Joseph, Cardinal,** Belgian prelate, born at Braine-l'Alleud, 1851. He was educated at Malines, Paris, and Leipzig; became a priest, 1874; taught philosophy at Malines, 1877–82, and then at Rome. In 1906 he was consecrated archbishop of Malines and primate of Belgium, and in 1907 he was made cardinal. By his fearless, patriotic conduct during the German invasion of 1914, Cardinal Mercier came into world-wide notice. In 1919 he visited the United States and Canada. Among his various writings on metaphysics, philosophy and psychology, the most important is his "Origins of Contemporary Psychology."

Meredith, George, poet and novelist, was a native of Hampshire, and was born in 1828. After studying for some time in Germany he commenced his literary career with the publication of a volume of poems. This was followed by the "Shaving of Shagpat, an Arabian Entertainment"; "Farina, a Legend of Cologne," "The Ordeal of Richard Feverel," "Modern Love: Poems and Ballads," "Emilia in England," "Rhoda Fleming," "Vittoria," "The Adventures of Harry Richmond," "The Egoist," "The Tragic Comedians," "Poems and Lyrics of the Joy of Earth," "Diana of the Crossways," "One of Our Conquerors," "Lord Ormont and his Aminta," "The Amazing Marriage," and a volume of short stories. Died, 1909.

Mergenthaler, Ottmar, inventor of the typesetting machine bearing his name, was born in Württemberg, Germany, in 1854; came to the United States in 1872, and received a government position in Washington to care for the mechanism of bells, clocks, and signal service apparatus; became connected with a mechanical engineering firm in Baltimore, Md., in 1876; subsequently, while still engaged with that company, he began experiments which resulted in the invention named. He died in Baltimore, Md., 1899.

Merivale, Charles, dean of Ely; born in Exeter in 1808; held a succession of appointments as lecturer; wrote a history of Rome from its foundation in 753 B. C. to the fall of Augustus in 476 A. D., but his chief work is the "History of the Romans under the Empire," indispensable as an introduction to Gibbon. Died, 1893.

Merritt, Wesley, major general of United States Army, retired June 16, 1900; born in New York, June 16, 1836; graduated from West Point, 1860; commissioned brigadier-general United States volunteers, June 29, 1863; major-general, United States volunteers, April 1, 1865. After war regularly promoted from lieutenant-colonel to major-general, United States Army. Served in army of the Potomac until June, 1864; participated in all its battles and earned six successive brevet promotions for gallantry at Gettysburg, Yellow Tavern, Hawes' Shop, Five Forks, etc. Afterward accompanied General Sheridan on cavalry raid toward Charlottesville, and engaged in battle of Trevilian's Station; commanded cavalry division in Shenandoah campaign, August, 1864, to March, 1865; was engaged in battles of Winchester, Fisher's Hill, etc.; commanded corps of cavalry in Appomattox campaign; one of three commanders from National

Army to arrange with Confederate commanders for surrender of Army of Northern Virginia. After war served in various departments, participated in several Indian campaigns; superintendent of United States Military Academy, 1882–87; commanded department of the Atlantic until assigned, May, 1898, to command of United States forces in the Philippine Islands, continuing there until summoned to the aid of the American Peace Commissioners in session in Paris, December, 1898; returned to United States; in command of department of the East, Governor's Island, until retirement, 1900. Died, 1910.

Merry del Val, Raphael, pontifical secretary of state, was born in London of Spanish parents, 1865, and educated in England, where he resided for some length of time at different periods in his career. He was at first attached to the diocese of Westminster, acted for many years as Camerieri Segreto to Pope Leo XIII., and was appointed president of the Accademia Pontificia in 1899, and Italian Archbishop of Nicosia in 1900. He visited England as papal envoy on the occasions of Queen Victoria's Jubilee and King Edward's coronation, and went to Canada on an educational mission. In July, 1903, on the death of Leo XIII., he was nominated consistorial secretary, and in October succeeded Cardinal Rampolla as secretary of state; was afterwards created a cardinal. Appointed, 1914, archpriest of St. Peter's to succeed Cardinal Rampolla.

Metternich, Clemens Wenzel, Prince von, a great Austrian diplomatist and statesman; born in Coblenz, 1773; after a distinguished diplomatic career, became foreign minister of the empire in 1809. This high office he held with consummate ability for a period of thirty years, exercising, almost without control, the highest authority in Austria. The revolution of 1848 sent him into exile, from which he returned three years after. Died, 1859. Prince Metternich was an adroit intriguer, and exercised in his day a powerful influence upon the cabinets of Europe.

Meyer, Adolf, pathologist, alienist; born in Niederweningen, near Zürich, Switzerland, September 13, 1866; educated at gymnasium, Zürich; University of Zürich, M. D., 1892; post-graduate studies in Paris, London, Edinburgh, Zürich, Vienna, and Berlin, 1890–92 (LL. D., Glasgow, 1901); came to the United States, September, 1892. Honorary fellow and later docent in neurology, University of Chicago, 1892–95; pathologist to Illinois Eastern Hospital for the Insane, Kankakee, Ill., 1893–95; pathologist and later director of clinical and laboratory work, Worcester (Mass.) Insane Hospital, and docent in psychiatry, Clark University, 1895–1902, director Pathological (psychiatric) Institute, New York State Hospitals, 1902–10. Professor psychiatry, Cornell University Medical College, 1904–09; professor psychiatry, Johns Hopkins University, since 1910. Extensive contributor to neurology, pathology, and psychiatry.

Meyer, George von Lengerke, born in Boston, June 24, 1858; graduated at Harvard, 1879; engaged in business as merchant and trustee, 1879–99. Member of Boston common council, 1889–90; member of board of aldermen, 1891; member of Massachusetts Legislature, 1892–97, and speaker of house, 1894–97; chairman of Massachusetts Paris Exposition Managers; member of Republican National Committee, 1898–1905. Director of Amoskeag Manufacturing Company, the Amory Company, Old Colony Trust Company, National Bank of Commerce, United Electric Securities Company; president of Ames Plow Company. United States ambassador to Italy, 1900–05; ambassador to Russia, 1905–07; postmaster-general, 1907–09; secretary of navy, 1909–13. Died, 1918.

Michael VIII. (Palæologus), born in 1234; having been crowned Emperor at Nicæa with John Lascaris, regained Constantinople from the Latins in 1261, and ordered his colleague to be blinded, for which he was excommunicated and did public penance; attempted to unite the Eastern and Western Churches at the Council of Lyon (1274), and subsequently defeated a French invasion. Died, 1282.

Michelet, Jules, born in Paris, August 21, 1798; a popular French historian, for many years professor of history in the College of France. In 1843–46, he became widely known, not only in his own country, but also in England, by his attacks upon the Jesuits in his three works: "The Jesuits," "Priests, Women, and Families"; and "The People." He was the writer of many other works, several of them of considerable interest; but those of most permanent value are "History of France," "History of the French Revolution," and "History of the Nineteenth Century." Died, 1874.

Miles, Nelson Appleton, an American military officer; born in Westminster, Mass., August 8, 1839. At the breaking out of the Civil War, he was engaged in mercantile pursuits in Boston, Mass.; entered the service as first lieutenant, 1861, and distinguished himself at the battles of Fair Oaks and Malvern Hill. In 1862 he was made colonel and was severely wounded at Chancellorsville. He commanded a brigade in the Richmond campaign and was promoted brigadier-general, 1864. At the close of the war he was commissioned colonel of infantry in the regular army. He was made brigadier-general, 1880, major-general, 1890, and commander of the army, 1895. In the Indian wars of 1874 and thereafter he took a prominent part. On July 13, 1898, he assumed personal command of the army around Santiago, Cuba. In 1901 he was promoted lieutenant-general. Upon reaching the age limit, he retired from active service, 1903.

Mill, James, a British historian and political economist, was born near Montrose, Scotland, in 1773. He has written much that is of standard value, as witness his "History of British India" (five volumes); "Liberty of the Press," "Law of Nations," "Elements of Political Economy," and "Analysis of the Phenomena of the Human Mind." Died in London in 1836.

Mill, John Stuart, son of James Mill, born in London in 1806, established his reputation, in 1843, by the publication of "A System of Logic, Ratiocinative and Inductive," a work the success of which paved the way for "The Principles of Political Economy, with some of their Applications to Social Philosophy." His later works are an "Essay on Liberty," "An Examination of Sir William Hamilton's Philosophy," and the "Subjection of Women," in which he avows himself a partisan of the woman's rights movement. Died, 1873.

Millerand, Alexandre, French statesman, was born in Paris, 1859. He was educated at the Lycée Vanves and the Lycée Henri IV, and studied law at the University of Paris. Entering politics, he became a radical socialist leader, and, in 1885, was elected to the Chamber of Deputies. Later he edited "The Voice" and "The Little Republic," both socialist organs. During 1889-1902 he was minister of commerce and devoted his energies toward various practical reforms. Severing his connection with the Socialist party, he served as minister of public works, 1909-10, and as minister of war, 1912-15. Continuing active service in the Chamber of Deputies, he was selected delegate to the War Conference in London, 1916, and, following the retirement of Clemenceau, 1920, was chosen premier. Upon the resignation of Deschanel, Millerand was elected president of France, Sept. 23, 1920, for the remainder of the unexpired term, 1920-27.

Milman, Henry Hart, born in London, 1791; an ecclesiastical historian and poet; for several years professor of poetry in the University of Oxford, and after 1849 he was Dean of St. Paul's Cathedral. His best known poems are "The Fall of Jerusalem," and "The Martyr of Antioch"; his historical works are a "History of the Jews," a "History of Christianity from the Birth of Christ to the Abolition of Paganism in the Roman Empire," and a "History of Latin Christianity, including that of the Popes to the Pontificate of Nicolas V." Died, 1868.

Milton, John, English poet, born in 1608; son of a London scrivener of some culture, who sent him to St. Paul's school and Cambridge (Christ's College), after leaving which he lived with his father in Buckinghamshire, and then traveled in France and Italy. In 1644 he published "Areopagitica," a speech for the liberty of unlicensed printing, among his other prose works being "Eikonoklastes" and "Defensio pro Populo Anglicano" (in answer to Salmasius), this last work being the immediate cause of his loss of sight. He was appointed foreign secretary to the Council of State in 1649, and some years after became blind. "Allegro," "Penseroso," "Comus," "Lycidas," etc., were written in his early days; his greatest work, "Paradise Lost," was published in 1667, and "Paradise Regained" in 1671. He was married three times. Died, 1674.

Mitchell, John, labor leader, was born at Braidwood, Ill., February 4, 1870; received common school education, read law one year, and made special study of economic questions; began work in coal mines, 1882, and, as worker or labor leader, was identified with mines and mining; his official connection with the United Mine Workers of America began in 1895, and from 1899 to 1908 he served as president of that organization. Author: "Organized Labor, Its Problems, Purposes, and Ideals." Died, 1919.

Modjeska, Helena (Mme. Chlapowski), actress; born in Cracow, Poland, October 12, 1844; début, Bochnia, Poland, 1861; soon became leading actress in her native country; married, in 1868, Charles Bozenta Chlapowski, compatriot. First appearance in English, San Francisco, 1877, in Adrienne Lecouvreur, followed by a starring tour through United States and England. Returned here and played leading Shakesperian parts, "Camille," "Mary Stuart," etc. Died, 1909.

Mohammed was in his youth employed as a camel-driver between Mecca and Damascus by his uncle, who had adopted him, but at the age of twenty-five married Khadija, a rich widow. He then led a life of meditation, during which the Koran was drawn up. When at the age of 40 he claimed to be a prophet, he was opposed by his family, and in 622 left Mecca for Medina (the Hegira). Here his followers increased, and were incited by him against the Arabian Jews. Mecca was stormed, and in time all Arabia and Syria conquered, but the prophet died (632) soon after at Medina, perhaps from poisoned food.

Molière, Jean Baptiste (Poquelin), born in 1622; dramatist; was educated by the Jesuits, and studied law, but about 1645, changed his name, and became an actor. He began to write plays in 1653, and took part in them himself, first performing before Louis XIV. in 1658. In 1673, while playing Argan in "Le Malade Imaginaire," he was seized with convulsions, and died soon after. It was only by the intervention of the king that the Church allowed him burial. His chief plays were "L'Etourdi," "L'École des Femmes," "Le Misanthrope," "Le Médecin Malgré Lui," "Tartufe," "Le Bourgeois Gentilhomme."

Moltke (*mōlt'ka*), **Helmuth Karl Bernhard, Count von,** chief marshal of the German Empire; was born in Parchim, Mecklenburg, 1800. He entered the Prussian service in 1822, as a lieutenant in the eighth infantry regiment. In 1835, he undertook a tour in Turkey, remained there several years, and took part in the campaign of the Turks in Syria, against the viceroy of Egypt. He became a lieutenant-general in 1859, and sketched the plans of the campaigns against Denmark, 1864, and Austria, 1866. He was the commander-in-chief in the Franco-German War, 1870–71, and to his brilliant strategy are ascribed the splendid victories of the German arms. The illustrious marshal, who is generally regarded as the first strategist of the day, was created a count in 1870, and chief marshal of the German Empire in 1871. Died, 1891.

Monk, George, Duke of Albemarle, an English general; born in County Devon in 1608; after a brief service in Holland, fought at first on the side of Charles I. during the civil war; then, changing his coat, he commanded a republican army in Ireland, 1646–50, and in 1651 reduced Scotland into submission to Cromwell. In 1653, he commanded in the sea-fight in which the Dutch were defeated, and their admiral, Van Tromp, killed. After the death of the Protector, 1658, Monk proclaimed Richard Cromwell, his father's successor, and himself retained command of the army in Scotland. With that army, he, in 1660, marched upon London, and declared for the restoration of Charles II., which consummation he succeeded in bringing about. His last great victory at sea was over the Dutch in 1666. Monk died in 1670.

Monroe, James, fifth President of the United States; was born in Westmoreland County, Va., 1758. After graduating at William and Mary College, he served with distinction in the army during the War of the Revolution, and in 1783, entered the general Congress as a delegate from his native State. In the Virginia convention, 1788, he opposed the adoption of the Federal Constitution, and allied himself with the Republican party, which party elected him a member of the United States Senate in 1790. Four years later he proceeded to France as minister-plenipotentiary, from which office he was recalled in 1796. During the years 1799–1802, he filled the office of governor of Virginia. In 1802, as the associate of Livingston, he was dispatched on a special mission to negotiate for the purchase of Louisiana. In 1803, in England, and in 1805, in Spain, he performed special diplomatic services for his country. In 1811, he again accepted the governorship of Virginia, and in the same year became secretary of state under President Madison's administration, which position he occupied with credit till March, 1817. The year before he had been the elected Democratic candidate for the presidency. During his term of office, Florida was ceded to the United States, 1819. Reëlected in 1820, during his second term, the United States recognized the de facto independence of the Spanish-American colonies. In December, 1823, he gave utterance in his message to the celebrated principle touching the foreign policy of the United States, since known as the "Monroe Doctrine." In 1825, Monroe retired from the presidential chair, and died in New York, 1831.

Montaigne, Michel Eyquem de, French writer, born in 1533; was educated at the Collège de Guienne at Bordeaux, partly under George Buchanan, and became a judge of the parliament there in 1554. He took no part in affairs, but was driven from his château for two years by the wars of the league, during which time he formed his friendship with Marie de Gournay. In 1588, he was chosen to negotiate a treaty between Guise and Navarre at Blois. His "Essais," of which Shakespere and Ben Jonson possessed translations, were first published in 1580. Died, 1592.

Montcalm de Saint Véran, Louis Joseph, Marquis de, born in 1712; French general; was named commander of the French forces in Canada in 1756, where he won several victories, and fortified Quebec, but was defeated by Wolfe on the Plains of Abraham and mortally wounded in the battle, Sept. 13, 1759.

Montesquieu, Charles de Secondat, Baron de, born at the Castle of La Brède, near Bordeaux, January 18, 1689; an eminent political philosopher of France, best known as the author of a work on "The Spirit of Laws," which was published in 1748. In this work, which occupied its writer for more than fourteen years, he discusses with great ability the principles of political science, as those principles were understood in his time. He was also the author of some "Persian Letters" (1721), in which, in the character of a Persian, he described and satirized the peculiarities of his countrymen; of a discourse on "The Causes of the Greatness and of the Decay of the Romans" (1734); and of numerous other works. Died in Paris, February 10, 1755.

Montezuma I., Emperor of Mexico; after having been the victorious general of his uncle, succeeded him in 1436. He defeated the people of Chalco, and embanked the lake of Tezcuco. Died, 1464.

Montezuma II., born in 1466; became emperor in 1502, and governed with great cruelty. His dominions having been attacked and conquered by Cortez, he was killed (1520) by his subjects while persuading them to submit to the Spaniards.

Montgomery, Richard, an American general; was born in Ireland in 1736. In 1772, he resigned his commission in the British service, and settled in Dutchess County, N. Y., representing it in the Continental Congress, 1775. As brigadier in the national army he took Montreal, and was killed in the assault on Quebec, December, 1775.

Montrose, James Graham, Marquis of, Royalist leader; was born in Edinburgh in 1612, and lived some time in France as an officer in the Scottish Guard. On his return he first joined the Covenanters, but afterwards became a zealous Royalist, gaining several battles for the king, but was defeated by Leslie at Philiphaugh in 1645, and five years later, having been captured in Orkney, was brought to Edinburgh and executed in 1650.

Moody, Dwight Lyman, noted American evangelist, was born in Massachusetts in 1837; renounced Unitarianism and became a Congregationalist, served during the Civil War on the Christian commission, and from 1856 entirely abandoned business. His church and schoolhouse at Chicago having been burnt down in 1871, he went to England to raise funds for rebuilding them, and was successful in his object. Established a school for Christian workers at Northfield, Mass., and a Bible institute at Chicago. Died, 1899.

Moody, William Henry, jurist, born in Newbury, Mass., December 23, 1853; graduated from Phillips Academy, Andover, Mass., 1872; Harvard University, 1876; lawyer by profession; district attorney for eastern district of Massachusetts, 1890–95; member 54th Congress from sixth Massachusetts district to fill vacancy; also member 55th, 56th, and 57th Congresses; secretary of the navy, 1902–04; attorney-general United States, 1904–06; in 1906, associate justice United States Supreme Court, from which he retired in 1910. Died, 1917.

Moore, Sir John, soldier, born in 1761, son of a doctor in Glasgow, who edited Smollett's works; served in the American war, in Corsica (1794), in the attack on St. Lucia, of which he became governor, and subsequently in Ireland, Holland, Egypt, and Sicily (1806). On his return from an expedition in aid of Sweden, he was sent to Portugal to command an army to coöperate with the Spaniards. He was obliged to retreat from Salamanca to the sea, and won the victory of Corunna (1809), but fell in the battle and died.

Moore, John Bassett, publicist, born in Smyrna, Del., December 3, 1860; graduate of University of Virginia, 1880; studied law, Wilmington, Del.; passed civil service examination, 1885, and appointed law clerk in state department at $1,200 a year; in 1886, became third assistant secretary of state. Although a Democrat, was retained in that position by Mr. Blaine; resigned, 1891, to become professor international law and diplomacy at Columbia College; appointed, April, 1898, assistant secretary of state, resigning in September to become secretary and counsel to Peace Commission at Paris; member of Institut de Droit International, and the Institute Colonial International (LL. D., Yale,

1901). Minister plenipotentiary to Centenario, Chile, 1910; counselor of department of state, 1913-14. An authority on international law. Author: "Report on Extraterritorial Crime," "Report on Extradition," "Extradition and Interstate Rendition" (two volumes), "American Notes on the Conflict of Laws," "History and Digest of International Arbitrations," "American Diplomacy, Its Spirit and Achievements." One of the editors of "Political Science Quarterly," and of the "Journal de Droit International Privée."

More, Sir Thomas, statesman and writer; born in 1478, son of Sir J. More, a judge; was educated in the household of Archbishop Morton, who sent him to Oxford, where he made the acquaintance of Erasmus. He entered parliament in 1504, where he took an independent course, refusing a pension from the king, whose favor, however, and that of Wolsey, he enjoyed; was knighted in 1521, became speaker in 1523, and, on the fall of Wolsey, chancellor, but resigned in 1532, and was committed to the Tower two years later for refusing to take the oath of supremacy. He was then condemned by attainder, and executed on a charge of treason in 1535. He wrote "Utopia" and several other works.

Morgan, John Pierpont, banker, financier; born in Hartford, Conn., April 17, 1837; son of Junius Spencer and Juliet (Pierpont) Morgan; graduate of English high school, Boston; student of University of Göttingen, Germany. Entered bank of Duncan, Sherman & Co., 1857; became agent and attorney in United States, 1860, for George Peabody & Co., bankers, London, in which his father was partner; member of Dabney, Morgan & Co., investment securities, 1864-71; became member, 1871, of firm of Drexel, Morgan & Co., now J. P. Morgan & Co., leading private bankers of United States; also J. S. Morgan & Co., London. Largely occupied as financier in largest reorganizations of railways and consolidation of industrial properties; floated United States bonds issue of $62,000,000 during Cleveland administration; organized and floated securities of United States Steel Corporation, 1901 (capital, $1,100,000,000); secured American subscriptions of $50,000,000 to British war loan of April, 1901; organized existing agreement of anthracite operators of Pennsylvania, also of soft coal interests in Ohio, Indiana, and Pennsylvania; controlled over 50,000 miles of railways, large American and British ocean transportation lines. Gave site, buildings, and funds, amounting to about $1,500,000, to lying-in hospital, New York, and large donations to the New York trade schools, the cathedral of St. John the Divine, and many other institutions. Made valuable gifts to American Museum of Natural History, Metropolitan Museum of Art, and New York Public Library. In 1912 he gave to library of congress a complete set of autographs of the signers of the declaration of independence. Owned famous collections of pictures (including famous Gainsborough painting), books, manuscripts, curios, etc. President of Metropolitan Museum of Art; member of many societies, clubs, etc., in United States and abroad. Died, 1913.

Morgan, John Tyler, United States senator from Alabama, 1877-1907; born in Athens, Tenn., June 20, 1824; emigrated to Alabama when 9 years old; academic education; admitted to bar, 1845; practiced until elected to the senate. Presidential elector, 1860; delegate to Alabama secession convention, 1861; joined Confederate States Army, May, 1861, as private; promoted through all grades to colonel of 51st Alabama Regiment, which he raised; was brigadier-general, 1863-65. After war, resumed practice at Selma, Ala.; presidential elector, 1876; Democrat. Appointed by President Harrison as arbitrator on Bering Sea fisheries, 1892; appointed by President McKinley, July, 1898, one of the commissioners to organize government in Hawaii, after passage of annexation bill. Died, 1907.

Morley, Right Hon. John, statesman and writer; born in Blackburn in 1838, and educated at Cheltenham and Oxford; took degree of LL. D. in 1859, but devoted his time to writing. He edited, among other publications, the "Fortnightly Review" from 1867 to 1882, the "Pall Mall Gazette" from 1880 to 1883, and "Macmillan" in 1883-85, and after two unsuccessful candidatures (in 1869 and 1880) entered parliament in 1883, as member for Newcastle. He, from the first, adopted Home Rule. Twice chief secretary for Ireland, with seat in cabinet, 1886, and 1892-95; secretary of state for India, 1905-10; lord president of the council, 1910-14. His chief works are "Edmund Burke: an Historical Study," "Voltaire," "Rousseau," "Diderot," "On Compromise," "Life of Cobden," "Walpole," and "Chatham" in the "Statesmen" series; and he edited the "English Men of Letters" series.

Morris, Clara, actress; born in Toronto, Canada, in 1849; lived there until three months old, then went to Cleveland and grew up there; became member of ballet in Academy of Music, Cleveland, 1861, rapidly advancing to leading lady; in 1869, became leading lady at Wood's Theater, Cincinnati; became member Daly's Fifth Avenue Company, New York, 1870; soon became prominent in emotional rôles and has appeared as star in principal American theaters. Leading rôles: Camille, Alixe, Miss Multon, Mercy Merrick in "The New Magdalene," Cora in "L'Article 47," etc.; married in 1874, to Frederick C. Harriott. Author: "A Silent Singer," "My Little Jim Crow," "Life on the Stage," "A Paste-Board Crown" (novel), "Stage Confidences," "The Trouble Woman," "New East Lynne," etc.

Morris, Gouverneur, American statesman; born in 1752; became a member of the Provincial Congress of New York, and was one of those who drew up the State Constitution in 1776; was a prominent member of the Continental Congress in 1777-80, being the colleague of R. Morris as superintendent of finance. He was one of the draughters of the Federal Constitution in 1787, after which he passed many years in Europe, being minister to France during the Revolution, and became United States senator on his return. He wrote "Observations on the American Revolution," and his "Correspondence" throws much light on the French Revolution. Died, 1816.

Morris, Robert, American financier; born in Liverpool in 1734; emigrated at an early age and settled in Philadelphia, becoming a partner in the counting-house of C. Willing; opposed the Stamp Act, and signed the Non-importation Agreement (1765). Having become a member of the Continental Congress, he signed the Declaration of Independence, and greatly helped the American cause from his own purse, both during the war and afterwards. He founded the Bank of North America, was superintendent of finance from 1781 to 1784, but declined the secretaryship of the treasury; was finally ruined by his speculations, and imprisoned for debt. He died in 1806.

Morris, William, English poet and socialist; born in 1834, son of a London merchant; was educated at Marlborough and Oxford, and, in 1863, with D. G. Rossetti, Burne-Jones, and others, engaged in the manufacture of artistic wall-paper and household decorations. During his leisure hours he gave socialist lectures, and wrote poetry, his chief productions having been "The Life and Death of Jason," "The Earthly Paradise," "The Story of Sigurd the Volsung," besides translations of the "Æneid" and the "Odyssey," and some prose works, of which the chief is "A Tale of the House of the Wolfings." Died, 1896.

Morse, Samuel Finley Breese, born in 1791; American electrician; son of a Congregationalist minister in Massachusetts; having graduated at Yale, went to England in 1810, and, becoming a pupil of West, exhibited "The Dying Hercules" at the academy in 1813. He afterwards abandoned art for science, and, in 1837, took out a patent for his electric telegraph, the first overhead message being sent from Washington to Baltimore in 1844. It was afterwards generally adopted, the inventor receiving an international testimonial in 1858. Disputes subsequently arose with Professor Henry, as to priority of invention, and on account of the infringement of Morse's patent. Died, 1872.

Morton, Levi Parsons, American banker and statesman, Vice-President of the United States, 1889-93; born in Shoreham, Vt., May 16, 1824; graduated from Shoreham Academy (LL. D., Dartmouth College, 1881, Middlebury College, 1882); founded banking houses of L. P. Morton & Company and Morton, Bliss & Company, New York; Morton, Rose & Company, Morton, Chaplin & Company, London, and Morton Trust Company, New York; member Congress from New York, 1879-81; United States minister to France, 1881-85; governor of New York, 1895-96. Died, 1920.

Moses, a great Hebrew prophet and legislator, and son of Amram of the Levitical tribe, was born in Egypt, about 1570 B. C. In pursuance of a royal command that all male infants of Hebrew birth should be destroyed, Moses, to escape this fate, was laid in a basket among a clump of bulrushes on the banks of the Nile, and there discovered by the daughter of Pharaoh, who adopted him as her son. When arrived at a ripe manhood, Moses began to form plans for the deliverance of his race from bondage, and incurring, by so doing, Egyptian mistrust, he fled to Midian, where he served as a shepherd till his 80th year. Then he is said to have been the recipient of the Lord's commands to guide the children of Israel out of captivity into the Land of Canaan. He accordingly conducted them through the Red Sea into the wilderness, and became their apostolic chief and lawyer, composing for them the code since known as the "Mosaic Dispensation." After appointing Joshua as his

successor, Moses died on Mount Pisgah, at the patriarchal age of 120.

Motley, John Lothrop, an American historian; born in Massachusetts in 1814, and graduated at Harvard College in 1831, after which he traveled for some years in Europe. In 1841, he became secretary of legation at Petrograd; was minister-plenipotentiary at Vienna from 1861 till 1867; and in 1869 was appointed American minister to the court of St. James, a post from which he was removed in 1870. The three great works upon which Motley has built up one of the foremost literary reputations of the age, are "The Rise of the Dutch Republic — a History," its sequel, "The History of the United Netherlands from the Death of William the Silent to the Synod of Dort," and "John of Barneveld," all of which have been translated into the French, Dutch, and German languages. Died in England in 1877.

Moulton, Louise Chandler, novelist and poet; born in Pomfret, Conn., April 10, 1835; daughter of Lucius L. and Louisa R. (Clark) Chandler. Author: "This, That, and the Other," "Juno Clifford," "My Third Book," "Bed-Time Stories," "More Bed-Time Stories," "Some Women's Hearts," "Swallow Flights," poems; "New Bed-Time Stories," "Random Rambles," "Firelight Stories," "Ourselves and Our Neighbors," "Miss Eyre From Boston, and Other Stories," "In the Garden of Dreams," "Stories Told at Twilight," "Lazy Tours in Spain and Elsewhere," "In Childhood's Country," "At the Wind's Will." Edited: "Garden Secrets," "A Last Harvest," by Philip Bourke Marston; "Collected Poems of Philip Bourke Marston," "Selections from Poems of Arthur O'Shaughnessy." Died, 1908.

Moulton, Richard Green, educator, author; born in Preston, Eng., May 5, 1849; graduated from London University, 1869; Cambridge, Eng., University, 1874 (Ph. D., University of Pennsylvania, 1891); Cambridge University extension lecturer in literature, 1874–90. Now professor of literary theory and interpretation, University of Chicago. Author: "Shakespere as a Dramatic Artist, a Study of Inductive Literary Criticism," "The Ancient Classical Drama, a Study of Literary Evolution," "Four Years of Novel Reading—Account of an Experiment in the Study of Fiction," "The Literary Study of the Bible," "A Short Introduction to the Literature of the Bible," "The Moral System of Shakespere." Editor: "The Modern Reader's Bible," twenty-one volumes, 1895–98.

Moultrie, William, an American Revolutionary general, born in South Carolina in 1731; was the recipient of the thanks of Congress for his heroic defense of the fort on Sullivan's Island, Charleston Harbor, since called by his name. In 1785, he became governor of his native State, and died in 1805.

Moxom, Philip Stafford, clergyman; born in Canada, 1848; ordained to ministry, 1871. Pastor of First Baptist Church, Cleveland, O., 1879–85; First Baptist Church, Boston, 1885–93; South Congregational Church, Springfield, Mass., 1894–1917. Author: "The Aim of Life," "From Jerusalem to Nicæa: The Church in the First Three Centuries," "The Religion of Hope," also numerous articles in periodicals.

Mozart, Johann Chrysostom Wolfgang Amadeus, German composer, was born in Salzburg in 1756; composed some pieces at the age of five, when he was taken to Munich, and performed with his sister before the elector of Bavaria. In 1763, the children went on a tour to all the principal German towns, as well as Brussels and Paris, and in April, 1764, gave concerts in London. On his return to Salzburg in 1769, Mozart became director of the archbishop's concerts, and soon after made a tour in Italy, after his return from which, in 1781, he settled in Vienna. Here, in his 25th year, he wrote "Idomeneo," on the occasion of the first rejection of his suit to Constance Weber, whom he married in 1782. "L'Enlèvement du Serail" was composed in 1782, "Nozze di Figaro" in 1786, "Don Giovanni" in 1787, "Die Zauberflöte" and "La Clemenza di Tito" in 1791, and the "Requiem" on his death-bed, in addition to which he produced many masses, symphonies, concertos, etc. Died, 1791.

Muir, John, geologist, naturalist, born in Scotland, 1838; educated in Scotland and at University of Wisconsin. Discovered Muir glacier, Alaska; visited the Arctic regions on the United States steamer Corwin in search of the DeLong expedition; devoted many years to cause of forest preservation. Member of many learned societies. Traveled in Asia, Australasia, South America and Africa. Author: "The Mountains of California," "Our National Parks," "Stickeen, the Story of a Dog," "My First Summer in the Sierra," and many scientific articles. Died, 1914.

Müller, Friedrich Max, philologist; born in Dessau in 1823; son of a German poet, Wilhelm Müller; educated at Leipzig; studied at Paris, and came to England in 1846; was appointed Taylorian professor at Oxford in 1854, and in 1868, professor of comparative philology there, a science to which he has made large contributions; besides editing the "Rig-Veda," he published "Lectures on the Science of Language," and "Chips from a German Workshop," dealing therein not merely with the origin of languages, but that of the early religious and social systems of the East. Died in 1900.

Munsey, Frank Andrew, publisher; born in Mercer, Me., August 21, 1854; educated in public schools in Maine; unmarried; started business career in country store; became manager Western Union Telegraph office, Augusta, Me.; went to New York, 1882, and started "The Golden Argosy," juvenile weekly (now the adult monthly, "The Argosy"); in February, 1889, launched "Munsey's Weekly," converted October, 1891, into "Munsey's Magazine"; now also owns "The All-Story Magazine," the "Washington Times," the "Boston Journal," and several other publications. Author: "Afloat in a Great City," "The Boy Broker," "A Tragedy of Errors," "Under Fire," "Derringforth."

Münsterberg, Hugo, professor of psychology, Harvard, 1892–1916; born in Danzig, Germany, June 1, 1863; graduated from Danzig Gymnasium, 1882; post-graduate studies in philosophy, natural sciences, and medicine in Leipzig and Heidelberg, 1882–87 (Ph. D., Leipzig, 1885; M. D., Heidelberg, 1887; LL. D., Washington University, 1904); instructor University of Freiburg, Germany, 1887; assistant professor same, 1891. Author: "Psychology and Life," "Grundzuege der Psychologie," also other works in German, "American Traits," "The Americans," "Principles of Art Education," "Eternal Life," "Peace and America." Died, 1916.

Murfree, Mary Noailles ("Charles Egbert Craddock"), author; born in Murfreesboro, Tenn., January 24, 1850; for years concealed her identity and sex under her pen-name. Author: "In the Tennessee Mountains," "Where the Battle was Fought," "Down the Ravine," "The Prophet of the Great Smoky Mountain," "In the Clouds," "The Story of Keedon Bluffs," "The Despot of Broomsedge Cove," "In the 'Stranger-People's' Country," "His Vanished Star," "The Phantoms of the Footbridge," "The Mystery of Witchface Mountain," "The Juggler," "The Young Mountaineers," "The Story of Old Fort Loudon," "The Bushwhackers and Other Stories," "The Champion," "A Spectre of Power," "Storm Centre," "The Frontiersman."

Murillo, Bartolomé Estéban, born in 1617; Spanish painter, pupil of Juan del Castillo; after living in great poverty, made the acquaintance of Velasquez, who introduced him to the Escorial. He made a reputation by his pictures in the "Claustro Chico" of the Seville Franciscan Convent, and afterwards painted Madonnas and holy familes, his "chef-d'œuvre" being "The Immaculate Conception," now in the Louvre. Murillo died (1682) from the effects of a fall from scaffolding when engaged on a picture of "The Espousals of St. Catherine."

Murray, James Stuart, Earl of, regent of Scotland; born in 1533; was a natural son of King James V. During the early part of the reign of his half-sister, Mary, Queen of Scots, he became her chief minister, and after her deposition was appointed to the regency. Assassinated, January, 1570.

Nansen, Fridtjof, born near Christiania, Norway, 1861; made his first Arctic exploration in 1882, followed by a second in 1888–89, when he crossed Greenland; from 1893 to 1896, was engaged in his famous expedition in the "Fram," when he penetrated farther north than any of his predecessors. Was professor of zoölogy at Christiania University; took an active part, 1905, in effecting separation of Norway from Sweden, and was Norwegian ambassador to England, 1906–08.

Napoleon I. was born in 1769, in Ajaccio, being the second son of Charles Bonaparte, a Corsican advocate. He was educated at Brienne, entered the French Army in 1785, and first became notable for his conduct at the siege of Toulon in 1793, when he commanded the artillery. Two years later he led the troops of the Convention against the Sections, and in 1796, soon after his first marriage, received the command of the army of Italy. After his great successes in this war, he in May, 1798, set out for Egypt, where he defeated the Mamelukes and invaded Syria, but was checked at Acre. Having left Egypt secretly, he reached France in October, 1799, overthrew the Directory, and became first consul. He again invaded Italy, and made peace with Austria and England in 1801 and 1802, reconstructing the German Empire in the interests of France, while he also concluded a concordat with the pope, and remodeled the French con-

situation and legal system. War broke out again with England in 1803, and Austria in 1805. He crushed the latter at Ulm and Austerlitz but failed in his designs on the former. Next year Prussia was conquered at Jena and Auerstädt, and in 1807, after an indecisive campaign, the Peace of Tilsit was made with Russia. The continental system was now organized against England, and the crown of Spain given to Joseph Bonaparte. The second great attempt of Austria ended with the defeat at Wagram (1809), after which Napoleon divorced Josephine Beauharnais and married Maria Louisa, daughter of the emperor. Meanwhile, however, in the Iberian Peninsula the French arms had been held in check, and a breach with Russia occurred in 1812, the results of which were the invasion of that country, the disastrous retreat of the Grand Army and the rising of Germany. After the battle of Leipzig, France was invaded from east and south, and on April 11, 1814, Napoleon abdicated and was banished to Elba. Next year he escaped, held France at his feet, but after a hundred days met the final defeat at Waterloo, June 18, 1815. He passed the rest of his life in exile at St. Helena, where he dictated his "Memoirs." Died, 1821.

Napoleon III., born in 1808; the third son of Louis Bonaparte, King of Holland, and Hortense de Beauharnais, became head of the house after the death of his elder brothers and of the King of Rome, and in 1836 made a first attempt to assert his claims, the result of which was exile to the United States. In 1840, he made another attempt, for which he was imprisoned in the castle of Ham, whence he escaped to England in May 1846. He was elected to the Assembly in 1848, and soon after became president of the republic. After the coup d'état of December, 1851, his term of office was prolonged to ten years, and less than a year later a plebiscite was held, and Louis Napoleon became Emperor of the French. He joined England in the Crimean War, and in 1859 (the year after his life was attempted by Orsini), helped Sardinia against the Austrians, and also took part in the operations against China (1858–60) and Mehemet Ali (1860–61), but he failed in Mexico in 1861, and his government becoming increasingly unpopular in France, he sought a remedy in the quarrel with Prussia. The result was his defeat and capture at Sedan (September 1–2, 1870), after which he was deposed, and on his release lived in England till his death. Napoleon III. was the author of several works, the chief of which are "La Vie de Jesus," and "Des Idées Napoléonnennes." Died, 1873.

Neander, Johann August Wilhelm, born in 1789 (David Mendel), German theologian of Jewish parentage, professor of the logic at Berlin. Many of his works have been translated, the most of them being "History of the Christian Religion and Church," "Life of Jesus Christ," and "The Emperor Julian and his Age." Died, 1850.

Nebuchadnezzar succeeded his father, Nabopolassar as King of Babylon, and after taking Jerusalem in 606 B. C., carried off to Babylon numerous captives, among them the prophet Daniel who tells much about him in the book of Daniel. He afterwards conquered Tyre and Egypt. Died, 562 B. C.

Necho, one of the Pharaoh Dynasty of Egyptian kings, succeeded his father, Psammetichus, in 610 B. C., defeated Josiah, King of Judah, and was himself defeated by Nebuchadnezzar, King of Babylon, in 605.

Needham, Charles Willis, economist; born in Castile, N. Y., September 30, 1848; graduate of Albany Law School, 1869 (LL. D., University of Rochester, Georgetown College, Kentucky); practiced law in Chicago, 1874–90, Washington 1890–97; assisted in organizing Chicago University and was one of board of trustees, elected professor of law, 1897, resigned and elected dean, school of comparative jurisprudence and diplomacy, 1898, president, 1902–10. The George Washington University, formerly Columbian. Lecturer upon legal ethics, constitutional law, trusts and trades unions. Member American Economic Association and many other learned and educational societies. Delegate to Congrès International de Droit Comparé, 1900; delegate to Congrès International des Chemins de Fer; delegate Comité International D'Assistance Publique et de Bienfaisance Privée, Paris; speaker upon jurisprudence, congress of arts and sciences, St. Louis Exposition, 1904. Author of several pamphlets on education, law, and jurisprudence; contributor to periodicals.

Neilson, Adelaide, an English actress; born in Leeds, Yorkshire, England, March 3, 1848. Her real name was Elizabeth Ann Brown, though she was sometimes called Lizzie Bland (Bland being the name of her step-father). She made her début as Juliet when only 17 years old. She appeared as Amy Robsart in 1870 in London, with immense success, and by 1878 stood at the head of her profession. In 1872, she came to the United States, playing in Booth's theater, New York, and in Boston, where she was equally successful. She made four visits to the United States, her last one being in 1880. She died in Paris, France, August 15, 1880.

Nelson, Horatio, Viscount, born in 1758; English admiral, son of a Norfolk clergyman; entered the navy in 1770, served in the American War, and under Lord Hood in the war with revolutionary France, becoming commodore in 1796, and rear-admiral after the battle of Cape St. Vincent, 1797. In the following year he won the battle of the Nile, for which he was made baron, and in 1801, brilliantly disobeyed Sir Hyde Parker, by attacking Copenhagen. After this he commanded in the Mediterranean, and in October 21, 1805, saved England from invasion by his defeat of the combined French and Spanish fleets at Trafalgar, but fell in the action.

Nepos, Cornelius, a Roman historian who flourished during the time of Julius Cæsar and the first six years of the reign of Augustus. He enjoyed the friendship of Cicero, and his only extant work "Vitæ Excellentium Imperatorum," is held in high esteem as an educational classic.

Nero, Lucius Domitius, born in 37; Emperor of Rome, grandson of Germanicus; was adopted by Claudius in the year 50, and succeeded him in 54. He caused his mother, Agrippina, to be murdered for opposing his divorce from Octavia and marriage with Poppæa Sabina, this being accomplished by the murder of the former. He persecuted the Christians, whom he charged with the burning of Rome in 64, and married Messalina after the death of his second wife. The conspiracy of Piso was discovered, but on the success of that of Galba, Nero put an end to his life.

Nerva, Marcus Coccelus, a Roman Emperor, born in Umbria, A. D. 32; after being twice consul, was proclaimed emperor on the death of Domitian, 96. He ruled with goodness and justice, and, after adopting Trajan as his son and successor, died, 98.

Newcomb, Simon, astronomer; born in Wallace, N. S., March 12, 1835; came to United States, 1853; graduate of Lawrence Scientific School, Harvard, B. S., 1858. Appointed, 1861, professor of mathematics, United States Navy; assigned to duty at United States Naval Observatory; professor in mathematics and astronomy, Johns Hopkins, 1884–94, and editor "American Journal Mathematics." In 1874 made correspondent, and in 1893, one of the eight foreign associates, Institute of France; made officer of Legion of Honor of France, 1895. Author: "Secular Variations and Mutual Relations of the Orbits of the Asteroids," "Investigation of the Orbit of Neptune," "Researches on the Motion of the Moon," "Popular Astronomy," "Calculus," "A Plain Man's Talk on the Labor Question," "Principles of Political Economy," "Elements of Astronomy," "His Wisdom the Defender," "The Stars," "Astronomy for Everybody," "Reminiscences of an Astronomer," also various other books on astronomy and economic topics, magazine articles, etc. Died, 1909.

Newman, John Henry, Cardinal, born in 1801; theologian, son of a London banker; graduated from Trinity College, Oxford, in 1820, and was elected Fellow of Oriel. He took orders in 1824, in 1825 became vice-principal of St. Alban's Hall, and in 1828, became vicar of St. Mary's. He took a leading part in the Tractarian movement, and in 1841, wrote "Tract XC.," which was severely condemned. After living in Littlemore for some years in seclusion, he was received into the Roman Church, in 1845; founded the Brompton oratory in 1850, and directed the Edgbaston oratory for the greater part of his remaining years. He took part in controversies with Kingsley in 1864, and with Gladstone in 1874, and accepted the Infallibility dogma with some reservations. He was created cardinal in 1879. Chief among his works were "Apologia pro Vitâ Suâ, An Essay in Aid of a Grammar of Assent," and "The Dream of Gerontius." Died, 1890.

Newton, Sir Isaac, the greatest of philosophers, was born, December 25, 1642, at Woolsthorpe, in Lincolnshire, and early displayed a talent for mechanics and drawing. He was educated at Grantham School, and at Trinity College, Cambridge, and studied mathematics with the utmost assiduity. In 1667, he obtained a fellowship; in 1669, the mathematical professorship; and in 1672, he became a member of the Royal Society. It was during his abode at Cambridge that he made his three great discoveries, fluxions, the nature of light and colors, and the laws of gravitation. To the last of these his attention was first turned by his seeing an apple fall from a tree. The "Principia," which unfolded to the world the theory of the universe, was not published till 1687. In that year also Newton was chosen one of the delegates to defend the privileges of the

university against James II.; and in 1689 and 1701 he was elected one of the members of parliament for the university. He was appointed warden of the mint in 1696; was made master of it in 1699; was chosen president of the Royal Society in 1703; and was knighted in 1705. He died, March 20, 1727. Among his works are: "Arithmetica Universalis," "A New Method of Infinite Series and Fluxions," "Optics," "The Chronology of Ancient Kingdoms," amended; and "Observations on the Prophecies of Daniel" and the "Apocalypse."

Ney, Michel, peer and marshal of France; born in Saarlouis, 1769, son of a cooper; entered the army as a private hussar in 1788; distinguished by his bravery in the wars of the Revolution and the Empire, and earned for himself from the army under Napoleon, and from Napoleon himself, the title, "Brave of the braves"; on Napoleon's abdication in 1814 he attached himself to Louis XVIII., but on Napoleon's return from Elba Ney joined his old master, and stood by him during the hundred days; on the second Restoration he was arrested, tried by his peers, and shot in 1815.

Nicholas II., who on November 1, 1894, succeeded Alexander III. as "Emperor of All the Russias," was born at Petrograd on May 18, 1868, his mother being the Princess Dagmar, a daughter of King Christian IX. of Denmark, and sister to Queen Alexandra, the Duchess of Cumberland, and George V. of Greece. During the famine of 1891, he was, at his own request, made president of the committee of succor, and worked hard in the organization of relief. As Czarevitch he held several military commands in his own country—in the famous Préobrajensky regiment among others—and in England he had conferred upon him, in 1893, the order of the garter. He married the Princess Alix of Hesse-Darmstadt in November, 1894. Four daughters came first, but a son was born on August 12, 1904, and was named Alexis. The coronation of the czar took place with impressive ceremonial at Moscow in May, 1896, and in August of the same year he commenced a tour which included visits to the Emperors of Austria and Germany, to the King of Denmark, to Queen Victoria, and to the President of France. The famous peace proposals which he made to the powers during 1898 led to the first peace conference at The Hague in 1899, the establishment of the Permanent Court of Arbitration there, and indirectly to the second conference in 1907. He was gifted with the linguistic facility of most of his countrymen, and fluently spoke French, German, Italian, and especially English. Following the revolution effected by the Russian Duma, Czar Nicholas abdicated the throne, March 15, 1917. In August, 1917, he was sent to Tobolsk in western Siberia. His death at the hands of the revolutionists was repeatedly announced in 1918.

Nicholas V., "Da Sarzana," born in 1398, was elected pope in 1447 (the abdication of the anti-pope, two years later, bringing to an end the "Great Schism"), and defeated the conspiracy of Porcari in 1452. He was a great scholar, was chief founder of the Vatican library and of several Italian universities, and offered an asylum to the Greeks driven out of Constantinople. Died, 1455.

Niebuhr, Barthold Georg, historian and philologist, was born in Copenhagen in 1776, but in 1806 entered the Prussian service, and became privy councilor. He was several years minister at Rome, and negotiated the concordat of 1821. In 1823 he obtained a chair at Bonn. His "Roman History" appeared in 1827. He wrote a work on the Byzantine historians. Died at Bonn, Prussia, 1831.

Niehaus, Charles Henry, sculptor; born in Cincinnati, January 24, 1855; educated at Cincinnati schools; art education at Royal Academy, Munich, Germany; took degree and won first medal ever given to American, and prizes at different times. Made Garfield statue, Cincinnati; Ingalls, Allen, Garfield, and Morton, in rotunda of Capitol, Washington; statues of Gibbon and Moses, Congressional Library, Hahnemann at Scott Circle, Washington; Astor historical doors, Trinity Church, New York; pediment to appellate court-house, New York; statues of Hooker and Davenport, Conn. State House; statue to Drake, erected by Standard Oil Company, at Titusville, Pa.; two large groups, "Mineral Wealth," Pan-American Exposition, 1901; statues of Lincoln, Farragut, and McKinley, Muskegon, Mich.; Lincoln, Buffalo; Apotheosis of St. Louis for St. Louis Exposition; equestrian, General Forrest, Memphis, Tenn.

Nielsen, Alice, opera singer; born in Nashville, Tenn., 1876; daughter of Erasmus Ivarius and Sarah A. Nielsen; musical education in San Francisco, under Mlle. Ida Valerga; first stage appearance with opera company at Oakland, Cal., 1893, as Yum Yum in "Mikado"; after Tivoli engagement, joined the Bostonians, 1896, and took the rôle of Annabel in "Robin Hood," the following season played leading part of Maid Marion; also principal soprano rôle in "The Serenade." Stellar début at Grand Opera House, Toronto, Canada, September 14, 1898, in "The Fortune Teller."

Nietzsche, Friedrich Wilhelm, noted German philosopher, born at Röcken, near Leipzig, 1844; educated at Schulpforta, and at universities of Bonn and Leipzig; was professor of classical philology at Basel, 1869-80. Among his works are "Morgenröte," "Die Fröhliche Wissenschaft," "Also Sprach Zarathustra," "Jenseits von Gut und Böse." Died near Weimar, 1900.

Nightingale, Florence, was born in Florence in 1820, and, in 1851, entered an institution of sisters of mercy at Kaiserswerth. On November 4, 1854, she arrived with a corps of women at Scutari, and brought the hospital there to a high state of efficiency. She wrote "Notes on Hospitals" and "Notes on Nursing." Died, 1910.

Nilsson, Christine, an operatic singer, born in Sweden, 1843; daughter of a peasant, and one of the foremost sopranos of her day; distinguished for her dramatic talent no less than for her powers as a vocalist. She married the Comte de Miranda, 1887. Died, 1921.

Nimrod, a grandson of Ham, is supposed to have been the founder of Babylon, and also the first king and the first conqueror. In the Scripture he is called "a mighty hunter before the Lord."

Ninus, the supposed founder of the Assyrian monarchy, and builder of the city of Nineveh, flourished about 2000 B. C., and was the husband of the famous Semiramis.

Nixon, Lewis, shipbuilder; born in Leesburg, Va., April 7, 1861; early education in Leesburg; appointed midshipman, United States Navy, 1878; graduate of United States Naval Academy, 1882, at head of class, and sent to Royal Naval College, Greenwich, England, by navy department; transferred to construction corps of navy, 1884; in 1890, designed battle-ships "Oregon," "Indiana," and "Massachusetts," and then resigned from navy to become superintending constructor of Cramp shipyard, Philadelphia; resigned, 1895, and started Crescent shipyard, Elizabeth, N. J., where he built 100 vessels in six years, among them the submarine torpedo-boat "Holland," monitor "Florida," torpedo-boat "O'Brien," and cruiser "Chattanooga."

Noah, son of Lamech, an eminent patriarch and the hero of the Deluge. According to the account in Genesis, he was the ninth in descent after Adam, and the father of Ham, Shem, and Japhet, formerly regarded as the founders of the three families of the human race.

Nobel, Alfred Bernhard, noted Swedish chemist, inventor, and manufacturer, was born at Stockholm in 1833. In 1862 his father began to manufacture nitroglycerin. Five years later, through the accidental escape of some of the liquid nitroglycerin into the siliceous sand used in packing, Alfred Nobel discovered how to make dynamite, a far safer and more manageable explosive. Following this he invented several kinds of smokeless powder, and also blasting-gelatin. He patented more than 100 inventions and established works for their manufacture in various parts of the world. By the terms of his will a fund of $9,200,000 was provided for the establishment of five annual prizes of about $40,000 each to be awarded to persons throughout the world making the most valuable discoveries in physics, chemistry, and medicine, writing the best literature, and contributing most to the cause of humanity and peace. He died in 1896.

Nordica, Lillian (Mrs. G. W. Young), prima donna; born (Lillian Norton) in Farmington, Me., in 1859; musical education in New England Conservatory, by John O'Neill, and with San Giovanni, Milan, Italy; married, first, to Mr. Gower; second, to Herr Döme; third, to G. W. Young. Operatic début, Brescia, Italy, in "La Traviata"; appeared in London, 1887, and in Paris, Petrograd, and other European capitals. Repertoire embraces forty operas and all the standard oratorios; best known in Wagnerian parts. Died, 1914.

North, Frederick, Earl of Guilford, commonly known as Lord North; statesman; born in 1732, of the same family as first earl; became chancellor of the exchequer in 1767, and from 1770 to 1782 was prime minister, after which he formed a coalition with Fox, and was joint secretary with him for a few months. He was the favorite minister of George III. Died, 1792.

North, Simon Newton Dexter, journalist, statistician; born in Clinton, N. Y., November 29, 1849; graduate of Hamilton College, 1869. Managing editor "Utica Morning Herald," 1869-86; president of New York State Associated Press, 1885-86; editor and joint proprietor of "Albany Express," 1886-88. Secretary of National Association of Wool Manufacturers, 1888-1903. Appointed member of United States Industrial Commission by President McKinley, 1898; resigned, 1899, to accept position of chief statistician for manufactures, twelfth census; appointed, April, 1903, di-

rector United States census; resigned, 1909. Author: "An American Textile Glossary," "A History of the American Wool Manufacture," "Old Greek, an Old Time Professor in an Old-Fashioned College"; also numerous pamphlets and lectures on economical, industrial, and educational subjects.

Northcliffe, Alfred Harmsworth, Baron, British publisher and statesman, was born in Chapelizod, Ireland, 1865. He founded in 1888 a weekly periodical "Answers," which met with great success. In 1894 he purchased the London "News," and subsequently founded or bought several influential British newspapers, and established "Harmsworth's Magazine." He was made baron in 1905. Upon the outbreak of the great war he conducted vigorous editorial campaigns in behalf of preparedness. In 1917 Lord Northcliffe came to the United States as a special representative of the British government in aid of various war commissions.

Norton, Charles Eliot, professor of history of art, Harvard, 1874–98; professor emeritus, 1898–1908; born in Cambridge, Mass., November 16, 1827; graduate of Harvard, 1846 (Litt. D., Cambridge, England, 1884; L. H. D., Columbia, 1885; LL. D., Harvard, 1887, Yale, 1901; hon. D. C. L., Oxford University, England, 1900). Entered commercial office in Boston, 1846; went as supercargo on East Indian voyage, 1849; later made several trips to Europe. Known as a Dante scholar and an authority on art. Author: "Considerations on Some Recent Social Theories," "Historical Studies of Church Building in the Middle Ages," "Notes of Travel and Study in Italy." Editor: "North American Review," 1862–68. Translator of Dante's "Vita Nuova" and "Divina Commedia." Died, 1908.

O'Connell, Daniel, born in Kerry in 1775; educated at St. Omer and Douay, and was called to the bar in 1798. His agitation for removing the political disabilities of the Roman Catholics culminated in 1828, when he was elected for Clare, but not allowed to take his seat. Amidst great excitement the Catholic Emancipation Bill was passed in 1829. He first demanded the repeal of the Union in 1841. After holding several monster meetings in Ireland, he was arrested, fined, and imprisoned, but this judgment was reversed by the House of Lords. O'Connell was opposed to the use of physical force, and discountenanced the Chartists and the "Young Ireland" party. He died in Genoa in 1847.

Odoacer, a Herule or Rugian chieftain, after attacking and slaying the patrician Orestes, and deposing his son, the Emperor Romulus Augustulus (476), ruled Italy as patrician under the Eastern Emperor Zeno, but was practically an independent sovereign. He was overthrown by Theodoric, King of the Ostrogoths, who put him to death in 493.

Oglethorpe, James Edward, born in 1696; English general, served under Marlborough and Eugene, in 1733, founded the colony of Georgia, which he named after George II.; returned to England in 1743, and held a command against the Jacobites (1745). Died, 1785.

Ohm, Georg Simon, born in 1787; German physicist; discovered "Ohm's law" of electricity, by which the intensity of a current is stated in terms of the electromotive force and the resistance of the circuit. He died in 1854.

Oku, Yasukata, Count, was born in 1846, and has seen about forty years' service with the Japanese army. In 1877, when he had attained the rank of major, he greatly distinguished himself at the siege of Kumamoto Castle by the Satsuma insurgents, cutting his way out and opening communication with the relieving army. When the war broke out with China in 1894, he was given the command of a division in the Manchurian campaign, and received his title of nobility in recognition of his great services. His knowledge of the ground, and his capacity, marked him out for service in the war with Russia, and he commanded the second army, which landed on the east coast of the Liao-tung Peninsula in May, 1904, won the brilliant victory at Kinchau, and did splendid service in the subsequent fighting in Manchuria. Count, 1907.

Olaf, St., a Norwegian king; wrested the throne from Eric, and set himself to propagate Christianity by fire and sword; excited disaffection among his people, who rebelled and overpowered him with the assistance of Cnut of Denmark, so that he fled to his brother-in-law, Jaroslav of Russia; by his help he tried to recover the throne, but was defeated and slain, his body being buried in Trondhjem; he was canonized in 1164, and is patron saint of Norway.

Olcott, "Chauncey" (Chancellor John Olcott), singer and actor; born in Buffalo, July 21, 1860; educated in Buffalo common schools; brought out as singer by R. M. Hooley, 1880. With Hooley's company two years, then consecutively with Haverly's company, Carncross Minstrels, Denman Thompson, Duff's Opera Company for several seasons; sang two years in England in comic opera, then succeeded W. J. Scanlan as star in Irish musical dramas; has since appeared in various leading rôles in United States and England.

Olney, Richard, United States attorney-general, United States secretary of state; was born in Oxford, Mass., September 15, 1835; graduate of Brown, 1856; Harvard Law School, 1858 (LL. D., Harvard, Brown, Yale). Admitted to bar, 1859; practiced law in Boston (serving in Massachusetts legislature, 1874) till appointed United States attorney-general by President Cleveland, serving from March 6, 1893, to June 9, 1895, and from June 10, 1895, until March 4, 1897, as secretary of state. Died, 1917.

Omar Khayyam (*ō'mur ky-ya'm*), astronomer-poet of Persia, born in Nishapur, in Khorassan; lived in the latter half of the eleventh century, and died in the first quarter of the twelfth. He wrote a collection of poems which breathe an Epicurean spirit, and while they occupy themselves with serious problems of life, do so with careless sportiveness, intent on the enjoyment of the sensuous pleasures of life, like an easy-going Epicurean. The great problems of destiny do not trouble the author, they are no concern of his, and the burden of his songs assuredly is, as his translator says, "If not, 'let us eat, let us drink, for to-morrow we die.'"

Oppenheim, Nathan, physician, medical author; born in Albany, N. Y., October 17, 1865; graduate of Harvard, 1888; College of Physicians and Surgeons (Columbia), 1891. Became attending physician, children's department, New York Red Cross Hospital, and New York City Children's Hospital; specialist in diseases of children. Author: "The Development of the Child," "The Medical Diseases of Childhood," "The Care of the Child in Health," "Mental Growth and Control;" also various scientific essays. Died, 1916.

Orange, Princes of. (1) William I., "the Silent," born in 1533, son of William, Count of Nassau; inherited large domains in Brabant, Flanders, and Holland; was sent as a boy to the court of Charles V.; enjoyed the confidence of that emperor, but was distrusted by his son, Philip II. On learning the designs of Philip and Henri II. of France against the Protestants (1559), he determined to espouse their cause. When the Duke of Alva arrived in the Low Countries (1567), he put himself at the head of the insurgents, and, after a protracted struggle, founded the republic of the Netherlands (1579) of which he was elected the first stadtholder. He was assassinated at Delft in 1584. (2) Maurice of Nassau, born in 1567, second son of the preceding; was one of the most skillful strategists of the age. Was appointed stadtholder of Holland in 1587, and soon afterwards of Utrecht, Overyssel, and Gueldres. The war with Spain was continued till 1609, after which the Dutch were able to maintain their independence. In 1619, Barneveldt, who accused Maurice of ambitious projects, was put to death. Maurice succeeded his elder brother as Prince of Orange (1618). Died, 1625.

Orlando, Vittorio Emanuele, Italian statesman, was born in 1860. He came into especial prominence during the period of Italy's participation in the great world war. He was minister of justice in the Salandra cabinet and minister of the interior in the Boselli cabinet. Upon the resignation of Boselli, ensuing upon the great disaster to the Italian arms at the battle of Caporetto, Orlando was made premier, October 31, 1917. Under his leadership the Italian government prepared for successful resistance to the powerful Austrian attack of June, 1918, and for the victorious offensive campaign, October 24—November 4, which shattered the military power of Austria and greatly hastened the triumph of the allied cause. In January, 1919, Premier Orlando headed the Italian delegation to the peace conference at Versailles.

Oscar II., king of Sweden and Norway, grandson of Bernadotte, was born in 1829. He succeeded his brother, Charles XV., in 1872 and reigned twenty-seven years, until his death in 1907. King Oscar distinguished himself in literature by translating Goethe's "Torquato Tasso" into Swedish, and by a volume of minor poems under his nom de plume "Oscar Frederick." The separation of Norway into a distinct kingdom occurred in 1905, and, although he opposed the disunion, his good judgment and patience contributed greatly to the peaceful dissolution which took place.

Osler, Sir William, physician, educator, author; born in Bondhead, Ont., 1849; graduate of McGill, Montreal, 1872 (LL. D., McGill, Toronto, University of Edinburgh, University of Aberdeen, Harvard, Yale; D. Sc., Oxford); professor of institutes of medicine, McGill University, 1874–84; professor of clinical medicine, University of Pennsylvania, 1884–89; professor of

medicine, Johns Hopkins University, 1889-1905; became Regius professor of medicine, Oxford University, England, in 1905. Author: "The Cerebral Palsies of Children," "Chorea and Choreiform Affections," "Lectures on Abdominal Tumors," "Angina Pectoris and Allied States," "The Principles and Practice of Medicine," "Cancer of the Stomach," "Science and Immortality" (Ingersoll lecture, Harvard University), "Æquanimitas, and Other Addresses." Died, 1919.

Ossian (*osh'e-an*), a Celtic bard, supposed to have lived in Scotland or Ireland about fifteen hundred years ago. He was the son of Fingal, King of Morven, a famous hero, and was blind. Ossian's poems are remarkable for their grandeur and wild beauty, and are very different from all other poetry. They have been published in nearly all European languages.

Otto I., "the Great," Emperor of the West, born in 912, son of Henry the Fowler, was chosen King of Germany in 936; in 951 was summoned to aid the Italians against Berengar, and married Adelheid, widow of King Lothair; routed the Hungarians near Augsburg, in 955; in 962, was crowned Emperor at Rome by Pope John XII. He subsequently deposed John, and set up Leo VIII. in his stead. He extended his dominion over nearly the whole of Italy, reëstablished the Western Empire, and made many reforms in church and state. Died, 973.

Owen, Robert, the founder of socialism in England, was born of poor parents in Newtown, Montgomeryshire, 1771. In 1800 he became owner of the New Lanark Cotton Factory, where he proceeded to put in practice his theories of a new system of society. He afterwards made unsuccessful attempts to establish communistic settlements at New Harmony in America (1825), and Harmony Hall in Hampshire (1844). To his efforts may be traced the first factory legislation, the co-operative movement, and the establishment of infant schools. Died, 1858.

Oxenstierna, Axel, Count, born in 1583, Swedish statesman, was made chancellor by Gustavus Adolphus in 1611; succeeded him as leader of the Protestant party in Germany (1632–35); acted as regent throughout the minority of Christina, and became her chief minister when she assumed the government (1644). Died, 1654.

Oyama, Field-Marshal Prince, was born in Kagoshima, in 1842. Entered the Japanese Army, was appointed colonel in 1871, promoted major-general in the same year, lieutenant-general in 1878, general in 1891, and in 1898, was raised to the rank of field-marshal. Having served as military attaché on the Prussian side during the Franco-Prussian War, upon his return to Japan he entered the ministry of war, and assisted in the work of reorganizing the army. In the Satsuma rebellion (1877) he took command of a brigade, and played a conspicuous part in subduing the revolt. Afterwards he was appointed under-secretary, and subsequently minister of war. When war broke out between Japan and China he was minister of war, but he took the field as commander of the second army, and captured Kinchow, Talienwan, Port Arthur, and Wei-hai-wei. In 1904, Oyama was chief of the general staff, and when war broke out with Russia he was appointed commander-in-chief in Manchuria, defeating the Russians at the three great battles of Liao-Yang, the Shaho, and Mukden. He received the order of merit, February 21, 1906, and resigned his post as chief of the general staff in April. His wife was educated in America, and took a degree. He died in 1916.

Paderewski, Ignace Jan, famous pianist and composer, was born on November 6, 1860, in Podolia, a province of Russian Poland. He began to play the piano at the age of 3, and, when 7 years old, was placed under Pierre Lowinski, a local tutor. In 1872, he went to Warsaw, learning harmony and counterpoint from Roguski, and subsequently from Frederick Kiel. He toured through Russia, Siberia, and Rumania, playing only his own compositions. In 1878, he became professor of music in Warsaw Conservatoire, and for a while, in 1884, he was a professor at Strasburg Conservatoire, but then definitely decided to try his fortune as a virtuoso. After three years' study with Leschetizky, in Vienna, he made his *début* in 1887 with instant success and soon rose to first rank among living pianists. In 1919 he became premier of Poland.

Page, Thomas Nelson, author; born on Oakland Plantation, Hanover County, Va., April 23, 1853; educated at Washington and Lee (Litt. D.); graduate of law department of University of Virginia; Litt. D., Yale; practiced law in Richmond, Va., 1875–93; lecturer. Appointed ambassador to Italy, 1913. Author: "In Ole Virginia," "Two Little Confederates," "On Newfound River," "The Old South," "Among the Camps," "Elsket and Other Stories," "Befo' de War" (with Armistead C. Gordon), "Pastime Stories," "The Burial of the Guns," "Unc' Edinburg, Meh Lady," "Mars Chan," "Polly," "Social Life in Old Virginia," "The Old Gentleman of the Black Stock," "Two Prisoners," "Red Rock," "Santa Claus's Partner," "A Captured Santa Claus," "Gordon Keith," "The Negro — The Southerner's Problem," etc.

Paine, John Knowles, professor of music, Harvard, 1876–1906; born in Portland, Me., January 9, 1839; studied music under Hermann Kotzschmar there; made first appearance as organist, 1857; studied in Germany under Haupt and others, 1858–61; made artistic tour there, 1866–67; instructor of music, Harvard, in 1862 (A. M., Mus. D.). Composer of music to "Œdipus Tyrannus" of Sophocles as performed in Greek at Cambridge, 1881; spring symphony; symphony in C minor; symphonic poems; Shakespere's "Tempest"; "Island Fantasy," overture to "As You Like It"; cantatas, Nativity and Song of Promise, choruses to "Birds" of Aristophanes; etc.; opera of Azara; "Centennial Hymn" to Whittier's words, sung at opening of Philadelphia Exposition, 1876; Columbus march and hymn for World's Columbian Exposition, 1893; Hymn of the West, words by Stedman, sung at the opening of the St. Louis Exposition, 1904; also mass, oratorio of St. Peter; cantatas, Realm of Fancy and Phoebus Arise, etc. Died, 1906.

Paine, Thomas, a political writer; born in England, 1737. In 1774 came to the United States, became editor of the "Pennsylvania Magazine"; issued his pamphlet, "Common Sense," in which he advocated the independence of the colonies. He went to Paris in 1787, and in 1791–92 published in England his "Rights of Man"; in 1792, elected a member of the French National Assembly, acting with the Girondists, and narrowly escaped the guillotine. While he was in France, appeared his deistical work, "The Age of Reason." Returned to the United States in 1802. Died in New York, 1809.

Paley, William, born in 1743, English theologian, professor of divinity at Cambridge, and archdeacon of Carlisle; wrote "Horæ Paulinæ," "Natural Theology," "Evidences of Christianity," etc. Died, 1805.

Palissy, Bernard (*pah-le-se'*), a famous French potter, chemist and enameler, was born near Agen, about 1510. The pottery made by Palissy, known as the Palissy ware, is much prized, and is distinguished for the high relief of figures and ornaments. Died, 1589.

Palma, Tomas, Estrada, Cuban patriot; born in Bayamo, Cuba; studied law at University of Seville, but never practiced. Took part in the Cuban revolution of 1868–78, in the early part of which his mother had been captured and starved to death by the Spaniards. Her death made him heir to a vast estate, which the Spaniards confiscated. He became President of Cuban Republic, but was captured, 1877, and imprisoned until hostilities ceased, 1878; then went to Honduras; became teacher and later postmaster-general; married a daughter of President Guardiola. Came to the U. S.; settled in Central Valley, N. Y. During last revolution delegate-at-large and minister plenipotentiary for Cuban Republic. President of Cuba, 1902–06. Died, 1908.

Palmer, George Herbert, Alford professor of natural religion, moral philosophy, and civil polity, 1889–1913, emeritus prof. since 1913, Harvard; born in Boston, March 19, 1842; graduate of Harvard, 1864; studied at University of Tübingen, 1867–69; Andover Theological Seminary, 1870 (LL. D., University of Michigan, 1894, Union, 1895; Litt. D., Western Reserve, 1897); tutor of Greek, 1870–73, assistant professor, 1873–83, professor philosophy, 1883–89, Harvard. Author: "The Odyssey," (English translation in rythmic prose); "The New Education," "The Glory of the Imperfect," "Self Cultivation in English," "The Antigone of Sophocles" (translation), "The Field of Ethics," "The Nature of Goodness."

Papin, Denis, born in Blois, in France, 1647; a celebrated mathematician and physicist; from 1687 to 1696 professor of mathematics in the University of Marburg. He was one of the early inventors of the steam engine, and made many other discoveries in physical science. A statue to his memory was erected at Blois in 1880. Died, at Marburg, in Hesse-Cassel, 1712.

Park, Roswell, physician, born in Pomfret, Conn., May 4, 1852; A. B., Racine College, 1872; M. D., medical department Northwestern University, 1876 (honorary M. D., Lake Forest University; LL. D., Yale, 1902); demonstrator in anatomy, Woman's Medical College, Chicago, 1877–79; adjunct professor of anatomy, Northwestern University, 1879–82; lecturer on surgery, Rush Medical College, Chicago, 1882; professor of surgery, medical department, University of Buffalo, and surgeon to Buffalo General Hospital, 1883–1914. Attended President McKinley after he was shot, 1901. Author "Lectures on Surgical Pathology," "History of Medicine," "Textbook of Surgery" (two volumes). Died, 1914.

Parker, Alton Brooks, jurist, lawyer; born in Cortland, N. Y., May 14, 1852; educated at public schools, Cortland Academy, Cortland Normal School; graduate of Albany Law School (LL. D., Union); admitted to bar; practiced in Kingston; surrogate Ulster County, 1877–85; delegate to Democratic National Convention, 1884; chairman of Democratic State Committee, 1885; appointed justice of Supreme Court, N. Y., 1885, elected, 1886; member Court of Appeals, 2d division, 1889–92; member of general term, 1893–96, of appellate division, 1896–97; chief justice Court of Appeals, N. Y., 1898–1904, resigning to accept the Democratic nomination for the presidency, 1904; defeated for election by Theodore Roosevelt. President of American Bar Association, 1906–07; chief prosecuting counsel at the impeachment trial of Gov. Sulzer, 1913.

Parker, Theodore, born in 1810, American minister, son of a farmer at Lexington, Mass.; ejected by the Unitarians for his writings, became leader of a society of free-thinkers; was also an active abolitionist. A collected edition of his works appeared in 1863. Died, 1860.

Parkhurst, Charles Henry, Presbyterian clergyman; born in Framingham, Mass., April 17, 1842; graduated from Amherst, 1866 (D. D., LL. D.); studied theology at Halle, 1869–70; Leipzig, 1872–73; taught in Williston Seminary, Easthampton, Mass., 1870–71; pastor Congregational Church, Lenox, Mass., 1874–80; since 1880 pastor Madison Square Presbyterian Church, New York. Became president, 1891, Society for Prevention of Crime, and his assertion of partnership of police with criminals led to an investigation of the New York police by the New York Legislature. Author: "Forms of the Latin Verb Illustrated by the Sanskrit," "The Blind Man's Creed," "The Pattern on the Mount," "Three Gates on a Side," "What Would the World Be Without Religion?" "The Swiss Guide," "Our Fight with Tammany," "The Sunny Side of Christianity."

Parkman, Francis, American historical writer; born in Boston in 1823; lived some time among the Indians of the Rocky Mountains, and wrote "The Conspiracy of Pontiac," "The Old Régime in Canada," "Count Frontenac and New France under Louis XIV.," "Montcalm and Wolfe," "A Half-Century of Conflict," etc. Died in 1893.

Parnell, Charles Stewart, Irish politician; was born in 1846, in Avondale, County Wicklow, and educated at Cambridge. He entered public life as member for Meath in 1875, and two years later became conspicuous by the "obstruction" with which he met the prisons bill. He gradually ousted Mr. Butt from the leadership of the home rule party, and, in 1880, became leader of the Irish party and entered upon the land agitation. At the general election he was elected for three constituencies, but chose Cork, and as the head of the Land League was prosecuted in 1880, by the Gladstone government, the result being a disagreement of the jury. In the following session he, with the majority of his followers, was removed by the sergeant-at-arms for obstruction, and in October was imprisoned in Kilmainham under the coercion bill. He was released in April, 1882, but the "no rent" manifesto had meanwhile been issued, and in 1883, the National League took the place of the suppressed Land League. At the general election of 1885, he nominated every home rule candidate, and subsequently entered into an alliance with the followers of Mr. Gladstone. In the next parliament he proposed a bill to suspend evictions and reduce rent, after the rejection of which the agitation continued. In 1888, a special commission was appointed to examine the charges made against Mr. Parnell and others by the "Times," the result being his acquittal on the greatest, but condemnation on many others. In consequence of the result of the O'Shea divorce case in 1890, he was deposed by the majority of his party, but continued to lead the minority and to carry on an active campaign until his death in 1891.

Parsons, Frank, lawyer, educator, author; born in Mt. Holly, N. J., November 14, 1854; graduated in mathematics and engineering course, Cornell, 1873; admitted to Boston bar; law clerk for a time; then opened offices of his own; text writer for Little, Brown & Company, publishers; public lecturer on economics and sociology; professor of history and political science, Kansas Agricultural College, 1897–1900; lecturer on law, Boston University, 1892–1908. Author: "The World's Best Books," "Our Country's Need," "The Drift of Our Time," "Rational Money," "The New Political Economy," "The Power of the Ideal," "The City for the People," "Direct Legislation," "The Bondage of Cities," "The Story of New Zealand." Died, 1908.

Parton, James, American writer; born in Canterbury in 1822, but was brought to America when a child, and wrote many works, the chief of which were "Life of Horace Greeley," "General Butler in New Orleans," "Life and Times of Benjamin Franklin," and "Life of Jefferson." Died in 1891.

Partridge, William Ordway, sculptor, author; born in Paris, France, April 11, 1861; student Columbia College; art education in Rome, Florence, and Paris; works include statue of Shakespere, Lincoln Park, Chicago; bronze statue, Alexander Hamilton, Brooklyn; Kauffmann Memorial, Washington; bust of Edward E. Hale, Union League Club, Chicago; Whittier, Boston Public Library; equestrian statue General Grant for Union League Club, Brooklyn; Schermerhorn Memorial, Columbia University; baptismal font St. Peter and St. Paul Cathedral, Washington; group Christ and St. John, Brooklyn Museum Fine Arts, etc. Author: "Art for America," "The Song Life of a Sculptor," "The Technique of Sculpture," "The Angel of Clay" (novel) "Nathan Hale, the Ideal Patriot."

Pasteur (*pàs-tör'*), **Louis,** an eminent French chemist, was born in Dôle, in department of Jura in 1822. Pasteur was celebrated for his studies and discoveries in fermentation, and also for his researches in hydrophobia, and his suggestion of inoculation as a cure. The Pasteur Institute in Paris was the scene of his researches from 1886. Died, 1895.

Patmore, Coventry, English poet; born in Essex, 1823; best known as the author of "The Angel in the House," a poem in praise of domestic bliss, succeeded by others, superior in some respects, of which "The Unknown Eros" is by many much admired. Died, 1896.

Patti, Adelina, famous high soprano, ranking among the greatest operatic prima donnas of the nineteenth century. She was born at Madrid, Spain, in 1843, of Italian parentage. When about 10 years of age, she appeared in a series of concerts with Ole Bull and Maurice Strakosch. She was first heard in opera in New York in 1859, but her real début was made in London in 1861, after which she was acclaimed one of the foremost artists of her time. She sang with great success throughout the world, accumulating a large fortune. Patti was married three times, — to the Marquis de Caux, 1868, to Ernest Niccolini, 1886, and to Baron Cederström, 1899. Died, 1919.

Pattison, Mark, born in 1813; scholar and divine; became Fellow of Lincoln College, Oxford, in 1839, and rector in 1861. He was at first a follower of Newman, but afterwards contributed to "Essays and Reviews," and became an active university reformer. His chief works were "Life of Casaubon," "Milton" in the Men of Letters series, and an edition of Pope's works. Died, 1884.

Patton, Francis Landey, educator, theologian; born in Warwick Parish, Bermuda, January 22, 1843; educated at Knox College, Toronto, University of Toronto; graduated from Princeton Theological Seminary, 1865 (LL. D., Wooster University, 1878, Harvard, 1889, Toronto, 1894, Yale, 1901, Johns Hopkins, 1902); ordained to Presbyterian ministry June 1, 1865; pastor 84th Street Presbyterian Church, New York, 1865–67; Presbyterian Church, Nyack, 1867–70; South Church, Brooklyn, 1871. Cyrus H. McCormick Professor Theological Seminary of the Northwest (now McCormick Seminary), Chicago, 1872–81; also, 1874–81, pastor Jefferson Park Presbyterian Church, Chicago; moderator general assembly, 1878; professor of Relations of Philosophy and Science to the Christian Religion, Princeton Theological Seminary, 1881–88, this chair being founded and endowed for Dr. Patton by Robert L. Stewart; president, 1888–1902, professor of ethics, 1886–1913, Princeton university; president and professor philosophy of religion, Princeton Theological Seminary, 1902–13. Author: "The Inspiration of the Scriptures," "Summary of Christian Doctrine"; also many articles and reviews.

Paul, St., this eminent apostle, originally named Saul, was a Jew of pure Hebrew descent, of the tribe of Benjamin. He was born at Tarsus in Cilicia, and was by birth a free Roman citizen. The mysterious circumstances that led to and attended his conversion, and his apostolic travels, are, doubtless, familiar to our readers, and need not be given here. Much diversity of opinion, however, prevails among the learned about the dates of the principal events of his life. About A. D. 59, having visited Jerusalem for the fifth time since his conversion, the populace there assailed him, and would have killed him, but an officer took him into custody and sent him to the Roman Governor Felix, at Cæsarea where he was unjustly detained a prisoner for two years. Having finally appealed to the Roman Emperor, according to the privilege of a Roman citizen, he was sent to Rome. On the voyage thither, he suffered shipwreck at Melita (probably Malta), in the spring of 61,

At Rome, he was treated with respect, being allowed to dwell "for two whole years in his own hired house." Whether he ever left the city or not cannot be positively demonstrated, but it is believed by many critics, from a variety of considerations, that he did obtain his liberty about A. D. 64, and that he made journeys both to the East and to the West, revisiting Asia Minor, and carrying out his long-cherished wish of preaching the gospel in Spain, then thought to be the western limit of the world. Meanwhile occurred the great and mysterious burning of Rome, generally attributed to Nero. The latter threw the blame on the Christians, who were, in consequence, subjected to a severe persecution. Among the victims was Paul, who, according to tradition, suffered death, A. D. 67.

Payne, John Howard, born in 1792; American actor and dramatist; wrote for the press at 13, and appeared on the stage at 16; made his début at Drury Lane in 1813, when 21, and composed a number of pieces, in one of which the air "Home, Sweet Home" was first heard. He died as consul at Tunis in 1852.

Payne, Sereno E., congressman, lawyer; born in Hamilton, N. Y., June 26, 1843; graduate of University of Rochester, 1864; admitted to bar, 1866; practiced at Auburn (LL. D., Colgate, 1902, University of Rochester 1903); married, 1873, to Gertrude Knapp. City clerk, Auburn, 1868-71; supervisor, 1871-72; district attorney, Cayuga County, 1873-79; president of board of education, 1879-82; member of Congress, 1883-87, 1889-1913; reëlected for term, 1913-15. Chairman of Committee on Ways and Means, 1899-1910; was active in framing McKinley and Dingley Tariff laws. Member of High Joint Commission to negotiate treaty with Canada, 1898. Author of the Payne tariff bill, 1909. Died, 1914.

Peabody, Francis Greenwood, Plummer professor of Christian morals, Harvard, 1886-1913; born in Boston, 1847; graduate of Harvard, 1869; Harvard Divinity School, 1872 (D. D., Yale); pastor of First Parish Church, Cambridge, 1874–80; Parkman professor of theology in Harvard Divinity School, 1881–86. Author: "Mornings in the College Chapel," "Short Addresses to Young Men on Personal Religion," "Founder's Day at Hampton," "Afternoons in the College Chapel," "Jesus Christ and the Social Question," "Happiness," "Religion of an Educated Man."

Peabody, George, born in 1795; philanthropist; having made a fortune as a dry-goods merchant in America, went to England, and established a banking business in London in 1843. Besides giving half a million to be invested for the London poor, he assisted with funds Dr. Kane's Arctic expedition, and founded and endowed many institutions at Baltimore and other places in the United States. Died, 1869.

Peary, Josephine, Diebitsch, arctic traveler, author; born (Diebitsch) and educated in Washington, D. C.; married Lieutenant R. E. Peary, United States Navy, explorer, 1888; accompanied him on his 1891–92 and 1893–94 expeditions as far as winter quarters in Greenland; was the first white woman to winter with an arctic expedition; gave birth to a daughter (Marie Ahnighito), the most northerly born white child in the world; accompanied her husband on his arctic trip in 1897. Went north to meet her husband in 1900. Ship caught in ice and she wintered with her little daughter at Cape Saline, 78° 42′ north latitude; went north again in 1902, returning with her husband. Author: "My Arctic Journal," "The Snow Baby."

Peary, Robert Edwin, arctic explorer, officer in United States Navy; born in Cresson, Pa., May 6, 1856. Entered United States Navy as civil engineer, October 26, 1881; assistant engineer on Nicaragua ship canal under government orders, 1884–85; engineer in charge of Nicaragua canal surveys, 1887–88; invented rolling-lock gates for canal. Made reconnaissance, 1886, of the Greenland inland ice-cap, east of Disco Bay, 70° north latitude; chief of arctic expedition of Academy of Natural Sciences of Philadelphia, June, 1891, to September, 1892, to northeast angle of Greenland (Independence Bay 81° 37′ north latitude); discovered and named Melville Land and Heilprin Land, lying beyond Greenland. Made another arctic voyage, 1893–95; made thorough study of little tribe of Arctic Highlanders; discovered, 1894, famous Iron Mountain (first heard of by Ross, 1818), which proved to be three meteorites, one of them weighing ninety tons (the largest known to exist); failed to reach the northern end of Greenland on third trip. Fitted out another ship, and sailed on another Polar expedition in 1905. Made summer voyages, 1896, 1897, bringing the Cape York meteorites to United States; commander of Arctic expedition under auspices of Peary Arctic Club of New York City, 1898–1902; rounded northern extremity of Greenland Archipelago, the last of the great Arctic land groups; named the northern cape, the most northerly land in the world (83° 39′ north latitude), Cape Morris K. Jesup; in 1906, attained highest north in Western Hemisphere (87° 6′ north latitude). Announced his discovery of the North Pole, 1909. Author: "Northward Over the Great Ice," etc. Died, 1920.

Peck, Harry Thurston, professor of Latin, Columbia University, 1888–1910; editor of the "Bookman," 1895–1907; born in Stamford, Conn., November 24, 1856; graduate of Columbia, 1881. (A. M., Ph. D., L. H. D., LL. D.); studied in Berlin, Paris, and Rome. Author: "The Personal Equation," "The Semitic Theory of Creation," "Latin Pronunciation," "The Adventures of Mabel," "What is Good English?" "Greystone and Porphyry" (poems), "Twenty Years of the Republic," "The Life of Prescott." Editor: "Harper's Classical Dictionary," "The International Cyclopædia" (15 vols.), "The New International Encyclopædia" (20 vols.), "American Atlas of the World," "The Library of the World's Literature," "Masterpieces of Literature." Consulting editor of International Year Book, etc. Translator of "Trimalchio's Dinner," etc. Died, 1914.

Peckham, Rufus Wheeler, associate justice of United States Supreme Court, 1895–1909; born in Albany, N. Y., November 8, 1838; educated at Albany Academy and in Philadelphia; studied law; admitted to bar, December, 1859. District attorney of Albany County, 1868; later corporation counsel, city of Albany; justice of Supreme Court of New York, 1883–86; associate justice of Court of Appeals, New York, 1886–95. Died, 1909.

Peel, Sir Robert, Bart., statesman; born in 1788, eldest son of the first baronet; was named under-secretary for the Colonies immediately on his entering parliament in 1811, and was Irish secretary from 1812 to 1818. In the following year he was chairman of the bank committee, and, in 1822, was appointed to the home office, becoming leader in the Commons on the death of Canning (1827). As such he introduced the Catholic emancipation and police bills, and lost his seat for Oxford University in consequence of the former. After the reform bill he reconstructed his party, modern Conservatism dating from his Tamworth manifesto (1834). He now held office a few months, and was finally prime minister from 1841 to 1846, when his desertion of protection cost him the support of the majority of his followers. He died in 1850.

Pelz, Paul Johannes, architect; born in Seitendorf, County of Waldenburg, Silesia, Germany, November 18, 1841; educated in College of St. Elizabeth and College of the Holy Spirit, Breslau; did not graduate, but left at 16 to join his father, who settled in the United States, 1851, for political reasons; studied architecture, 1859–66, in New York, under Detlef Lienau. In practice as architect; was connected with United States Lighthouse Board as architect and civil engineer, and designed many lighthouses. Architect of Congressional library building; Georgetown college academic building; Carnegie library, and music hall building, Allegheny, Pa.; United States Government hospital, Hot Springs, Ark.; Chamberlain hotel, Old Point Comfort, Va.; clinic hospital, University of Virginia; Aula Christi, Chautauqua, N. Y.; machinery hall, Louisiana Purchase Exposition, and many others. Died, 1918.

Penn, William, founder of Pennsylvania; was born in 1644, son of Sir W. Penn, who, with Venables, took Jamaica. He became a Quaker while at Oxford, and was several times imprisoned for his writings. In 1682, he embarked for the colony of the New Netherlands, which had been granted him by Charles II., and founded Philadelphia, but died in England, in 1718, having been in great favor at court under James II.

Pennell, Joseph, artist, illustrator, author; born in Philadelphia, July 4, 1860; pupil of Pennsylvania Academy of Fine Arts and Pennsylvania School of Industrial Art; represented in national collections of France (Cabinet des Estamps), Dresden, Buda-Pest, Melbourne, Perth, Adelaide, and in many State and municipal collections in Europe and America. Chairman of International Jury of Awards, St. Louis Exposition, 1904. Author: "A Canterbury Pilgrimage," "An Italian Pilgrimage," "Two Pilgrims' Progress," "Our Sentimental Journey Through France and Italy," "Pen Drawing and Pen Draughtsmen," "Our Journey to the Hebrides," "The Stream of Pleasure," "The Jew at Home," "Play in Provence," "To Gypsyland," "Modern Illustration," "The Illustration of Books," "The Alhambra," "The Work of Charles Keene," "Lithography and Lithographers." He has illustrated a large number of books.

Pepin le Bref, born in 714; King of the Franks and father of Charlemagne; deposed Childeric III., and founded the Carlovingian Dynasty (751), and afterwards, by helping Stephen II. against the Lombards, founded the temporal power of the popes. Died, 768.

Perry, Bliss, appointed professor English literature, Harvard, 1907; editor of "The Atlantic Monthly," 1899–1909; born in Williamstown, Mass., 1860; graduate of Williams, 1881, A. M., 1883; studied in Berlin and Strassburg universities; professor of English, Williams, 1886–93, Princeton, 1893–1900. Editor: "Selections from Burke," Scott's "Woodstock" and "Ivanhoe," and "Little Masterpieces." Author: "The Broughton House," "Salem Kittredge," "The Plated City," "The Powers at Play," "A Study of Prose Fiction," "The Amateur Spirit," "Walt Whitman," "Whittier," "Carlyle."

Perry, Oliver Hazard, distinguished American naval officer, born at South Kingston, R. I., 1785. He entered the navy in 1799, served in war against Tripoli, and in 1807 was made lieutenant. In the celebrated battle of Lake Erie, September 10, 1813, he defeated the British. He commanded the naval battalion in the battle of the Thames, October 5, 1813. These two victories restored Michigan to the United States and established the supremacy of the Americans on the frontier. Died, 1819.

Pershing, John Joseph, American general and commander-in-chief of the American military forces sent to France, 1917-18, was born in Linn Co., Mo., 1860. He graduated at the state normal school at Kirksville, 1880, and at the United States military academy at West Point, 1886. He served as lieutenant of cavalry in the Apache and Sioux campaigns, was in Cuba in 1898, and in the Philippine Islands, 1899-1903, being made captain in 1901 and brigadier-general in 1906. In 1905 he was military attaché with Kuroki's army in Manchuria in the Russo-Japanese war. For services in command of the troops sent into Mexico in pursuit of Villa in 1916, he was made major-general. In March, 1918, General Pershing placed the entire American army in France at the command of General Foch. In June portions of Pershing's forces won the battles of Chateau Thierry and Belleau Wood, and in July hurled the Germans back near Soissons. His armies captured the St. Mihiel salient, Sept. 13, and in October fought the great battles of the Argonne and the Meuse, victoriously reaching Sedan, Nov. 7. Appointed chief of staff, United States army, 1921.

Pestalozzi, Johann Heinrich, born at Zürich, Switzerland, in 1746; Swiss educator and writer, celebrated for his reforms in the methods of education; studied theology and jurisprudence at Zürich; later turned his attention to agriculture. He established an institution for deserted children on his estate Neuhof in 1775, and afterwards as a school-master at Burgdorf and Yverdon practiced his "intuitive" system. His chief works were "How Gertrude Instructs Her Children" and "Mother's Book." Died, 1827.

Pétain, Henri Philippe, French general, was born in 1857. While widely known on account of his lectures at the École de Guerre (military school), he was in rank only a colonel of infantry at the outbreak of the great world war. For notable services in the retreat from Charleroi to the Marne, Aug. 23 – Sept. 6, 1914, he was promoted general of a division. In the great battle of Artois, May, 1915, Pétain's corps broke the German front, taking Carency. In June following Pétain completed the capture of the famous Labyrinth. When the Germans carried the outer works of Verdun, Feb. 21-24, 1916, Pétain was chosen to defend the fortress. He reorganized the battered French defenses and defeated the Germans, successfully resisting the greatest and most costly series of attacks ever made on a single position. During the victorious allied offensive, directed by Foch, July—November, 1918, Pétain was commander-in-chief of the French armies. Upon his triumphal entry into Metz, Nov. 19, 1918, Pétain was made a marshal of France.

Peter I., czar of Russia (Peter the Great); born in 1672; was joint ruler with Ivan V. from 1682 till 1696, when he became sole sovereign; visited Holland and England to learn shipbuilding, and on his return suppressed the conspiracy of the Strelitz (1698); founded St. Petersburg (now Petrograd) in 1703, and, after a defeat at Narva, won the victory of Pultowa over Charles XII. of Sweden in 1709. He added to his dominions Esthonia, Livonia, and part of Finland. Died, 1725.

Petrarch, Francesco, Italian poet, born in Arezzo in 1304; lived chiefly at Avignon, but passed his later years at Milan, Venice, and Padua; with Boccaccio took an active part in the revival of learning, and was crowned as laureate in the capitol by King Robert of Anjou in 1341. His chief works are "Sonnetti," "Canzoni et Trionfi" (in praise of Laura, a married lady whom he met at Avignon in 1327), and some Latin treatises. Died in Arquà in 1374.

Phidias, one of the greatest of sculptors, an Athenian; is supposed to have been born about 500 B. C. Little, however, is known respecting his life. Hegias is stated by some to have been his master; he also studied under Ageladas of Argos. He executed several statues of Minerva, particularly that in the Parthenon (the works of which temple he superintended); a statue of Jupiter Olympus; and various other admirable productions. Died about 432 B. C.

Philip, one of the twelve apostles, according to John's Gospel, "of Bethsaida, the city of Andrew and Peter," and who was called to follow Jesus, at Bethany. After the resurrection he was present at the election of Matthias to the apostleship, but is not again mentioned. Philip the Evangelist, often confounded with the above, is first mentioned in Acts vi: 5. He preached at Smyrna, baptized the Ethiopian eunuch, and entertained Paul and his companion on their way to Jerusalem.

Philip, an Indian chief, whose father had been a staunch friend of the Pilgrim settlers, was himself friendly to the colonists, till in 1671 their encroachments provoked him to retaliation; after six years' fighting, in which many colonists perished and great massacres of Indians took place, he was defeated and slain in 1676.

Philip II., king of Macedon; born 382 B. C.; ascended the throne in 359; instituted the phalanx, made Thrace and Thessaly tributary, defeated the Athenians at Chæronea (338); was assassinated, 336 B. C.

Philip II. of Spain, born in 1527; succeeded upon the abdication of Charles V. in 1556. He married (1) Maria of Portugal, (2) Mary of England, (3) Elizabeth of France, (4) Anne of Austria. His reign was marked by the revolt of the Netherlands, the annexation of Portugal (1580), the defeat of the Turks at Lepanto (1571), and the loss of the Armada (1588). Died, 1598.

Phillips, Wendell, an American orator and abolitionist; born in Boston, Mass., November 29, 1811. He was graduated at Harvard in 1831, studied law there, and was called to the bar in 1834. But before clients came he had been drawn away from his profession to the real work of his life. A timely speech in Faneuil Hall, in 1837, made him at once the principal orator of the anti-slavery party; and henceforth, till the president's proclamation of January 1, 1863, he was Garrison's loyal and valued ally, his lectures and addresses doing more for their cause than can well be estimated. He also championed the cause of temperance, and that of women, and advocated the rights of the Indians. Died in Boston, 1884.

Phipps, Henry, manufacturer; born in Philadelphia, 1839; worked in stores in Pittsburgh, 1852-56; office boy and bookkeeper, 1856–61; partner in Bidwell & Phipps, agents for Dupont Powder Company, 1861; also partner in small iron mill, Kloman & Phipps; later associated with Thomas M. and Andrew Carnegie in iron and steel manufacture, building up large fortune, and having, next to Carnegie, largest interest in Carnegie Steel Company; director of United States Steel Corporation.

Pickering, Edward Charles, professor of astronomy and director Harvard College observatory, 1876-1919, was born in Boston, 1846. He graduated from Lawrence scientific school, Harvard, 1865 (A. M. 1880, Ph. D. Heidelberg, 1903, LL.D. university of California, 1886, of Michigan, 1887, of Chicago, 1901, of Harvard, 1903). From 1865 to 1867 he was instructor of mathematics, Lawrence scientific school. While professor of physics at Massachusetts institute of technology, 1867-76, he established (1869) the first physical laboratory for public instruction in the United States. During his directorship the Harvard College observatory greatly increased its activities and equipment, establishing at Arequipa, Peru, a branch observatory for the study of southern stars. For distinguished work in astronomical physics, notably in light and the spectra of stars, he was awarded the Draper, the Rumford, the Bruce, and other medals. Author: "The Elements of Physical Manipulation." Died, 1919.

Pierce, Franklin, fourteenth president of the United States, was born in Hillsboro, N. H., 1804, and was educated at Bowdoin college. Here he formed a friendship with Nathaniel Hawthorne who became his biographer. When elected to the United States senate in 1837, Pierce was its youngest member. He served as brigadier-general in the Mexican war, leading troops at the battles of Contreras and Churubusco. As democratic candidate for president in 1852, he received the electoral votes of all but four states. During his administration the leading events were the Gadsden Purchase, the Koszta Affair, and the Kansas-Nebraska Bill. Died, 1869.

Pilate, Pontius, Roman procurator of Judea and Samaria in the days of Christ, from A. D. 26 to 36; persuaded of the innocence of Christ when arraigned before his tribunal, he would have saved Him, but yielded

to the clamor of His enemies, who crucified Him; by washing his hands in their presence he protested before they led Him away that he was guiltless of His blood.

Pinchot, Gifford, forester; born in Simsbury, Conn., August 11, 1865; graduated from Yale, 1889; studied forestry in France, Germany, Switzerland, and Austria; began first systematic forest work in United States at Biltmore, N. C., January, 1892 (M. A. Yale, 1901, Princeton, 1904); member National Forest Commission; chief division, afterward Bureau of Forestry, and later The Forest Service, United States Department of Agriculture, 1898-1910; appointed member committee on organization of government scientific work, March 13, 1903, and commission on public lands, October 22, 1903. Author: "The White Pine" (with H. S. Graves), "The Adirondack Spruce," "A Primer of Forestry."

Pinero, Sir Arthur Wing, dramatic author; born in London in 1855. Commencing a legal career, he afterwards became connected with the stage, and acted at the Lyceum and Haymarket theaters. Devoting himself to play-writing, he produced his first piece, which was entitled "Two can Play at that Game," at the Lyceum. Other plays from his pen include "£200 a Year," "The Money Spinner," "The Squire," "Lords and Commons," "The Rocket," "The Magistrate," "Sweet Lavender," "The Profligate," "In Chancery," "Lady Bountiful," "The Times," "The Second Mrs. Tanqueray," "The Notorious Mrs. Ebbsmith," and "The Benefit of the Doubt," "The Princess and the Butterfly," "Trelawny of the Wells," "The Gay Lord Quex," "Iris," "Letty," "A Wife without a Smile," and "His House in Order." He also collaborated with Sir Arthur Sullivan and Comyns Carr in "The Beauty Stone," a romantic musical drama produced in May, 1898.

Pitt, William, Earl of Chatham, born in 1708. English statesman, son of Robert Pitt; became member of parliament, 1735, attaching himself to the so-called patriotic party under the Prince of Wales; he attacked Walpole and Carteret successively, and, after the retirement of the latter in 1744, supported the ministries of Pelham and Newcastle, and was made paymaster of the forces, a post which he lost owing to his anti-Hanoverian speeches. As secretary of state in 1756, and again in 1757, under Newcastle, he carried on the war against France with great vigor and success. He spoke against the peace of Paris in 1762, and afterwards supported the repeal of the Stamp Act. In 1766 he was created Earl of Chatham, and from his place in the House of Lords continued to urge a policy of conciliation towards America. Died, 1778.

Pius V., Ghislieri, born in 1504; elected pope in 1566, having previously been inquisitor-general; excommunicated Queen Elizabeth and suppressed heresy, but also carried out reforms, and encouraged Spain and Venice in their war against the Turks. Died, 1572.

Pius IX., Giovanni Mastai-Ferretti, born in 1792; was elected pope in 1846, and immediately granted a constitution, but refused to declare war against Austria. After the insurrection at Rome (1848), he fled to Gaeta, but was restored by French aid two years later. The same year he established a Catholic hierarchy in England, and in 1854, defined the doctrine of the Immaculate Conception. In 1859-60 he lost the greater part of his dominions, but was maintained in Rome by a French garrison. In 1870, the Infallibility dogma was promulgated by the ecumenical council held at Rome. In that year, when the French left the city, it was declared the capital of Italy, and occupied by the troops of Victor Emmanuel. Died, 1878.

Pius X., was the 253rd Roman Pontiff. His name was Giuseppe (Joseph) Sarto, and he was born June 2, 1835, at Riese, in the diocese of Treviso, his father being a minor municipal official. His relatives were shopkeepers and people of humble position. He was educated at Castelfranco and the diocesan seminary of Padua, and ordained priest September 18, 1858. He officiated nine years as curate at Tombolo, nine years as parish priest of Salzano; and was made canon and chancellor of the diocese of Treviso in 1875. In 1884, he was appointed Bishop of Mantua, and Leo XIII. made him a cardinal and patriarch of Venice in 1893. His charity and tact brought him unbounded popularity, and he was more than once instrumental in settling serious strikes and labor disputes. He came into direct personal contact with the King and the Queen of Italy while he was cardinal, but was credited with an inflexible resolve to maintain the rights and liberty of the Church. On the death of Leo XIII., July 20, 1903, the conclave met, July 31st, and on August 4th, at the seventh scrutiny, elected Cardinal Sarto as pope, and he chose to be known as Pope Pius X. As priest and bishop his life was spent in the pastoral and episcopal service of the Church rather than in the paths of diplomatic and official service. He always displayed deep interest in social questions and in bettering the life of the poor, to whom his charity at Venice was proverbial. He showed himself zealous in the reform of Church music and in other matters of ecclesiastical discipline. Died, 1914.

Pius XI., Achille Ratti, pope, was born at Desio, near Milan, Italy, 1857, the son of a weaver. He was educated for the Church, finishing his studies at Rome where he celebrated his first mass, 1879, and later received the doctorates of theology, philosophy, and canon law. Returning to Milan, 1882, he taught theology and sacred eloquence. In 1888 he became a director and later prefect of the famous Ambrosian library at Milan where he labored many years. He was appointed subprefect, 1910, and, prefect, 1914, of the Vatican library, Rome. At a critical period in the World War, 1918, he was designated apostolic visitor to Poland. During the ensuing two years he performed services of great value. In recognition of these he was named papal nuncio, 1919, and was appointed titular archbishop of Lepanto, 1920. Succeeding Cardinal Ferrari, he was elevated, July 3, 1921, to the cardinalate as archbishop of Milan. Upon the death of Benedict XV, Cardinal Ratti was elected pope, Feb. 6, 1922.

Pizarro, Francisco, born in 1475; Spanish conqueror of Peru; embarked for America in 1510, and, after having once visited Peru, he returned in 1531, and, taking advantage of a civil war, got possession of that country, founding Lima in 1535. Assassinated, 1541.

Plato, a Greek philosopher; born in Athens or in Ægina, in 429 B. C., the year in which Pericles died. He was a disciple of Socrates, and after the death of that philosopher, Plato himself became a teacher in the plane tree grove of the Academia. He had a great number of disciples, many of whom became eminent teachers. Among them was Aristotle, distinguished as the "Mind of the School," and perhaps Demosthenes. Women are said to have attended. In his 40th year, Plato visited Sicily, but he offended the tyrant Dionysius by the political opinions he uttered, and only escaped death through the influence of his friend, Dion. Two later visits to the court of the younger Dionysius were the only interruptions to his calm life as a teacher and writer at Athens. He died in 347 B. C.

Plutarch (*ploo'tärk*), the most distinguished biographer of antiquity, was born in Bœotia, about A. D. 50. After studying under Ammonius at Athens, he taught philosophy at Rome during the reign of Vespasian, as is supposed. He belonged to the platonic school, and was a most prolific writer. His "Lives" of eminent Greeks and Romans ranks as a standard classic.

Pocahontas (*po-ka-hŏn'tas*), the daughter of Powhatan, a powerful Indian chief of Virginia, was born about 1595. She was seized by the English, 1612, and held by them as a safeguard against the hostility of her tribe. She married an Englishman, John Rolfe, who took her to England, where she died, 1617.

Poe, Edgar Allan, an American poet, born in Boston, Mass., 1809, was a youth of wonderful genius, but of reckless habits, who came to an unhappy and untimely end. He left behind him tales and poems which, though they were not appreciated when he lived, have received the recognition they deserve since his death. His poetical masterpiece, "The Raven," is well known. Poe died, 1849, at Baltimore of inflammation of the brain. He had, perhaps, the loftiest and most original poetical genius which America has produced.

Poincaré (*pwăn'-kà'-rā'*), **Raymond,** French statesman, of a distinguished family, was born in Bar-le-Duc, 1860. He was educated for the law, practiced his profession, wrote for political journals, and at twenty-seven was elected deputy, rising in 1893 to the post of minister of public instruction and in 1894 to minister of finance. In 1912 he was made prime minister, and actively supported the alliance with Russia and the entente with Great Britain. In 1913 he was elected president of France and served until 1920. Following the outbreak of the great war in 1914, his patriotic appeals for support stirred the French nation to supreme efforts.

Polk, James Knox, born in 1795; eleventh president of the United States; was speaker of the house of representatives (1835-39) and governor of Tennessee (1839-41), and was elected as a Democrat to the presidency in 1844. He obtained the annexation of Texas and the cession of Upper California and New Mexico by Mexico, as well as the settlement of the Oregon boundary. Died, 1849.

Ponce de Leon, Juan, a Spanish explorer, the discoverer of Florida; born in San Servas, Spain, in 1460; was a court page, served against the Moors, and in 1502, sailed with Ovando to Hispaniola, and became governor of the eastern part of the island. In 1510, he obtained the government of Porto Rico, and had conquered the whole

island by 1512. In the same year he set out on a quest for the fountain of perpetual youth, and found Florida. He secured the appointment of adelantado of the country, and returned in 1521, to conquer his new subjects; in this, however, he failed. He retired to Cuba, and died there in July from the wound of a poisoned arrow.

Pope, Alexander, English poet; son of a linendraper; was born in London in 1688, and began as a child to write verses. He made his reputation by the "Essay on Criticism," and soon became the friend of Swift and other leading writers, and produced "The Rape of the Lock," verse translations of the "Iliad" and "Odyssey," "The Dunciad," and the "Essay on Man," besides taking part in "Miscellanies" with Swift, Arbuthnot, and others. Died, 1744.

Porter, Gene Stratton, author, illustrator; born on a farm in Indiana, 1868; married Charles Darwin Porter, 1886. Editor camera department, "Recreation," two years; was on natural history staff of "Outing" two years; specialist in natural history photography on "Photographic Times Annual Almanac" four years. Author and illustrator: "The Song of the Cardinal," "Freckles," "What I Have Done With Birds," "At the Foot of the Rainbow," "A Girl of the Limberlost," "Birds of the Bible," "Music of the Wild," "The Harvester," "Laddie," "Michael O'Halloran."

Porter, Horace, soldier, diplomat; born in Huntingdon, Pa., 1837; educated at Lawrence Scientific School, Harvard; graduated at West Point, 1860. Served in field through the Civil War, every commissioned grade up to brigadier-general; received Congressional medal of honor for gallantry at Chickamauga; private secretary of President U. S. Grant, 1869–73; became prominent in business; president of several railway corporations, clubs, and patriotic societies. Orator at inauguration of Washington Arch, New York, May 4, 1895, and dedication of Grant's Tomb, New York, April 27, 1897; at inauguration of Rochambeau Statue, Washington, May 24, 1902; at Centennial of West Point Military Academy, June 11, 1902. Decorated with Grand Cross of Legion of Honor by French Government, 1904; ambassador to France, 1897–1905. Author: "Campaigning with Grant," "West Point Life." Died, 1921.

Porter, Jane, born in 1776, English writer; author of "Thaddeus of Warsaw" and "The Scottish Chiefs." Died, 1850. Her sister, Anna Maria (died, 1832), wrote "The Hungarian Brothers" and other tales.

Porter, Noah, American philosopher, was born at Farmington, Conn., 1811; became professor of metaphysics and moral philosophy at Yale, in 1846, and president in 1871, resigning in 1886. Among his works are "The Human Intellect," "Elements of Intellectual Philosophy," "Elements of Moral Science," etc., and he edited the reissues of "Webster's Dictionary" in 1864 and 1880. Died, 1892.

Porter, William Sydney, widely known as a short story writer under the pen-name "O. Henry," was born in Greensboro, N. C., 1862. After spending many years as a wandering journalist, he located in New York in 1901, and in a few years won foremost rank among American writers of short stories. While his work shows numerous defects of style, he possessed a notably versatile and prolific imagination, coupled with a remarkable gift of story-telling. He died in 1910. His books include: "The trimmed Lamp and Other Stories," "Options," "Strictly Business," "The Gentle Grafter," "Sixes and Sevens," "Whirligigs," "Let Me Feel Your Pulse," "The Four Million," and "Rolling Stones."

Potter, Cora Urquhart (Mrs. James Brown Potter), actress; born in New Orleans; daughter of Colonel David Urquhart. Gained fame as an amateur in New York; professional début, London, as Anne Sylvester in "Man and Wife," 1887; has since appeared in varied repertoire and played during three tours around the world. Author: "My Recitations," also magazine articles.

Potter, Henry Codman, Protestant Episcopal bishop of New York, 1887–1908; born in Schenectady, N. Y., 1835; educated at Episcopal Academy, Philadelphia; theological seminary of Virginia. Ordained deacon, 1857; ordained priest, 1858; pastorates: Christ's Church, Greensburg, Pa., 1857–58; St. John's, Troy, 1859–66; assistant at Trinity Church, Boston; rector at Grace Church, New York; coadjutor to his uncle, Horatio Potter, bishop of New York, 1883–87. Author: "Thirty Years Reviewed," "Our Threefold Victory," "Young Men's Christian Associations and Their Work," "The Church and Her Children," "Sisterhood and Deaconesses," "The Religion for To-day," "The Gates of the East," "Sermons of the City," "Waymarks," "The Scholar and the State," "The East of To-day and To-morrow," "The Industrial Situation," "Law and Loyalty." Died, 1908.

Powell, John Wesley, American geologist and ethnologist, born in 1834; lost an arm in the Civil War, became president of the American Association for the Advancement of Science in 1887, and is the author of several geological monographs and "Introduction to the Study of Indian Languages." Died, 1902.

Powers, Hiram, American sculptor, born in 1805; son of a farmer in Vermont; lived at Florence from 1837 till his death in 1873. His chief productions were "The Greek Slave," "The Fisher Boy," "Proserpine," and "The Indian Girl."

Praxiteles, a famous Grecian sculptor, is believed to have been a native of Athens, to have flourished early in the Fourth Century B. C., and to have died at the age of eighty. He was long attached to the celebrated Phryne, of whom he executed two statues, one of which was placed in the temple of Delphi, the other in the temple of Love at Thespia. His Venus at Cnidus was considered one of the most finished productions of Greece.

Prescott, William Hickling, American historian, born in Salem, 1796; in spite of very bad eyesight, devoted himself to literature, and wrote "History of Ferdinand and Isabella," "The Conquest of Mexico," "Conquest of Peru," and "History of Philip II." (unfinished). He was made D. C. L. at Oxford in 1850. Died, 1859.

Priestley, Joseph, Unitarian natural philosopher, born in 1733, gained the Copley medal in 1773, for his discoveries concerning the properties of fixed air, and was librarian to Lord Shelburne for seven years. He also made important observations on respiration. In 1791, his house at Birmingham was wrecked by a mob who disapproved his sympathy with the French revolution, and three years after he went to the United States, where he died (1804). Besides his scientific works, he wrote a "History of Early Opinions Concerning the Person of Christ," and several similar books.

Pritchett, Henry Smith, American astronomer and educator, made president of the Carnegie Foundation for the Advancement of Teaching, 1906, was born at Fayette, Mo., 1857. He studied astronomy under Asaph Hall at Washington, later became professor, and, 1900–06, was president of Massachusetts Institute of Technology.

Prouty, Charles Azro, lawyer, government official, born in Newport, Vt., 1853; graduate of Dartmouth, 1875. Assistant to Professor S. P. Langley at Allegheny Observatory, 1875–76; taught several years; admitted to Vermont bar, 1882; practiced at Newport, Vt., 1882–96; member of House of Representatives, Vermont, 1888; reporter, Supreme Court of Vermont, 1888–96; member of United States Interstate Commerce Commission 1896–1914; director of valuation, same, 1914–18. Died, 1921.

Ptolemæus Claudius, flourished about 139; Alexandrian writer, author of the "Almagest" or "Syntax of Astronomy," the theories of which were accepted till the discoveries of Copernicus. He also wrote a "Geography," which for thirteen centuries was the leading authority.

Ptolemæus Soter, King of Egypt; obtained Egypt as his share of the dominions of Alexander the Great in 323 B. C.; was engaged in continual wars with Perdiccas and Antigonus. He gained his surname, the preserver, by saving Rhodes when besieged by Demetrius. Died, 283 B. C.

Puffendorff, Samuel, Baron von, born in 1632; German jurist and historian, author of "De Jure Naturæ et Gentium," and "Life of Gustavus of Sweden." Died, 1694.

Pulitzer, Joseph, proprietor of "New York World," 1883–1911; born in Budapest, Hungary, 1847; educated by private tutor; came to the United States, 1864; served until end of Civil War in cavalry regiment; went to St. Louis; became reporter on "Westliche Post," 1868; later its managing editor and part proprietor. In 1878 he bought the "St. Louis Dispatch" and united it with "The Evening Post" as the "Post-Dispatch"; member of Missouri Legislature, 1869; Missouri State Constitutional Convention, 1874; was elected to Congress in New York for term, 1885–87, but resigned after a few months' service; delegate to Cincinnati Liberal Republican Convention, which nominated Horace Greeley for president, after that a Democrat; advocated the "National" (gold-standard) Democratic ticket, 1896. In 1903, endowed with $1,000,000 Columbia College School of Journalism. Died, 1911.

Pupin, Michael Idvorsky, professor of electromechanics, Columbia, since 1901; born in Idvor, Banat, Hungary, October 4, 1858; graduate of Columbia, 1883; studied physics and mathematics under von Helmholtz, University of Berlin (Ph. D., Berlin). Wrote: "Osmotic Pressure and Free Energy," "Electrical Oscillation of Low Frequency and Their Resonance," "Resonance Analysis of Alternating Currents," "Electromagnetic Theory," "Propagation of Long Electrical Waves," "Wave Propagation Over Non-uniform Conductors."

Purdy, Milton Dwight, lawyer, government official, born in Mogadore, O., November 3, 1860; graduate of University of Minnesota, 1891, law department of same, 1892. Admitted to bar, 1892; assistant city attorney, Minneapolis, 1893–97; assistant county attorney, Hennepin County, Minn., 1897–98; assistant United States attorney, 1898–1901; United States attorney, 1901–02, for Minnesota; assistant attorney-general of United States, April 1, 1903, to July 27, 1905; assistant to the attorney-general of United States, 1905–08, and prominent as a trust prosecutor.

Putnam, Herbert, librarian of Congress, born in New York, September 20, 1861; graduate of Harvard, 1883 (Litt. D., Bowdoin, 1898; LL. D., Columbian, 1903; University of Illinois, 1903; University of Wisconsin, 1904); partial course at Columbia Law School; admitted to Minnesota bar, 1886; bar of Suffolk County, Mass., 1892; practiced law, Boston, 1892–95. Librarian of Minneapolis Athenæum, 1884–87; Minneapolis Public Library, 1887–91; Boston Public Library, 1895–99; appointed librarian of Congress, 1899; president of American Library Association, 1898, 1904; overseer, Harvard College, 1902–06. Has published numerous articles in reviews and professional journals.

Putnam, Israel, American Revolutionary general, was born in Salem (now Danvers), Mass., in 1718. He early served in the frontier war, fought against the French, and, on the outbreak of the Revolution, fought with distinguished valor at Bunker Hill. In 1775 he was appointed major-general, and, in 1777, commanded the army of the New York Highlands, and supervised the erection of the fortifications at West Point. Died, 1790.

Pyle, Howard, artist, author, born in Wilmington, Del., in 1853; educated in private schools and Art Students' League, New York; contributed as artist and author to leading New York periodicals. Author and illustrator: "The Merry Adventures of Robin Hood," "Pepper and Salt, or Seasoning for Young Folks," "Within the Capes," "The Wonder Clock," "The Rose of Paradise," "Otto of the Silver Hand," "A Modern Aladdin," "Men of Iron," "Jack Ballister's Fortunes," "Twilight Land," "The Garden Behind the Moon," "Semper Idem," "Rejected of Men"; also many magazine stories and articles. Died, 1911.

Pyrrhus, King of Epirus, born about 318 B. C.; came to the throne in 306 B. C.; was expelled a few years later, but restored by the help of Ptolemy Soter in 295; held the kingdom of Macedonia for a short time, and, in 281, went to Italy to help Tarentum against the Romans. He was at first successful (through his elephants and the phalanx), but was finally defeated in 275. After this he again mastered Macedonia, but was killed by a tile in a night attack on Argos, in 272.

Pythagoras, Greek philosopher, born in Samos, which he left for Crotona, in Southern Italy, where he exercised so much influence as an opponent of democracy that his followers were exposed to persecution and exile. He left no writings, but his doctrines of the "Kosmos," "Metempsychosis," and the "Music of the Spheres" are well known, the first being the beginning of physical science. Died, about 500 B. C.

Quesnay, François, born in 1694, an eminent French physician, at the time of his death first physician to Louis XVI. He is now remembered, however, as a writer on political economy, to which science he is said to have given its name. Although he wrote in the infancy of the science, and many of his opinions are not now maintained, his system is described by Adam Smith as being, "with all its imperfections, the nearest approximation to the truth that has yet been published on the subject of political economy." Died, 1774.

Quincy, Josiah, American statesman, born in Boston, 1772; was bred to the bar, and entered Congress in 1804, where he distinguished himself by his oratory as leader of the Federal party, as the sworn foe of slave-holding, and as an opponent of the admission of the Western States into the Union; in 1812 he retired from Congress, gave himself for a time to purely local affairs in Massachusetts, and at length to literary labors, editing his speeches, but without ceasing to interest himself in the anti-slavery movement. Died, 1864.

Rachel (Élisa Rachel Félix), actress, of Jewish descent, born in Switzerland in 1821. As a child she sang for bread in the streets of Lyons. In 1838 she appeared in Paris as Camille in Corneille's "Les Horaces," and was thereafter the unrivaled exponent of the classical school, her great part being Phèdre. Died, 1858.

Racine, Jean, the greatest French dramatist of the classical school, was born in La Férté-Milon in 1639, and educated at Port Royal. His ode on the marriage of Louis XIV. (1660) was rewarded by a pension from the king. He first exhibited his genius in "Andromaque," which was followed by a brilliant series of tragedies, closing with "Phèdre." His single comedy, "Les Plaideurs," appeared in 1668. In 1677, he was led by religious motives to cease writing for the stage, but, in 1691, he published a sacred drama, "Athalie," which is by many considered his masterpiece. Died, 1699.

Ragozin, Zénaïde Alexéievna, author, born in Russia; she traveled extensively in Europe; came to United States, 1874, and became naturalized citizen. Author: "Story of Chaldea," "Story of Assyria," and various historical and biographical works.

Raleigh, or **Ralegh, Sir Walter,** statesman, navigator, and author, born near Budleigh in 1552; studied at Oriel College, Oxford; fought in support of the Protestants in France (1569); distinguished himself against the rebels in Ireland, 1580–81; rose rapidly in Elizabeth's favor; in 1584, dispatched an expedition to America, which discovered Virginia, so named in honor of the queen; took part in the repulse of the Spanish Armada (1588); in 1595, went to Guiana in search of gold, and sailed some distance up the Orinoco; held a command in the attack on Cadiz (1596). After the accession of James I. he was accused of complicity in the plot to raise Arabella Stuart to the throne, and was imprisoned in the Tower for thirteen years (1603–16), during which he wrote his "History of the World." In 1616, he was permitted to lead an expedition to Guiana against the Spaniards, but his pardon was made dependent on his success, and, as the attempt was a failure, he was executed on his return (1618).

Ranke, Leopold von, German historian, born in Thuringia in 1795; educated at Leipzig, was appointed extraordinary professor at Berlin in 1825, ordinary professor in 1834, and in 1841 became royal historiographer. Among his chief works are the "History of the Popes," the "History of Germany during the Reformation," and the "History of England: Chiefly in the Seventeenth Century." Died in 1886.

Raphael, Raffaello Santi, or **Sanzio,** born in 1483; son of Giovanni Santi; a painter; studied under Pietro Perugino; in 1504 went to Florence, where he attached himself to Fra Bartolommeo, and was much influenced by the works of the Florentine school; in 1508, was summoned to Rome by Julius II. to adorn with frescoes the walls of the Vatican, which occupied him till 1513. He was much employed by Leo X., who succeeded Julius in 1513. To this period belong the cartoons at Hampton Court. Raphael also displayed genius as an architect, and after the death of Bramante (1514), superintended the building of the new cathedral of St. Peter's. Died in 1520.

Rawlinson, George, canon of Canterbury, historian, and Orientalist, born in 1812; was educated at Oxford, where he was appointed Camden professor of ancient history in 1861. Among his chief works are his version of Herodotus (1858–60), histories of "The Five Great Monarchies of the Ancient Eastern World," and "Ancient Egypt." Died, 1902.

Rayner, Isidor, United States senator, lawyer, born in Baltimore, April 11, 1850; educated at University of Virginia; admitted to bar, 1871; elected to Maryland legislature, 1878, State Senate, 1886; member of Congress, 1887–89, 1891–95; attorney-general, Maryland, 1899–1903; counsel for Rear-Admiral Schley before investigation commission, 1901; elected United States senator for terms, 1905–11, 1911–17. Died, 1912.

Reade, Charles, novelist and dramatist, born in Oxfordshire in 1814; was educated at Magdalen College, Oxford, of which he became Fellow. Among his novels, most of which were intended to expose some social abuse, were "Peg Woffington," "It is Never Too Late to Mend," "The Cloister and the Hearth," and "Griffith Gaunt." Died, 1884.

Reading, Lord, Rufus Daniel Isaacs, was born in London, 1860; educated at University College school, also in Brussels and in Hanover. Winning notable success at the bar, he became bencher of the Inner Temple, 1904; solicitor-general, 1910; attorney-general, 1910, and lord chief justice of England, 1913. He was member of parliament for Reading, 1904–13; was created baron in 1914 and viscount in 1916. Upon the death of Sir Cecil Spring-Rice in 1918, he became British ambassador to the United States.

Reclus, Jean Jacques Élisée, a French geographer, born in Sainte-Foix la Grande, France, March 15, 1830. In consequence of his extreme democratic views he left France after the coup d'état of 1851, and spent the next seven years in England, Ireland, North and Central America, and Colombia. He returned to Paris in 1858, and published an introduction to the "Dictionary of the Communes of France" (1864). While living in exile in Switzerland he began his masterpiece, "New General

Geography." Reclus wrote another great work, a physical geography, entitled "The Earth." Died, 1905.

Reed, Thomas B., a prominent legislator; born in Portland, Me., October 18, 1839; educated at Bowdoin College; studied law, and began practice in 1865. During the war was acting assistant paymaster in the Western River Navy. He entered the Maine House in 1868, and the Senate in 1870; was sent to Congress in 1877, where he remained until 1899. He gradually became a leader of the Republican members, and was chosen speaker of the 51st Congress, in which he made the famous new rule that all members present should be counted to make a quorum, whether voting or not. Retired from Congress in 1899, and died in 1902.

Rehan, Ada, actress; born in Limerick, Ireland, April 22, 1860; came to United States in childhood; made first appearance on stage at 14, in Newark, N. J.; played in Philadelphia, Baltimore, Albany, and Louisville stock companies. Engaged by Augustin Daly in 1879, filling leading positions in Daly's Theater until his death, in 1899, playing such characters in Shakesperean and old comedies as Rosalind, Katherine, Viola, Beatrice, Portia, Lady Teazle, Peggy in the Country Girl, and many high-class modern comedy parts. Died, 1916.

Reid, Whitelaw, born in 1837; American diplomatist; became editor of the "New York Tribune" in 1872; from 1889–92, was United States minister to France; ambassador to Great Britain, 1905–12. Author: "After the War, a Southern Tour," "Ohio in the War," "Schools of Journalism," "Newspaper Tendencies," "Town Hall Suggestions," "Two Speeches at the Queen's Jubilee," "Some Consequences of the Last Treaty of Paris," "Our New Duties," "Later Aspects of Our New Duties," "A Continental Union," "Our New Interests," "Problems of Expansion." Died, 1912.

Rembrandt van Rijn, born in 1607; an eminent painter and engraver; was the son of a miller near Leyden. He studied for three years under Jacob van Swanenburch, and was afterwards the pupil of Peter Lastman at Amsterdam, and of Jacob Pinas at Haarlem. In 1630, he settled in Amsterdam, where he died in 1669. Among his chief works are "The Anatomical Lesson," and "The Night Watch."

Remington, Frederic, artist, author, sculptor; born in Canton, N. Y., October 4, 1861; educated at Yale Art School and Art Students' League, New York; was clerk in store, then cowboy and stockman on ranch in the West; subsequently illustrator for magazines, treating military and western American subjects, and, during 1897–98, Cuban scenes; well known as a painter; among his leading works in sculpture are "The Broncho Buster" and "The Wounded Bunkie." Author: "Pony Tracks," "Crooked Trails," "Frontier Sketches," "John Ermine of the Yellowstone" (novel). Died, 1909.

Remsen, Ira, president, 1901-12, and professor of chemistry, 1876-1913, pres. and prof. emeritus since 1913, Johns Hopkins; born in New York, February 10, 1846; graduated from college of city of New York, 1865; M. D., College of Physicians and Surgeons, New York; Ph. D., University of Göttingen, Germany (LL. D., Columbia, 1893, Princeton, 1896, Yale, 1901, Toronto, 1902); professor of chemistry, Williams, 1872-76; founder, 1879, and since editor, "American Chemical Journal." Author: "The Principles of Theoretical Chemistry," "An Introduction to the Study of the Compounds of Carbon, or Organic Chemistry," "The Elements of Chemistry," "Inorganic Chemistry," "Introduction to the Study of Chemistry," "A Laboratory Manual," "Chemical Experiments," etc.

Renan, Joseph Ernest, Orientalist, historian, and essayist; born in 1823 in Tréguier, in Brittany; in 1842, he entered the seminary of St. Sulpice, but later gave up the priesthood. His first important work, "Averroës et l' Averroïsme," appeared in 1852. Appointed professor of Hebrew in the Collège de France, 1862, was removed, 1863, for unorthodoxy, and reappointed in 1870. The "Vie de Jésus," which gave rise to much discussion, was afterwards expanded into "Histoire des Origines du Christianisme." He also published "Le Judaisme," and numerous other works. Died, 1892.

Rennie, John, civil engineer; born in Phantassie, East Lothian, Scotland, in 1761; employed by the firm of Messrs. Boulton & Watt, at Soho, Birmingham, and entrusted by them to direct in the construction of the Albion Mills, London, he became at once famous for his engineering ability, and was in general request for other works, such as the construction of docks, canals, and bridges, distinguishing himself most in connection with the last, of which Waterloo, Southwark, and London over the Thames, are perhaps the finest. Died, 1821.

Reuter, Baron Paul Julius, born in Cassel in 1821; in 1849, established an office at Aix-la-Chapelle for supplying news by telegraph, and thereby revolutionized the press of Europe. In 1851, he transferred his business to London. He laid several important telegraphic cables. Died, 1899.

Revere, Paul, an American patriot; was born in Boston, Mass., in 1735, and bred a goldsmith. He was conspicuous for his zeal against the mother country, and one of the first actors in the revolt. Died, 1818.

Reynolds, Sir Joshua, painter; born in Plympton, in Devonshire, in 1723; studied under the portrait-painter Hudson; removed to London in 1746; traveled in Italy, 1749–52; on his return to London was immediately recognized as the greatest portrait painter of the day. He was the first president of the Royal Academy (1768–92), and in 1784, was appointed painter to the king. Among his intimate friends were Johnson, Burke, Goldsmith, and other eminent literary men. His fifteen "Discourses on Painting" were delivered before the Royal Academy between 1769 and 1790. Died, 1792.

Rhees, Rush, president of University of Rochester since July 1, 1900; born in Chicago, February 8, 1860; graduated from Amherst, 1883, A. M., 1897, LL. D., 1900; graduated from Hartford Theological Seminary, 1888; (D. D., Colgate University, 1901); Walker instructor of mathematics, Amherst, 1883–85; ordained, 1889; pastor Middle Street Baptist Church, Portsmouth, N. H., 1889–92; associate professor New Testament interpretation, Newton Theological Institution, Newton Centre, Mass., 1892–94; professor of same, 1894–1900. Author: "The Life of Jesus of Nazareth, a Study," "St. Paul's Experience as a Factor in His Theology," and other articles in several journals and periodicals.

Rhodes, Cecil, statesman; born in Hertfordshire in 1853; son of a vicar; went to South Africa; became director of the diamond mines at Kimberley, and amassed a large fortune; entered the Cape Parliament, and became prime minister in 1890; he was active and successful in extending the British territories in South Africa, aiming at destroying the race prejudices that prevail in it, and at establishing among the different colonies a federated union; founded the Rhodes scholarships at Oxford University. Died, 1902.

Rhodes, James Ford, author; born in Cleveland, O., May 1, 1848; educated at public schools, University of New York, University of Chicago; was not graduated. (LL. D., Adelbert College, Western Reserve University, 1893; Harvard, 1901; Yale, 1901; University of Wisconsin, 1904; Litt. D., Kenyon, 1903); Loubet prize, Berlin Academy of Science, 1901. Author: "History of the United States from the Compromise of 1850" (volumes I to VII, 1850–77).

Ricardo, David, born in 1772; political economist, son of a Jewish broker; entered parliament in 1819. His "Principles of Political Economy and Taxation," containing his famous theory of rent, was published in 1817. Died, 1823.

Richard. The name of three kings of England, Richard I. (Cœur de Lion) was born 1157, third son of Henry II.; succeeded his father, 1189. He led the English contingent in the third crusade to the Holy Land, and while on his return, 1192, was imprisoned by the Emperor of Germany, being ransomed after two years. He was killed at the siege of Limoges, 1199. Richard II., son of the Black Prince, was born at Bordeaux, 1366; succeeded his grandfather, Edward III., 1377, and was deposed in favor of Henry IV. He is believed to have died in prison about 1400. Richard III., son of Richard, Duke of York, born, 1452, was the last of the Plantagenet line. He usurped the throne on the death of his brother, Edward IV., 1483, imprisoning, and it is believed ordering the murder of his two young nephews. Defeated by Henry, Earl of Richmond, at Bosworth, Richard was killed on the field and was succeeded by the victor, as Henry VII.

Richelieu, Armand Jean du Plessis, Duc de, born in Paris, 1585, French cardinal and statesman, became bishop of Luçon in 1607; in 1615, entered the service of the Queen-mother, Marie de' Medici, and in 1616, became secretary of state for war and foreign affairs. He followed Marie de' Medici to Blois (1617), and was exiled to Avignon, but was soon afterwards recalled, and effected a reconciliation between the king and queen, receiving as his reward a cardinal's hat. In 1624, he became chief minister, an office which he retained till his death (1642). During this period he established the absolute power of the king, and crushed the Calvinistic party, although he was led by political motives to support the Protestants in Germany.

Ridley, Nicholas, English reformer; born in Northumberland, about 1500, studied at Cambridge, Paris, and Louvain; returned to Cambridge in 1529; became chaplain to Cranmer, in 1537, and, about 1540, master of Pembroke Hall; was appointed Bishop of Rochester, in 1547, and of London, in 1550; took a leading part in

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JAMES WHITCOMB RILEY

composing the liturgy and drawing up the forty-two articles; favored the attempt to place Lady Jane Grey on the throne, and was imprisoned in the Tower; was condemned to death for heresy, and burnt, with Latimer, at Oxford, in October, 1555.

Riis, Jacob August, journalist, author; born in Ribe, Denmark, May 3, 1849, and was educated in Latin school there. He came to New York and became police reporter for "New York Sun"; was active in small parks and playgrounds movement and in tenement house and school reform; executive officer of Good Government clubs, 1896-97. Author: "How the Other Half Lives," "The Making of an American," "The Children of the Poor," "The Children of the Slum," "The Children of the Tenements," "Peril and Preservation of the Home," "Roosevelt, the Citizen," "Is There a Santa Claus?" and numerous magazine articles on social and economic subjects. Died, 1914.

Riley, James Whitcomb, poet; born in Greenfield, Ind., in 1853; educated in the public schools; began contributing poems to Indiana papers, 1873, and long known as "the Hoosier poet"; much of his verse is in the Middle-Western or Hoosier dialect; his earlier Hoosier dialect verse, and his first book, appeared under the pen-name "Benj. F. Johnson, of Boone" (M. A., Yale, 1902; Litt. D., University of Pennsylvania, 1904). Author: "The Old Swimmin' Hole and 'Leven More Poems," "The Boss Girl and Other Sketches," "Afterwhiles," "Old-Fashioned Roses" (published in England); "Pipes o' Pan at Zekesbury," "Rhymes of Childhood," "Flying Islands of the Night," "Green Fields and Running Brooks," "Armazindy," "A Child-World," "Neighborly Poems," "Home Folks," "Poems Here at Home," "Rubaiyat of Doc. Sifers," "The Book of Joyous Children," "An Old Sweetheart of Mine," "Out to Old Aunt Mary's." Died at Indianapolis, 1916.

Ristori, Adelaide, born in 1822; Italian actress, the child of strolling players; married, in 1847, the Marquis Capranica del Grillo, but afterwards returned to the stage. Having established her reputation in Italy, she visited Paris, 1855, London, 1856, and other European capitals, as well as the United States and South America. In America she played with Edwin Booth. Died, 1906.

Robbia, Luca della, born about 1399, an Italian sculptor; famous for his work in enameled terra-cotta. Died, 1482. His nephew, Andrea, born 1438, excelled in the same art. Died, 1528.

Roberts, Frederick, Lord, an English military officer; born in Cawnpore, India, September 30, 1832. He was taken to England when two years old, educated at Clifton, Eton, Sandhurst, and Addiscombe, and entered the Bengal Artillery in 1851. His first taste of actual warfare was in the hot time of the siege of Delhi, during the mutiny, and he took an active part in the subsequent operations down to the relief of Lucknow. He discharged the duties of assistant quartermaster-general in the Abyssinian expedition of 1868, and in the Lushai expedition of 1871-72. On the outbreak of the Afghan War in 1878, Roberts, then major-general, was appointed to command the Kurram division of the army. He forced in brilliant fashion the Afghan position on the peak of Peiwar Kotal (8,500 feet above sea-level). After the murder of Sir Louis Cavagnari and the escort of the British mission at Kabul, he was given command of the force sent to avenge them. He defeated the Afghans at Charasia on October 6, 1879, took possession of Kabul on the 12th, and assumed the government of the country. On August 9, 1880, Roberts set out on his memorable march through the heart of Afghanistan to the relief of Kandahar, which he reached three weeks later. He immediately gave battle to Ayub Khan and routed him completely, capturing all his artillery and his camp; was appointed commander-in-chief of the Madras army (1881), and held the rank of commander-in-chief in India (1885-93). He was appointed commander-in-chief of the forces in Ireland in 1895; and in 1899 took command of the English forces in South Africa, capturing Cronje, relieving Kimberley, and annexing the two republics. He returned to England and was made commander-in-chief to succeed Lord Wolseley. Died, 1914.

Robespierre (*rōb'aiz-peer*), **Maximilien Marie Isidore,** a French revolutionist, was born at Arras, 1758. After studying law and gaining some distinction as an advocate, he entered the States-General in 1789, as one of the representatives of Artois. In that assembly he soon made his mark as a rabid Democrat, and attached himself to the Jacobin body. In 1792 the City of Paris elected him one of its deputies to the convention, where he speedily became the leader of the Mountain party, in its struggles with the Girondists. Over the latter, with the help of the Commune of Paris and the mob, he achieved a decisive triumph in June, 1793. After this he inaugurated the Reign of Terror, by constituting himself president of the committee of public safety, and associating along with him Couthon and Saint-Just. In 1794, being by this time in possession of almost unlimited power, Robespierre opened the régime of the guillotine by first sacrificing his Girondist rivals, and then sending indiscriminately to their death thousands of innocent persons of both sexes. The excesses of this monster at last raised against him a strong combination of opponents, and, the convention declaring him an outlaw, Robespierre perished under the guillotine, 1794.

Rochambeau, Jean Baptiste Donatien de Vimeur, Comte de, born in 1725, marshal of France; distinguished himself in Seven Years' War and the American War of Independence; in 1790 became commander of the army of the north, but resigned in 1792, and narrowly escaped execution during Reign of Terror. Died, 1807.

Rockefeller, John Davison, capitalist; born in Richford, N. Y., July 8, 1839; removed to Cleveland, Ohio, 1853; public school education; married in Cleveland, Ohio, September 8, 1864, Laura C. Spelman. Was clerk in forwarding and commission house; at 19, partner in firm of Clark & Rockefeller, commission merchants; firm became Andrews, Clark & Co., and engaged in oil business; in 1865 the firm, then William Rockefeller & Co., built Standard Oil Works, Cleveland; this was consolidated with others in Standard Oil Company, 1870; other interests were later acquired and the Standard Oil Trust was formed, 1882, but dissolved, 1892, the various Standard Oil companies afterward being operated separately, with Rockefeller at the head. In 1911 he resigned presidency of Standard Oil Company. He has given about $25,000,000 to the University of Chicago; a $100,000 building, 3,000 volumes on Greek art and literature, and money donations to Vassar; $1,375,000 to Barnard College; $250,000 to American Baptist Missionary Union and Home Missionary Society; $50,000,000 to the General Education Board; built and endowed the Rockefeller Institute for Medical Research, New York, at a cost of more than $4,000,000. Donations of $1,000,000. or over were made by him to Harvard University, Yale University, and the Southern Education Fund. In 1915 the total of his lesser gifts to various colleges, churches, missions, and similar institutions reached the sum of $85,000,000, while the aggregate amount of all his benefactions was about $250,000,000. His largest single gift was to the Rockefeller Foundation which in 1913 received $100,000,000. During the European war large sums from this fund were devoted to Belgian relief and similar activities.

Rockefeller, John Davison, Jr., capitalist; born in 1874; son of John Davison and Laura C. (Spelman) Rockefeller; graduate of Brown University; married, in 1901, Abby Greene Aldrich. Associated with his father in business enterprises; member of board of managers of Delaware, Lackawanna & Western Railroad Company; director of Colorado Fuel and Iron Company, American Linseed Company.

Rockefeller, William, capitalist; born in Richford, Tioga County, N. Y., May 31, 1841; educated at Owego, N. Y., and Cleveland, Ohio; was bookkeeper and later partner in produce commission trade; soon after joined his brother, John D. Rockefeller, in oil business; from 1865 to 1911, at head of the business in New York; also president of the Standard Oil Co. of New York until 1911. He is trustee or director of many railroads and other corporations.

Rodin, Auguste, sculptor, president of international society of painters, sculptors, and engravers, was born of a poor family in Paris in 1840. At an early age he displayed great taste for art. He studied under Barye and Carrier-Belleuse. At the age of twenty-two he modeled the "Man with a Broken Nose," one of the best of his works. He began to exhibit at the salon in 1875. In 1877 he exhibited "The Age of Bronze" which was purchased by the state and is now in the Luxembourg gallery. In 1880 he completed his statue of St. John, also in the Luxembourg gallery. Possibly the most elaborate of all his works is his "Portal of Hell" upon which he worked twenty years. It is a bronze door for the museum of decorative art, Paris. His works include: "Burgesses of Calais," "The Kiss," statue of Balzac, busts of Jean Paul Laurens, Victor Hugo, and many others. In 1900 the city of Paris erected a building in which most of his works were exhibited at the Paris exhibition. Died, 1917.

Roebling (*rōb'ling*), **John A.,** an American civil engineer, was born in Mühlhausen, Prussia, 1806. He emigrated to the United States in 1831, and in course of years became the designer and constructor of many great public works; among them the canal aqueduct across the Allegheny River, and the Monongahela suspension bridge, both at Pittsburgh; the suspension bridge at Niagara, and the Ohio bridge at Cincinnati. Roebling died in 1869, having just before projected the bridge

over the East River, to connect the cities of New York and Brooklyn, completed by his son and opened to travel in 1883.

Roebling, Washington Augustus, engineer; born in Saxonburg, Pa., May 26, 1837; graduate of Rensselaer Polytechnic Institute, 1857; joined his father in construction of Pittsburgh suspension bridge across Allegheny River; served, 1861–65, in Union Army, private to brevet colonel; resigned to assist his father in building the Cincinnati and Covington suspension bridge. The Brooklyn bridge was undertaken by the father, but his death, 1869, before the work had been begun, left the entire construction to his son, who directed it to completion. Author: "Military Suspension Bridge."

Roentgen, Wilhelm Conrad, the discoverer of the X-Rays, is of Dutch origin, and was born in 1845. He began his university studies at Zürich, and from there followed Professor Kundt to Würzburg, and afterwards to Strassburg, in which university he acted as Kundt's assistant in 1873. In 1875, he became professor of physics and mathematics at the Agricultural Academy in Württemberg; in 1876, he returned to Strassburg; in 1879, became professor at Giessen, in 1885 at Würzburg, and at Munich since 1899. He has written several works on scientific subjects, and of late years has studied the effects of electricity when passed through various gases; also the absorption of heat rays by steam and gases. His discovery of the rays which he has named X-Rays came by chance when he was experimenting with vacuum tubes. He studied them thoroughly, however, before making his discovery public.

Roger II., King of Sicily; born in 1097. He gained some territory from his cousin, William of Apulia, after whose death, in 1127, he was acknowledged as Duke of Apulia, Calabria, and Naples, receiving his investiture from Pope Honorius II. (1128). Soon afterwards the Prince of Capua did homage to him as his over-lord. In 1129, he received from the anti-pope, Anacletus, the title of King of Sicily. Died, 1154.

Rogers, Henry Huttlestone, capitalist, was born at Fairhaven, Mass., 1840, and was educated at the Fairhaven high school. He began life as a newsboy, clerk, and railroad workman. In 1860 he went to Pennsylvania where he entered the oil business and became one of the leading men in the kerosene industry. In 1874 he was a prominent factor in the organization of the Standard Oil Company, later becoming its vice-president and the chief lieutenant of John D. Rockefeller. He amassed a great fortune, estimated at over $100,000,000, and invested heavily in various industries, including copper, steel, mining, and railways. His benefactions to his native town exceeded $3,000,000. Died, 1909.

Rogers, Henry Wade, dean law department of Yale, 1903–13; born in Holland Patent, N. Y., October 10, 1853; graduate of University of Michigan, 1874 (A. M., LL. D., Wesleyan University, Conn.). Admitted to bar, 1877; professor law in law school, University of Michigan, 1883; dean of same, 1885–90; president of Northwestern University, 1890–1901; professor of law, Yale, 1901–03. Author: "Illinois Citations," "Expert Testimony," also numerous articles for law journals and reviews.

Roland, Marie Jeanne Philpon, born in 1754; was daughter of an engraver at Paris, and married Roland in 1780. She sympathized with his revolutionary ideas, and exercised much influence over the policy of the Girondist party. On the proscription of the Girondists she was confined in the Abbaye, and, after five months' imprisonment, put to death in 1793. Her "Mémoires" were written during her confinement.

Romanes, George John, naturalist; born in Kingston, Canada, in 1848; took an honors degree in science at Cambridge; came under the influence of Darwin, whose theory of evolution he advocated and developed in lectures and various works, e. g., "Scientific Evidences of Organic Evolution," "Mental Evolution in Animals," "Mental Evolution in Man"; his posthumous "Thoughts on Religion" reveal a marked advance from his early agnosticism towards a belief in Christianity; founded the Romanes Lectures at Oxford. Died, 1894.

Romney, George, painter, born at Dalton, in Lancashire, 1734; after receiving some lessons from a country artist, went to London in 1762; visited France in 1764, and Italy, 1773–75; on his return became the rival of Reynolds as a portrait painter; also gained distinction as a painter of historical pictures. Died, 1802.

Roosevelt, Franklin Delano, assistant secretary of the navy, 1913–20, was born at Hyde Park, N. Y., 1882. He graduated from Harvard University, 1904; attended Columbia Law School, 1904–07; was admitted to the bar 1907, and practiced law in New York, 1907–10. In 1910 he was elected to the New York state senate, serving until 1913 when he resigned to become assistant secretary of the navy. At the Democratic National Convention, held at San Francisco in July, 1920, he received the nomination for Vice-President of the United States.

Roosevelt, Theodore, twenty-sixth President, was born in New York City, October 27, 1858, the son of Theodore and Martha (Bullock) Roosevelt. Though physically delicate in youth, he entered Harvard University at 18, and was graduated in 1880. In the following year he began the study of law and was elected to the New York legislature. He was twice reelected, and became the candidate of the minority party for speaker in his second term. In 1884 he was chosen a delegate to the Republican National Convention, and later in the year went to North Dakota, where he spent two years on a ranch, raising cattle. In 1886 he was an unsuccessful candidate for Mayor of New York. President Harrison appointed him a member of the United States Civil Service Commission in 1889, in which capacity he served until 1895, when he resigned to accept the presidency of the Police Commission of New York City, under Mayor Strong. President McKinley appointed him Assistant Secretary of the Navy in April, 1897, and, upon the outbreak of the Spanish-American War, in 1898, he resigned the post to assist in organizing the First U. S. Volunteer Cavalry (afterwards known as Roosevelt's Rough Riders), of which he became lieutenant-colonel, and later colonel, for gallantry in the battles of Las Guasimas and San Juan, Cuba. In September, 1898, he was mustered out with his regiment, at Montauk, Long Island. Shortly following he was nominated for governor of New York, and elected, November, 1898. Two years later he was unanimously nominated for vice-president of the United States by the Republican National Convention, at Philadelphia, and elected. He succeeded to the presidency September 14, 1901, upon the death of President McKinley, and at the close of the term was unanimously nominated by his party to succeed himself, and elected November, 1904. His second term embraced a strenuous, successful campaign for political, industrial, and social reform. His efforts in bringing about a treaty of peace between Japan and Russia in 1905 were important and effective, in appreciation of which he was awarded the Nobel peace prize in 1906. He headed a large hunting party to Africa for the Smithsonian Institution, 1909. In 1910 he returned through Europe, making speeches at Cairo, Paris, and the Guildhall, London. The Smithsonian Institution received over 23,000 specimens as the result of this trip. In 1912 he was presidential candidate of the Progressive party which he had organized. During the campaign he was shot at Milwaukee, but was not fatally wounded. Contributing editor of the Outlook, 1909-14. During an exploration in South America, 1913-14, he discovered several hundred miles, previously unexplored, of a river tributary to the Madeira, named in his honor Rio Teodoro. Early in the great war he became decidedly anti-German, and upon the sinking of the "Lusitania" in 1916 vigorously urged national preparedness against Teutonic aggression. Among his important publications are: "Winning of the West," "History of the Naval War of 1812," "Hunting Trips of a Ranchman," "Life of Thomas Hart Benton," "Life of Gouverneur Morris," "Ranch Life and Hunting Trail," "History of New York," "American Ideals and other Essays," "The Wilderness Hunter," "The Rough Riders," "Life of Oliver Cromwell," "The Strenuous Life," "Theodore Roosevelt: an Autobiography," "African Game Trails," "Life Histories of African Game Animals," "Through the Brazilian Wilderness," "America and the World War." He was twice married: first to Alice Lee, in 1880, who died in 1884; second to Edith Kermit Carow, in 1886. His four sons, Theodore, Kermit, Archibald, and Quentin, served in American or allied armies, 1917-18. The youngest, Quentin Roosevelt, was killed in an airplane battle in France, 1918. Following the Brazilian expedition, Roosevelt's health became impaired and he died of pulmonary embolism, January 6, 1919.

Root, Elihu, an American statesman and lawyer; born in Clinton, N. Y., February 15, 1845; was graduated at Hamilton College in 1864, and after teaching for a while entered the New York University Law School and was graduated in 1867. On August 1, 1899, he was appointed secretary of war by President McKinley, and on March 5, 1901, was reappointed. After the Spanish-American War, Secretary Root represented the United States Government in all official communications with Cuba, Porto Rico, and the Philippine Islands. In August, 1903, he resigned the office of secretary of war, his resignation to take effect in January, 1904. In 1905, President

Roosevelt appointed him secretary of state, and while discharging the duties of that office he did much to unify the Pan-American countries. In 1907, he visited Mexico in the interests of a closer relationship between that country and the United States. United States senator from New York, 1909–15. Received Nobel peace prize, 1912.

Rosebery, Archibald Philip Primrose, fifth earl of; born in 1847; was chief commissioner of works in 1885, and was chairman of the first London County Council; became foreign secretary under Mr. Gladstone in 1886 and 1892; succeeded to the premiership in 1894, resigned in 1895, and retired from the leadership of the Liberal party, October, 1896; since then he has been prominent on several important occasions, notably during the Fashoda crisis and the Transvaal negotiations, in both of which he supported Lord Salisbury; has delivered many notable speeches on literary and social subjects. In 1900, published an interesting study of "Napoleon — The Last Phase." In December, 1901, returned to political life, with a speech at Chesterfield, and became president of the Liberal League. Has been a vigorous critic of Mr. Chamberlain's policy, especially on imperial grounds.

Rosecrans, William Starke, American general, born at Kingston, Ohio, 1819; trained as an engineer, he had settled down to coal-mining when the Civil War broke out; joined the army in 1861, and rapidly came to the front; highly distinguished himself during the campaigns of 1862–63, winning battles at Iuka, Corinth, and Stone River; but defeated at Chickamauga he lost his command; reinstated in 1864 he drove Price out of Missouri; was minister to Mexico, a member of Congress, and 1885–1893 registrar of the United States Treasury; died near Los Angeles, Cal., 1898.

Rossetti, Gabriele (*ros-set'tē*), born at Vasto, in the province of Chieti, Italy, 1783, an eminent Italian author, chiefly celebrated as a commentator on Dante, and as the author of several volumes of poems, which are popular in Italy. He went to England as a political refugee in 1824, and was for several years (till 1845) professor of Italian Literature in King's College, London. Died in London, 1854. His son, Gabriel Charles Dante Rossetti, born in London, 1828; died at Birchington-on-the-Sea April 9, 1882; attained considerable eminence as an artist, and also as a poet. His poems are contained in two volumes — "Poems" (1870), and "Ballads and Sonnets" (1881). He also wrote "Dante and his Circle" (1861 and 1874.) Christina Rossetti, daughter and sister of the two above, died December 29, 1894, at the age of sixty-four. She wrote "The Prince's Progress," etc., and many well-known religious poems and books, children's stories, etc.

Rossini, Gioachino Antonio (*ros-sē'nē*), the greatest of the Italian opera composers, was born 1792. He was the son of a strolling horn-player. He studied music under Mattei at the Lyceum of Bologna. Among his chief operas are "Tancredi" (1813), "Il Barbiere di Seviglia" (1816), and "Guglielmo Tell" (1829). He also composed a "Stabat Mater" (1842), and other Church music. From 1824 onwards he lived chiefly in Paris. Died, 1868.

Rothschild (*Ger. pron. rōt'shilt*), the name of a celebrated Jewish family of bankers and financiers. Meyer Anselm Rothschild, was born at Frankford, 1743, died, 1812. Was designed for the priesthood, but showed more aptitude for commercial pursuits, and laid the foundations of his family's fortune by his success as the banker of the Elector of Hesse-Cassel. His son, Nathan, born 1777, died 1836, went to England in 1800 as agent for his father, after whose death he greatly extended his business, acting in co-partnership with his brothers, who resided in various European capitals. His eldest son, Lionel de Rothschild, was born 1808, died 1879, was elected Whig member for the City of London in 1847, but did not take his seat until the passing of the Jewish Disabilities Bill (1858). Nathaniel Mayer, born 1840, died, 1915, eldest son of Lionel, was raised to peerage, 1885.

Rousseau, Jean Jacques (*Rö-sō'*), French philosopher, was born 1712, son of a watchmaker at Geneva; was apprenticed to an engraver, but made his escape into Savoy (1728), where he was found by a priest, who entrusted him to the care of Madame de Warens at Annecy. During the ensuing years the greater part of his time was spent in her house, but he finally quarreled with her and went to Paris (1741), whence in 1742 he accompanied the French ambassador to Venice as secretary. In 1750 he gained a prize, offered by the Academy of Dijon, by an essay attacking the influence of the arts and sciences on society. Of his subsequent writings the following are the most famous — "Julie, ou la Nouvelle Héloïse," a romance (1760), "Du Contrat Social" (1762), and "Emile," a philosophical romance treating of education (1762). The years 1766-67 he spent in England as the guest of Hume, but quarreled with him, and returned to France. Died, 1778.

Royce, Josiah, philosopher, psychologist and educator, born in Grass Valley, Nevada County, Cal., November 20, 1855; graduate of University of California, 1875 (Ph. D., Johns Hopkins, 1878; LL. D., University of Aberdeen, Scotland, 1900; LL. D., Johns Hopkins, 1902). Instructor in English literature and logic, University of California, 1878-82; instructor and assistant professor, Harvard, 1882-92; professor of history of philosophy, 1892-1914. Author: "Religious Aspect of Philosophy," "History of California" (in "American Commonwealth" series), "The Feud of Oakfield Creek," "The Spirit of Modern Philosophy," "The Conception of God" (joint author), "The World and the Individual," "The Conception of Immortality," "Studies of Good and Evil," "Outlines of Psychology," "Herbert Spencer, an Estimate and a Review." Died, 1916.

Rubens, Peter Paul, a distinguished Flemish painter; born in Siegen, Westphalia, June 29, 1577. He went to Antwerp in 1608, and was soon after made court painter to the Archduke Albert, Spanish governor of the Low Countries. In 1621 he was employed by the Princess Marie de' Medici to adorn the gallery of the Luxembourg with a series of paintings illustrative of the principal scenes of her life. While thus engaged he became known to the Duke of Buckingham, who purchased his museum. He was afterwards employed by the Infanta Isabella and the King of Spain in some important negotiations which he executed with such credit as to be appointed secretary of the Privy Council. He acquired immense wealth, and was twice married, the second time, in 1630, to a girl of sixteen. Rubens, beyond all comparison, was the most rapid in execution of all the great masters, and was incontestably the greatest perfector of the mechanical part of his art that ever existed. His works are very numerous, and very diversified in subject. There are nearly 100 in the picture gallery at Munich. "The Descent from the Cross," at Antwerp, is perhaps his masterpiece. He died in Antwerp, May 30, 1640.

Rudolf, or **Rodolf I.,** King of Germany, founder of the Habsburg Dynasty, was born 1218; was elected emperor in 1273, and, by his concessions to Gregory X. at his coronation, ended the feud with the pope. A war with Ottocar, King of Bohemia, was terminated by the defeat and death of the latter in 1278. His son, Wenceslaus, did homage to Rudolf for Bohemia and Moravia. Rudolf curbed the power of the nobles, and granted charters to many towns. Died, 1291.

Rudolf II., German emperor, son of Maximilian II., born in Vienna in 1552; became King of Hungary in 1572, and of Bohemia three years later; ascended the imperial throne in 1576; indolent and incapable, he left the empire to the care of worthless ministers; disorder and foreign invasion speedily followed; persecution inflamed the Protestants; by 1611, his brother, Matthias, supported by other kinsmen, had wrested Hungary and Bohemia from him; had a taste for astrology and alchemy, and patronized Kepler and Tycho Brahe. Died, 1612.

Rumford, Benjamin Thompson, Count, was born in Woburn, Massachusetts, March, 26, 1753. He was an American scientist, noted especially for his successful endeavors to apply the principles of natural philosophy to practical uses. He began life as a teacher at the town of Rumford, now Concord, New Hampshire; but, having taken part in the political movements of the time, he was sent to England by General William Howe as the bearer of despatches. There he occupied for a time the position of under-secretary of state in the colonial office; and then returned to America, where he fought on the royal side. Afterwards he entered the service of the King of Bavaria, and effected many reforms in that kingdom, in return for which he was created Count of the Holy Roman Empire, choosing Rumford for his titular designation. In 1795 he was once more in London, where he assisted in founding the Royal Institution. In 1802 he took up his residence in Paris, where he married the widow of the celebrated chemist, Lavoisier; but, having separated from that lady, he removed to Auteuil, where he remained until his death. His only literary works of importance are: "Essays, Political, Economical, and Philosophical" (1797–1802), and a volume of "Papers on Natural Philosophy and Mechanics" (1802). Died, 1814.

Runeberg, Johan Ludvig, born in 1804; Swedish poet; studied at the University of Abo; was rector of the College of Borga, 1847–50; published idylls, lyrics, and other poems. Died, 1877.

Rupert, Prince Robert, of Bavaria, was born 1619. He was a son of Frederick V., Elector Palatine, by Eliza-

beth, eldest daughter of James I., of England, and whose sister is known in English history as the Electress Sophia of Hanover. He took a prominent part in the civil wars of England under his uncle, Charles I., and was distinguished for his rash courage and impetuosity. In the reign of Charles II. he served in the fleet, and was afterwards appointed Governor of Windsor. In his last years he amused himself with scientific pursuits; and is said to have invented pinchbeck, sometimes called prince's metal, and the curious scientific toys called Prince Rupert's drops. He is buried in Henry the Seventh's Chapel, Westminster. Died, 1682.

Rush, Benjamin, American physician and politician, born at Philadelphia, 1745. He studied at Edinburgh; was a member of Congress in 1776, and signed the Declaration of Independence; became professor in the Institute of Medicine at Philadelphia in 1791. Among his works are, "Essays, Literary, Moral, and Philosophical"; "Medical Inquiries and Observations"; and "A History of the Yellow Fever." Died, 1813.

Ruskin, John, was born in London, 1819, and educated at Oxford. In 1843 appeared the first volume of "Modern Painters," which created a revolution in modern art and the estimation of artistic qualities. The remaining volumes were published in 1846, 1856, and 1860. Of Ruskin's other works on art, the chief are the "Seven Lamps of Architecture," and "Stones of Venice." About 1860 he became deeply interested in the social problems of the age, and published "Unto this Last," and "Munera Pulveris." Among his later works are "Sesame and Lilies," "The Ethics of the Dust," and "The Crown of Wild Olive," and "Præterita," a charming, though uncompleted autobiography. Mr. Ruskin was appointed Rede Lecturer, at Cambridge, in April, 1867, and the senate conferred the degree of LL. D. upon him, May 15th. From 1869 to 1879, and during 1883–84 he was Slade Professor of Fine Arts at Oxford. He was obliged to resign the post in 1884 on account of failing health. For several years prior to his death he lived in retirement at Brantwood, on Lake Coniston. Died, 1900.

Russell, Annie (Miss), actress; born in Liverpool, England, in 1864; first stage appearance in Montreal when 8, afterward at New York in juvenile "Pinafore" company; went to South America and West Indies in varied repertory; returned to United States and joined Madison Square Theater Company; became famous in "Esmeralda" and George Parsons Lathrop's "Elaine"; retired for several years on account of ill health; since 1895, has appeared in several leading rôles; first appearance in London, 1898. Has since appeared as star in "Miss Hobbs," "A Royal Family," "The Girl and the Judge," etc.

Russell, John, Earl, statesman, third son of the sixth Duke of Bedford, was born 1792. He was educated at Westminster and Edinburgh; entered parliament as a Whig in 1813; became an advocate of parliamentary reform; was instrumental in the repeal of the Test and Corporation Acts (1828), and the passing of the Catholic Relief Act (1829); was paymaster-general under Lord Grey, 1830–34, and drew up the Government Reform Bill (1832); was home secretary (1835–39), and colonial secretary (1839–41) under Lord Melbourne; led the Opposition (1841–46); was prime minister (1846–52); went as British plenipotentiary to the Vienna Conference (1855); was foreign secretary under Lord Palmerston (1859–65); again became prime minister in 1865, but resigned on the defeat of his Reform Bill in 1866. Earl Russell published an "Essay on the History of the English Government and Constitution," and numerous other works. Died, 1878.

Russell, Lillian, opera singer; born (Helen Louise Leonard) in Iowa in 1861; educated in Convent Sacred Heart, Chicago; sang in church choir, and, in 1879, was engaged by E. E. Rice to play in "Pinafore." Later, sang ballads at Tony Pastor's Theater, New York; joined McCaull Opera Company, of which she was prima donna until her own company was organized; has since starred in various operatic rôles in United States and England; married, first, Harry Braham, musical conductor; second, Edward Solomon, composer; third, Sig. Perugini, operatic tenor; fourth, A. P. Moore.

Ruysdaal (*rois'dal*), or **Ruysdael, Jacob van,** one of the most distinguished Dutch landscape painters, born at Haarlem, probably about 1625, died in the poorhouse of his native place 1682. His paintings, but little appreciated during his lifetime, now bring great prices. Fine examples of his works are to be seen in the National Gallery at London, and in the Louvre at Paris. Landscapes with dark clouds hanging over them, lakes and rivulets surrounded by overhanging trees, etc., are his subjects, and are represented with true poetic feeling and admirable technique. It is said that the figures in his paintings were executed by A. van de Velde, Philip and Pieter Wouwerman, C. Berghem, and others.

Ruyter (*roi'ter*), **Michael Adriaanszoon de,** a celebrated Dutch Admiral, born at Flushing in 1607, died, 1676, in the port of Syracuse from a wound received in an engagement with the French. He rose to his rank from the situation of cabin-boy, and distinguished himself for remarkable seamanship and bravery in many naval battles, but more especially in 1653, in 1666, and in 1672, against the British fleet.

Ryan, Patrick John, Roman Catholic archbishop, was born near Thurles, Ireland, in 1831. He was ordained deacon and completed his studies in St. Louis, Mo., and was raised to the priesthood in 1853. In 1872 was elected coadjutor bishop of St. Louis; archbishop, 1883. His administration was energetic and successful. He was transferred to Philadelphia in 1884. He was distinguished as a graceful and eloquent speaker. Author of "What Catholics Do Not Believe"; "The Causes of Modern Skepticism," etc. Died, 1911.

Ryan, Thomas Fortune, financier; born in Nelson County, Va., October 17, 1851. Began business life, 1868, Baltimore dry goods house; entered Wall Street, 1870; member of New York Stock Exchange, 1874; afterwards interested in consolidation and extension of street railway and lighting systems, New York, Chicago, and other cities, and in reorganization of various railways in the South, coal properties in Ohio and West Virginia, and railways in Ohio. Purchased controlling interest of the stock of Equitable Life Assurance Society of United States, 1905. Delegate from Virginia, Democratic National Convention, 1904. In 1908, retired as officer or director of more than thirty corporations in which he was the controlling factor. He gave $1,000,000 for Roman Catholic church, New York city, in 1912.

Sagasta, Praxedes Mateo, born in 1827; Spanish statesman, was obliged to leave the country for his share in the rising of 1856, and again, ten years later, to seek refuge in France. On his return he changed his views and joined General Prim, and held the portfolio of the interior for several years. After the accession of Alfonso XII., he formed a Liberal-constitutionalist party, and having, in 1880, joined a new Liberal combination, formed a coalition with Campos, which lasted till 1883. In 1885, Sagasta again became head of a ministry, and continued almost uninterruptedly down to 1902. Died, 1903.

Sage, Margaret Olivia Slocum, was born in Syracuse, N. Y., September 8, 1828; daughter of Joseph and Margaret Pierson (Jermain) Slocum; educated in schools of Syracuse; graduate of Troy Female Seminary, 1847 (degree, Mistress of Letters, New York University, 1904); married in Watervliet, N. Y., November 24, 1869, to Russell Sage. President of Emma Willard Association; member of Society of Mayflower Descendants. She added large sums to the endowment of Troy Female Seminary, Rensselaer Polytechnic Institute, and other institutions. Gave $50,000 to Syracuse agricultural school in 1912. Died, 1918.

Saint Clair, Arthur, an American general, was born in Scotland, in 1734. He emigrated to America, became a citizen of Pennsylvania, and a brigadier-general in the Revolutionary army, serving with distinction at the battles of Trenton and Princeton. In 1777, he became major-general, and entered Congress in 1785, of which body he was elected president two years later. In 1789, he was made governor of Northwest Territory, and two years afterwards suffered a defeat with heavy loss, at the hands of the Miami Indians. Died, 1818.

Sainte-Beuve, Charles Augustin, born in 1804; French critic; after having been a surgeon, wrote verses for the "Revue des Deux Mondes" and other periodicals, and, in 1840, became Mazarin librarian. In 1849, he joined the "Constitutionnel," in which appeared his "Causeries du Lundi." He was one of the editors of the "Dictionnaire Historique de la Langue Française." Died, 1869.

Saint Gaudens, Augustus, sculptor; born in Dublin, Ireland, in 1848; came to United States in infancy; learned trade of cameo cutter; studied drawing at Cooper Institute, 1861; student at National Academy of Design, 1865–66 (hon. LL. D., Harvard; L. H. D., Princeton); at École des Beaux Arts, Paris, 1867–70. In Rome, 1870–72, producing there, 1871, his first figure, "Hiawatha"; settled in New York, 1872. Among his works are "Adoration of the Cross" (in St. Thomas's Church, New York), "The Puritan," "Diana" (on tower of Madison Square Garden, New York); statues of Abraham Lincoln and John A. Logan, Chi-

cago; Admiral Farragut, New York; Peter Cooper, New York; Colonel R. G. Shaw, Boston; monument to General Sherman, New York, and numerous other statues and busts. Died, 1907.

Saionji, Kinmochi, former Japanese premier, belongs to an illustrious family which, in the past, has had marriage connections with the imperial family. Born in Kyoto in 1849, as a youth of 18 he gathered volunteers and fought for the emperor in the revolution. He then went to Paris, was a student in the Latin Quarter, and returned to Japan at the age of 32. He at once started a daily paper at Tokyo, and proclaimed himself a Liberal of the European type. Subsequently, the marquis became minister to Austria-Hungary and then to Germany. On his return to Japan he joined the first Ito cabinet as minister of education, a post which he again occupied in the second Ito cabinet, having been minister of foreign affairs in the interval. A great friend of Marquis Ito, Saionji assisted him to form the Constitutional Association (1900), and became its leader in 1903. At three difficult crises the mikado has called Saionji to be prime minister pro tem. Resigned premiership of Japan, 1912.

Salisbury, Marquis of, an eminent British statesman; was born at Hatfield in 1830. He was graduated from Christ Church College, Oxford, in 1849, and sat in parliament for Stamford, 1853–68. He was secretary for India, 1866–67, and again 1874–76. In the latter year he was special ambassador to the Porte, and was practically the leader of the Conference of Constantinople. In 1878 he was appointed foreign secretary, and, with Lord Beaconsfield, took a prominent part in the congress of Berlin. After the latter's death he became the leader of the Conservatives in the House of Lords, and later rose to the rank of premier. Died, 1903.

Sallust, Roman historian; born at Amiternum, in the territory of the Sabines, and attained the quæstorship and the tribunate, though a plebeian; for a misdemeanor was expelled from the senate; joined Cæsar's party in the civil war, and became governor of Numidia; enriched himself by extortions, and returned to Rome a rich man, and gave himself to literature; wrote the "Catiline Conspiracy" and the "War with Jugurtha," among other works, in a terse and forcible style, and was the precursor of Livy and Tacitus; as a writer he affects the moralist, though he lived in vice, 86–35 B. C.

Samuel, a Jewish prophet, born of the tribe of Levi, about 1155 B. C.; consecrated by his mother from earliest years to the service of the Lord; became a judge when he was 40, anointed first Saul and then David to be king over the until then disunited tribes of Israel, and thus became the founder of the Jewish monarchy.

Sand, George, nom de plume of Madame Dudevant; born in 1804; French novelist; separated from her husband in 1831, in which year was published, under the pseudonym "Jules Sand," a novel written in collaboration with Sandeau. Next year she began to write under the well-known signature, her chief works being "Consuelo," "La Comtesse de Rudolstadt," "Les Sept Cordes de la Lyre," "La Petite Fadette," "Elle et Lui," "Le Marquis de Villemer," and other plays, and "Impressions et Souvenirs." Died, 1876.

Santa Ana or **Anna, Antonio Lopez de,** born in 1795; Mexican general; fought at first for the Spaniards, but in 1829, defeated their expedition, and became president in 1833. He recognized the independence of Texas, and defended Vera Cruz against the French in 1838, but, after having been dictator from 1841 to 1844, was banished. He returned to conduct the war against the United States, and in 1853–55 was again dictator. He was afterwards banished once more for intriguing against Juarez. Died, 1876.

Santos-Dumont, Alberto, born at São Paulo, Brazil, 1873, a French aëronaut of means and leisure, whose ambition was to establish that an airship for aërial navigation "is not a mere plaything but a practical invention, capable of being applied in a thoroughly useful fashion." On October 19, 1901, he won the Deutsch prize of £10,000, offered to the first aëronaut who should go to and return from the Eiffel Tower, the Aërostatic Park, in Paris, being the starting-point. In November, 1901, the Brazilian Congress voted him £5,000 in recognition of his great services to aëronautic science. Chevalier of the Legion of Honor, 1904.

Sardou, Victorien, born in 1831; French dramatist, whose first comedy, produced at the Odéon in 1854, was a failure; won a reputation by "M. Garat," and other pieces, produced at the Déjazet Theater, and was admitted to the Academy in 1877. Among his best-known plays are "Les Pattes du Mouche," the original of "A Scrap of Paper," "Nos Intimes," of "Peril," "Dora," of "Diplomacy," "Odette," "Fédora," "La Tosca," and "Rabagas," a satire on Gambetta. Died, 1908.

Sargent, Dudley Allen, director of physical training; born at Belfast, Maine, 1849; A. B., Bowdoin College, 1875, A. M., 1887; M. D., Yale, 1878. Director Hemenway gymnasium since 1879, assistant professor physical training, 1879–89, Harvard; director of Normal school of physical training, Cambridge, Mass., 1881-1916; president Sargent school for physical education, since 1916. Inventor of modern gymnasium apparatus. Author: "Health, Strength and Power" and "Physical Education."

Sargent, John Singer, artist; born in Florence, Italy, 1856; educated in Italy and Germany; studied painting at Academy of Fine Arts, Florence, Italy, and in Paris under Carolus Duran. Exhibited portrait of Carolus Duran in Paris Salon of 1877; traveled in Spain, 1879, and on return opened studio in Paris; removed to London, 1884, and has since resided there. He ranks among the foremost of modern portrait painters. Some of his best portraits are those of Carolus Duran, Henry Marquand, Edwin Booth, Joseph Jefferson, Ellen Terry, and Theodore Roosevelt. His mural decorations in the Boston public library take place among the best works of their kind.

Saul, the son of Kish, of the tribe of Benjamin, the first king of the Israelites, was anointed by Samuel, B. C., 1091, and after a reign of forty years, filled with various events, was slain with three of his sons on Mount Gilboa. He was succeeded by David, who was his son-in-law, and whom he had endeavored to put to death. His history is contained in I. Samuel, x. to xxxi.

Savage, Minot Judson, Unitarian clergyman; born in Norridgewock, Me., June 10, 1841; graduated from Bangor Theological Seminary, 1864 (D. D., Harvard, 1896); Congregational home missionary in California, 1864–67; pastor at Framingham, Mass., 1867–69; Hannibal, Mo., 1869–73; became Unitarian; pastor of Third Unitarian Church, Chicago, 1873–74; Church of the Unity, Boston, 1874–96; Church of the Messiah, New York, 1896–1906; retired. Author: "Christianity, the Science of Manhood," "The Religion of Evolution," "Light on the Cloud," "Bluffton, a Story of To-day," "Life Questions," "The Morals of Evolution," "Talks About Jesus," "Poems," "Belief in God," "Beliefs About Man," "Beliefs About the Bible," "The Modern Sphinx," "Man, Woman, and Child," "The Religious Life," "Social Problems," "These Degenerate Days," "My Creed," "Religious Reconstruction," "Signs of the Times," "Helps for Daily Living," "Life," "Four Great Questions Concerning God," "The Irrepressible Conflict Between Two World-Theories," "The Evolution of Christianity," "Is this a Good World?" "Jesus and Modern Life," "A Man," "Religion for To-day," "Our Unitarian Gospel," "Hymns," "The Minister's Hand-book," "Psychics, Facts, and Theories," "Life Beyond Death," "The Passing and the Permanent in Religion," "Living by the Day," "Men and Women," "Can Telepathy Explain?" "Life's Dark Problems," Editor: "Sacred Songs for Public Worship" (with Howard M. Dow), "Unitarian Catechism." Died, 1918.

Savonarola, Fra Girolamo, Italian preacher; born in Ferrara in 1452; acquired great political influence in Florence, where he denounced abuses of all kinds. He was twice sent as envoy to Charles VIII. of France, and after the expulsion of Piero de' Medici was real ruler of the state, but, having been prohibited preaching and excommunicated by Alexander VI., he was attacked in his priory of San Marco, with his friends, and burnt, after being put to the torture, in 1498.

Saxe, Maurice, Comte de, born in 1696; marshal of France; was a natural son of Augustus II. of Saxony and Poland. His greatest achievements were the victories of Fontenoy, Laffeld, and Raucoux, and the capture of Maestricht. He left a work entitled "Mes Rêveries," which was published in 1757, and subsequently translated. Died, 1750.

Schaeberle, John Martin, astronomer; born in Germany, 1853; removed to Ann Arbor, Mich., 1854; apprentice in Chicago machine shop, 1868–71; became interested in astronomy; studied at Ann Arbor High School; constructed a number of telescopes; graduated from University of Michigan, C. E., 1876 (LL. D., University of California, 1898); private assistant to Professor Watson, 1876–78; assistant in Ann Arbor Observatory, instructor in astronomy and acting professor of astronomy in University of Michigan, 1878–88; astronomer Lick Observatory, Mt. Hamilton, 1888–97, acting director, 1897–98; had charge of eclipse expeditions of Lick Observatory, 1889, 1893, Cayenne and Chile, and in 1896 to Japan; has discovered three comets, and has done much original work; extensive contributor to astronomical journals.

Schiff, Jacob Henry, banker; born in Frankfort-on-the-Main, Germany, 1847; educated in schools of Frankfort; came to the United States, 1865; settled in

New York; member of firm of Kuhn, Loeb & Co., bankers; president and director of several large corporations.

Schiller, Johann Christoph Friedrich von, one of the greatest of German national poets, was born in Marbach, 1759. After completing his studies he early adopted the medical profession, and, while serving as an army surgeon, produced, in 1781, his tragedy of "The Robbers," a work which established his reputation as a dramatist. After quitting the army, he, in 1783, assumed literature for a means of livelihood, and became writer to the theater at Mannheim, in which capacity he produced his tragedy of "Fiesco." Two years afterwards, he took up his residence in Leipzig, and wrote his "Ode to Joy." In 1789, upon the recommendation of his friend Goethe, Schiller entered upon the professorship of history at Jena University; and, three years later, published his "History of the Thirty Years' War"; and, in 1799, his masterpiece, the tragedy of "Wallenstein." In 1799, he took up his abode in Weimar, where he composed his dramas of "Mary Stuart," "The Maid of Orleans," and "The Bride of Messina," as well as his exquisite poem "The Song of the Bell." Finally, in 1804, appeared one of the most popular of his dramas, "William Tell." Died, 1805.

Schley, Winfield Scott, rear-admiral of United States Navy; born near Frederick, Md., October 9, 1839; served in West Gulf blockading squadron from 1861; was in engagements leading to capture of Port Hudson, La., 1863; remained in Southern waters until 1864. Then, until 1866, in Pacific station as executive officer of gunboat "Wateree"; suppressed insurrection among Chinese coolies on Chincha Islands, 1864, and in 1865, landed 100 men at San Salvador to protect United States consulate and custom house during revolution. In 1872, was placed at head of department of modern languages at Annapolis; served in Europe, west coast of Africa and the South Atlantic States and, 1884, took command of Greely Relief Expedition and rescued Lieutenant Greely and six survivors at Cape Sabine. Commanded "Baltimore" and settled trouble at Valparaiso, Chile, 1891, when several American sailors were stoned by a mob. Carried Ericsson's body to Sweden, August, 1891, for which he received gold medal from King of Sweden. Placed in command of the "Flying Squadron" in war with Spain. Was in immediate command at the destruction of Cervera's fleet off Santiago, July 3, 1898. Promoted to rear-admiral, 1899; retired at age limit, 1901. Author: "Rescue of Greely," "Forty-five Years Under the Flag." Died, 1911.

Schofield, John McAllister, lieutenant-general in United States Army; born in Gerry, N. Y., 1831; entered West Point, 1849; graduated, 1853 (LL. D., Chicago University). Served in garrison in South Carolina and Florida until 1855; assistant professor of natural philosophy, West Point, 1855-60; under leave of absence, professor of physics, Washington University, St. Louis, until April, 1861; in the Civil War became brigadier-general, November, 1861, and major-general, November, 1862, of volunteers; commanded a department and army in the field; was in the Atlanta campaign and later commanded at the battle of Franklin, Tenn., for which he was made brigadier-general and brevetted major-general in regular army. After war became division commander; was secretary of war, 1868-69; commanded the army of the United States, 1888-95; was made lieutenant-general, 1895. Died, 1906.

Schumann-Heink, Ernestine, dramatic contralto, was born at Lieben, Bohemia, 1861; educated at Ursuline convent, Prague, and at Gratz; made début at Dresden, 1878, as Azucena in Il Trovatore; sang in Dresden four years, and in 1883 went to Hamburg; in 1896 appeared at Bayreuth and won national reputation; came to America in 1898 and for many seasons has appeared in leading cities in opera and concert. Married to Heink in 1883, to Paul Schumann in 1893, and to William Rapp, Jr., of Chicago, 1905, from whom she was divorced, 1914. In 1905 she purchased an estate at Montclair, N. J., and later became a citizen of the United States.

Schurman, Jacob Gould, president of Cornell University 1892-1920; born in Freetown, Prince Edward Island, May 22, 1854; graduate of University of London, A. B., 1877, A. M., 1878, and 1877-78 studied at Paris and University of Edinburgh. Studied two years at Heidelberg, Berlin and Göttingen and in Italy (LL. D., Columbia University, 1892; Yale University, 1901; University of Edinburgh, 1902). Was, 1880-82, professor of English literature, political economy and psychology, Acadia College; 1882-86, professor of metaphysics and English literature, Dalhousie College; 1886-92, Sage professor of philosophy, Cornell; appointed, January, 1899, by the president, chairman of United States Philippine Commission, and spent most of 1899 in the Philippines. Author: "Kantian Ethics and the Ethics of Evolution," "The Ethical Import of Darwinism," "Belief in God," "Agnosticism and Religion," "A Generation of Cornell," "Report (to Congress) of the Philippine Commission" (joint author), four volumes, 1900; "Philippine Affairs—A Retrospect and Outlook." Appointed U. S. minister to Greece, 1912.

Schurz, Carl, publicist; born in Liblar, near Cologne, 1829; educated at gymnasium, Cologne, University of Bonn (LL. D., Harvard, and of University of Missouri; LL. D., Columbia University, 1899). Published a liberal newspaper at Bonn; took part in revolutionary movements in 1848-49, and was compelled to leave Bonn, 1849; joined revolutionary army, but finally had to flee to Switzerland. Newspaper correspondent, Paris, 1851; teacher in London. Came to the United States, 1852; settled in Watertown, Wis.; was defeated as Republican candidate for lieutenant-governor of Wisconsin, 1857; member of Republican National Convention, 1860; United States minister to Spain, 1861; resigned to enter army; appointed brigadier-general, April, 1862; major-general, March 14, 1863; commanded division at Second Bull Run and at Chancellorsville, and a corps at Gettysburg, Washington correspondent to "New York Tribune," 1865-66; founded "Detroit Post," 1866; editor of "St. Louis Westliche Post," 1867; temporary chairman of Republican National Convention, Chicago, 1868; United States senator from Missouri, 1869-75; one of the organizers of Liberal party, 1872; presided over convention at Cincinnati which nominated Greeley for president; supported Hayes, 1876; secretary of the interior, 1877-81; editor "New York Evening Post," 1881-84. One of leaders of Independent movement, 1884; supported Cleveland for president; contributor to "Harper's Weekly," 1892-98; Author: "Speeches," "Life of Henry Clay," "Abraham Lincoln, an Essay." Died, 1906.

Schwab, Charles M., capitalist, ex-president of United States Steel Corporation; born in Williamsburg, Pa., April 18, 1862; childhood from 5th year at Loretto, Pa.; educated in village school and St. Francis College; as a boy drove stage from Loretto to Cresson, Pa., five miles; entered service of Carnegie Co., as stake-driver in engineering corps of Edgar Thompson steel works; rose steadily; superintendent of Homestead works, 1892-97; president of Carnegie Steel Co., Ltd., 1897-1901; president, 1901-03, of United States Steel Corporation; built new Catholic church, costing $150,000, at Loretto, Pa.; established Homestead, Pa., Industrial School, etc.

Scipio, Africanus, Publius Cornelius, born in 234 B. C.; Roman general; took Carthago Nova and conquered Spain, became consul in 205 B. C., and brought to a conclusion the second Punic War by the defeat of Hannibal at Zama (202 B. C.). He became a second time consul, but his popularity passed away on account of the arrogance of his later years. Died, 183 B. C.

Scott, Sir Walter, Bart., born in 1771; novelist; was the son of a writer to the signet in Edinburgh, and practiced for a few years as an advocate, being appointed clerk of the Court of Session in 1806. After some translations from the German, he began to write ballads, the "Lay of the Last Minstrel," being followed by "Marmion," "The Lady of the Lake," and other poems. In 1814, he published "Waverley," anonymously, and in succeeding years appeared the series called by that name. In 1820, Scott was made a baronet, but six years after he was ruined by the bankruptcy of Messrs. Constable, and he spent his later years in an honorable and successful attempt to meet his liabilities by means of his "Life of Napoleon," "Tales of a Grandfather," and contributions to the "Quarterly Review." His life was written by his son-in-law, Lockhart, and his "Journal" was published in 1890. Died, 1832.

Scott, Winfield, born in 1786; American general; was made prisoner and wounded in the War of 1812-14, and, after further services, became commander-in-chief, in 1841. Having conducted the war against Mexico, he was Republican candidate for the presidency in 1852, but was not elected. He retired from the army in 1861, and died at West Point, 1866.

Seawell, Molly Elliot, author; born in Gloucester County, Va., October 23, 1860; daughter of John Tyler Seawell (a nephew of President Tyler); educated at home. Her father died and she and her mother removed to Washington, D. C. Began writing sketches and stories in 1886. Published first novel in 1890. In 1890, her "Little Jarvis" took a prize of $500 offered by "Youth's Companion" for the best story for boys, and, in 1895, her "Sprightly Romance of Marsac" took a prize of $3,000 offered by the "New York Herald." Author: "Little Jarvis," "Midshipman Paulding,"

"Paul Jones," "Maid Marion," "Decatur and Somers," "A Strange, Sad Comedy," "The Sprightly Romance of Marsac," "A Virginia Cavalier," "The Rock of the Lion," "Gavin Hamilton," "The House of Egremont," "Papa Bouchard," "Francezka," "Children of Destiny," "Fifi," "The Great Scoop." Plays: "Maid Marion," "Sprightly Romance of Marsac." Died, 1916.

Seeley, John Robert, historian; born in 1834. In 1863, he was appointed professor of Latin at University College, London, and, in 1869, became Regius professor of modern history at Cambridge. In 1865, he published anonymously "Ecce Homo," and he also wrote "Life and Times of Stein," "The Expansion of England," and "Greater Greece and Greater Britain." Died, 1895.

Sembrich, Marcella, noted dramatic soprano, born at Lemburg, Austria, 1858; made her début at Athens in 1877, in "I Puritani," and afterwards sang at Vienna, Dresden, London, and New York, her favorite parts being Susanna, Martha, and Zerlina.

Seneca, Lucius Annæus, born about 4 B. C.; stoic philosopher; was banished from Rome on a false charge, but, returning after eight years, became tutor to Nero. Being accused of conspiracy, he died, 65 A. D., by opening his veins and suffocating himself in a warm bath. His works consist of treatises and epistles, but the tragedies ascribed to him are of doubtful authenticity.

Servetus, Michael, born in 1511; Spanish theologian; escaped from the Inquisition at Vienne to Geneva, where he was burnt to death for his Arianism by the orders of Calvin, in 1553.

Seward, William Henry, born in 1801; American statesman; was elected governor of New York in 1838, and, in 1849, became United States senator. He now headed the Republican party, and, having been an unsuccessful candidate for the presidential nomination, became secretary of state under Lincoln, in 1861. He was attacked at the same time as the latter, but recovered. He wrote a "Life of John Quincy Adams," and other works. Died, 1872.

Shafter, William Rufus, major-general in United States Army, retired; born in Galesburg, Mich., October 16, 1835. Entered Union army as first lieutenant. Brevetted brigadier-general, March 13, 1865, for gallant and meritorious services during the war; mustered out of volunteer service, November 2, 1865; entered regular army as lieutenant-colonel, January 26, 1867; brevetted colonel, United States Army, March 2, 1867, and given Congressional medal of honor for gallant and meritorious services at battle of Fair Oaks, Va. Major-general of volunteers, May, 1898; went to Tampa, Fla.; thence to Cuba, where he commanded the military operations ending in capitulation of General Linares' army and surrender of Santiago de Cuba, July, 1898. Retired, June 30, 1901, as major-general. Died, 1906.

Shah-Jehan ("King of the World"), fifth of the Mogul emperors of Delhi; succeeded his father in 1627; a man of great administrative ability and a skilled warrior; conquered the Deccan and the kingdom of Golconda, and generally raised the Mogul Empire to its zenith; his court was truly Eastern in its sumptuous magnificence; the "Peacock Throne" alone cost $35,000,000. Died in prison in 1666, a victim to the perfidy of his usurping son, Aurungzebe.

Shakespere, or **Shakspeare, William,** the greatest of the English dramatic poets, was born in Stratford-on-Avon, Warwickshire, in 1564. Of the incidents of his youth almost nothing is known, excepting that he married in his 19th year, and soon afterwards resorted to London, where he became an actor of repute at the Globe and Blackfriars theaters. In 1593, he inaugurated his literary career by the publication of his poem "Venus and Adonis"; and, in the following year, his first published play appeared, the precursor of a succession of works which constitute the crowning glory of English dramatic literature. Shakespere enjoyed the favor of Queen Elizabeth and James I., and the friendship of Southampton, Raleigh, Ben Jonson, and other of the principal of his contemporaries. After realizing an easy fortune by his contributions to the stage, he retired to his native town, and there died in 1616. Shakespere's tragedies of "Hamlet," "Macbeth," "Othello," "Romeo and Juliet," and "King Lear" are wonderful examples of his power of expressing the strongest passions of the human soul; while, on the other hand, his comedies, particularly "The Merry Wives of Windsor," "Much Ado About Nothing," "Twelfth Night," "The Taming of the Shrew," etc., are unsurpassed in the English language. Of his dramas, strictly so called, perhaps the finest are "As You Like It," "The Merchant of Venice," and "The Tempest."

Shaler, Nathaniel Southgate, scientist; born in Newport, Ky., in 1841; graduate of Lawrence Scientific School, Harvard, 1862, Sc. D., 1865; served two years as artillery officer in Union army during the Civil War; instructor in zoölogy and geology, Lawrence Scientific School, 1868–72; professor of Palæontology, 1868–87, and afterward professor of geology, Harvard; director of Kentucky geological survey, 1873–80, devoting part of each year to that work; from 1884 to 1906, geologist in charge of Atlantic division of United States geological survey. Author: "A First Book in Geology," "Kentucky, a Pioneer Commonwealth," "The Nature of Intellectual Property," "The Story of Our Continent," "The Interpretation of Nature," "Illustrations of the Earth's Surface," "Sea and Land," "The United States of America: a Study of the American Commonwealth," "Fossil Brachiopods of the Ohio Valley," "American Highways," "Features of Coasts and Oceans," "Domesticated Animals: Their Relation to Man," "The Individual: Study of Life and Death," "The Neighbor," "The Citizen," etc. Died, 1906.

Shaw, Albert, editor of "American Monthly Review of Reviews"; born in Shandon, Butler County, O., July 23, 1857; graduate of Iowa College, 1879; took course in history and political science, Johns Hopkins (Ph. D., 1884; LL. D., University of Wisconsin, 1904). Editorial writer with "Minneapolis Tribune," 1883–88, 1889–90; studied in Europe, 1888–89. Established, 1891, and has ever since conducted, "American Review of Reviews." Member of numerous learned societies; has lectured in many universities and colleges. Author: "Icaria — A Chapter in the History of Communism," "Local Government in Illinois," "Coöperation in the Northwest," "Municipal Government in Great Britain," "Municipal Government in Continental Europe." Editor: "The National Revenues"; also many articles on political science and economics, and particularly on municipal governments, in magazines, etc.

Shaw, George Bernard, was born in Dublin, July 26, 1856, and went to London in 1876. He published a few novels, "Cashel Byron's Profession," etc., which attracted little attention; joined the Fabian Society in 1884; wrote musical critiques in the "London Star," 1888–90, and the "World," 1890–94; edited Fabian essays in 1889, and, in 1895, began his work as a dramatic critic, writing in the "Saturday Review." In 1898, he published "Plays Pleasant and Unpleasant," and since then his chief literary work has been writing for the stage. His plays include "Man and Superman," "John Bull's Other Island," "Major Barbara," "The Doctor's Dilemma," "Cæsar and Cleopatra," etc.

Shaw, Henry Wheeler, an American humorist; born in Lanesborough, Mass., April 21, 1818. In 1859, he began to write, and, in 1860, sent "An Essa on the Muel, bi Josh Billings" to a New York paper. It was reprinted in several comic journals, and extensively copied. His most successful literary venture, however, was a travesty on the "Old Farmers' Almanac," 127,000 copies of which were sold in its second year. He began to lecture in 1863, and for twenty years previous to his death, contributed regularly to the New York "World." He died in Monterey, Cal., October 14, 1885.

Shays, Daniel, an American insurgent; born in Hopkinton, Mass., in 1747; served as ensign at the battle of Bunker Hill, and attained the rank of captain in the Continental army. He took a leading part in the popular movement in Western Massachusetts for the redress of alleged grievances, appearing before Springfield, Mass., at the head of 1,000 men, to prevent the session of the Supreme Court at that place, and commanding the rebel party at Pelham and at the engagement with the militia at Petersham. After the rebellion was put down, however, he was pardoned by the government, and later, in his old age, was allowed a pension for his services during the Revolutionary War. He died in Sparta, N. Y., September 29, 1825.

Shelley, Percy Bysshe, one of the most eminent of English poets, was born of a noble family, in County Sussex, in 1792. He was early distinguished by his original turn of mind for speculative inquiry, and was expelled from Oxford University on an alleged charge of atheism. Refusing to recant certain philosophical opinions he had formed, and which had given rise to his expulsion, he incurred the displeasure of his father and family. Retiring to London, he there entered upon authorship by the production of his fine poem of "Queen Mab," and contracted an unfortunate marriage with a person of humble rank, from whom he soon separated. In 1816, after the death of his first wife, he married the daughter of William Godwin, so celebrated as the authoress of "Frankenstein"; and, in the following year, gave to the world his principal work, "The Revolt of Islam." In 1818, he quitted England never to return, and took up his residence in Italy, where he became the associate of Lord Byron and Leigh Hunt, and where he wrote his tragedy of "The Cenci"; the

"Prometheus Unbound," together with many of his minor and most exquisite poems. In 1822, he perished by the capsizing of his boat, while sailing in the Gulf of Leghorn.

Shepard, Edward Morse, lawyer, born in New York, in 1850; graduate of College of City of New York, A. B., 1869. Civil service commissioner, Brooklyn, 1883–85, chairman, 1888–90; New York State forestry commissioner, 1884–85; Democratic candidate for mayor of Greater New York, 1901; afterward proposed for gubernatorial and other nominations of his party. Was director of numerous railway and other corporations. Author: "Martin Van Buren" (American Statesmen series), "Memoirs of Dugdale," and many reviews, magazine and other articles and addresses on political, industrial, and educational topics. Died, 1911.

Sheridan, Philip Henry, born in 1831; American general; distinguished himself during the Civil War at Stone River, and by his victory of Cedar Creek (October 19, 1864), and afterwards under Grant at Five Forks (April 1, 1865) and Sailor's Creek. In 1867, he quarreled with President Johnson, was removed, and took command of the department of the Missouri. Died, 1888.

Sherman, James Schoolcraft, was born in Utica, N. Y., October 24, 1855; received an academic and collegiate education, graduating from Hamilton College in the class of 1878; was admitted to the bar in 1880; was a practicing lawyer; also president of the Utica Trust and Deposit Company; served in these public positions: Mayor of Utica, 1884–85; delegate to the Republican National Convention in 1892; chairman of New York State Republican Convention in 1895, in 1900, and in 1908; chairman of the Republican National Congressional Committee in 1906; was elected to the Fiftieth, Fifty-first, Fifty-third, Fifty-fourth, Fifty-fifth, Fifty-sixth, Fifty-seventh, Fifty-eighth, Fifty-ninth, and Sixtieth Congresses. In 1908, was elected Vice-President of the United States. Renominated in August, 1912, and died October 30th following.

Sherman, William Tecumseh, born in 1820; American general; served with distinction in California, and, having in the interval been occupied in various pursuits, commanded a brigade at Bull Run (July 21, 1861), was wounded at Shiloh (April 6–7, 1862), and having led the expedition against Vicksburg, took Arkansas Post at the head of the 15th Corps. He commanded the left wing at Chattanooga (November 23–25, 1863), and was soon after made head of the army of the Tennessee. He was repulsed by Johnston at Kenesaw Mountain (June 27, 1864), but defeated his successor, Hood. After further victories he became lieutenant-general, and, in 1869, became commander-in-chief, a position which he held till 1884. Died, 1891.

Siddons, Sarah, born in 1755; English actress, *née* Kemble; joined Garrick in 1775, and soon gained fame. In 1812 she retired with a fortune, having given unrivaled renderings of the greatest characters in the tragedies of Shakespere and other writers. Died, 1831.

Sienkiewicz (*shĕn-kyā'-vĭch*), **Henryk,** celebrated Polish novelist, born in Wola Okrzejska, 1846. He was educated in Warsaw where he studied philosophy at the university. His first literary work, consisting of a sketch of student life, entitled "In Vain," and a story "Nobody Is a Prophet in His Own Country," appeared in 1872. He visited California in 1876, and, under the pen-name of "Litwos," described his experiences in letters to the "Polish Gazette" of Warsaw, which aroused much interest by their attractive style. Beginning with 1879 he published a series of dramas, stories, and Polish historical novels which established his reputation. In 1895 he won world-wide fame with "Quo Vadis," a vivid novel of Nero's day, which has been translated and dramatized in many languages. Among his works are: "With Fire and Sword," "The Deluge," "Pan Michael," "On the Field of Glory," "In Life's Whirlpool," and "In Desert and Woodland." In 1905 he was awarded the Nobel prize for literature. Died at Vevey, Switzerland, 1916.

Sigsbee, Charles Dwight, naval officer, born in Albany, N. Y., January 16, 1845; Naval Academy, 1859–63; promoted ensign, October 1, 1863; served in West Gulf squadron, 1863–64, and was present at battle of Mobile Bay; in North Atlantic squadron, 1865, and at both attacks on Fort Fisher and final assault on same; after Civil War, 1874–78, sounded and explored the Gulf of Mexico; introduced numerous inventions and new methods in deep sea exploration, for which he later received decoration of Red Eagle of Prussia from Emperor William I., and received gold medal from abroad. Took command, April 10, 1897, of battleship "Maine," which was blown up and destroyed in Havana harbor, February 15, 1898; commanded battleship "St. Paul," September, 1898, to January, 1900; rear-admiral, 1903; was member Naval Construction Board and Naval General Board. Author: "Deep Sea Sounding and Dredging," "Personal Narrative of the Battleship 'Maine.'"

Silliman, Benjamin, American naturalist, born in Connecticut, 1779; graduated at Yale College in 1796; chosen professor of chemistry there in 1802; studied in Philadelphia and later abroad, preparing for his professorship, in which position he gained great celebrity. In 1818 he founded "The American Journal of Science and Arts," the first of its kind in the United States. Died in 1864. His son Benjamin succeeded him at Yale. Born, 1816; died, 1885.

Simpson, Sir James Young, physician, born in 1811; made a specialty of obstetrics. He discovered the anæsthetic properties of chloroform. Besides several medical works he was author of "Archæological Essays." Died, 1870.

Sismondi, Jean Charles Simonde de, historian and economist, was born in Geneva in 1773; was imprisoned there in 1794, as an aristocrat, and fled to Tuscany, but in 1800, returned to his native place. His chief works are "History of the Italian Republics of the Middle Ages," "History of the French," "History of the Literature of the South of Europe," and some economical works. Died, 1842.

Sitting Bull, chief of the Sioux Indians, born about 1837; was regarded by his tribe as a great "medicine man," and was an obdurate foe of the whites. He was conspicuous in the Sioux massacre of 1862; was constantly on the war path for fourteen years; was a leader in the Indian outbreaks of 1876; and was in command at the battle of the Little Big Horn in which General Custer and his entire force were killed. With his band he escaped into Canada, but continued even there to incite rebellion among the Sioux. In 1880, receiving the promise of pardon, he returned to Dakota and surrendered to General Miles. He again incited the Indians to renewed outbreaks. His arrest was ordered and the Indian police were detailed on this duty. In attempting to resist them, he was killed December 15, 1890.

Sixtus IV., born in 1414; was elected pope in 1471; equipped a fleet against the Turks, supported the Pazzi against the Medici, and Venice against Ferrara, but excommunicated the former for not agreeing to a peace. He built the Sistine chapel. Died, 1484.

Sixtus V., born in 1521; was originally a shepherd boy near Ancona, by name Felice Peretti, but became successively general of the Cordeliers at Bologna, confessor to Pius V., and cardinal, being elected successor to Gregory XIII. in 1585. He excommunicated Henry of Navarre, Condé, and Henri III. of France, and approved the expedition of Philip II. against England; and at Rome rebuilt the Vatican library, established the press, spent large sums in improving the city, and put down brigandage in his dominions. He also fixed the number of cardinals at seventy. Died, 1590.

Smalley, George Washburn, American correspondent to London "Times," 1895–1906, born in Franklin, Norfolk County, Mass., 1833; graduated from Yale, 1853 (A. M.); Harvard Law School, 1855; practiced law in Boston, 1856–61; in Civil War, 1861–62, war correspondent to "New York Tribune"; organized European Bureau, "New York Tribune," 1866–67; in charge of its European correspondence until 1895; special U. S. commissioner, Paris Exposition, 1878. Author: "London Letters," "Studies of Men." Died, 1916.

Smith, Goldwin, author, born in Reading, England, August 23, 1823; graduated from Magdalen College, Oxford University, 1845, M. A. (D. C. L., Oxford, 1882; LL. D., Princeton, 1896); called to English bar, 1847; Regius professor of modern history, Oxford, 1858–66; active champion of North during American Civil war; visited United States, 1864; came to United States, 1868; lecturer, 1868–71, and later honorary professor of English and constitutional history, Cornell; lived in Toronto from 1871 until his death. Author: "Irish History and Irish Character," "Rational Religion and the Rationalistic Objections of the Brampton Lectures for 1858," "Does the Bible Sanction American Slavery?" "The Empire," "On the Morality of the Emancipation Proclamation," "A Letter to a Whig Member of the Southern Independence Association," "England and America," "The Civil War in America," "Three English Statesmen," "Essays on Reform," "The Reorganization of the University of Oxford," "The Irish Question," "The Relations Between America and England," "William Cowper," "Jane Austen," "Lectures and Essays," "The Conduct of England to Ireland," "False Hopes," "Loyalty, Aristocracy, and Jingoism," "The Political Destiny of Canada," "Canada and the Canadian Question," "William Lloyd Garrison: a Biographical Essay," "A Trip to England," "History of the United States," "Oxford and Her Colleges," "Bay

Leaves: Translations from the Latin Poets," "Specimens of Greek Tragedy," "Essays on Questions of the Day," "Guesses at the Riddle of Existence," "The United Kingdom," "Shakespeare: The Man," "Commonwealth or Empire," "In the Court of History," "The Founder of Christendom," "Lines of Religious Inquiry," "My Memory of Gladstone," and numerous articles in magazines. Died, 1910.

Smith, Hoke, United States senator; born at Newton, North Carolina, 1855; educated in preparatory school conducted by his father; moved to Georgia, 1872; admitted to bar, 1873; practiced at Atlanta, Georgia, 1873–1909; delegate to Democratic National Convention, 1892; secretary of the interior, 1893–96; governor of Georgia, 1907–09; reelected governor for term, 1911–13; resigned as governor, 1911, to become United States senator. Reelected to senate, 1914.

Smith, John, English colonist, was born in 1580; was taken prisoner by the Turks when in the Hungarian service, but after his escape from the Crimea went out to colonize Virginia in 1606. He was captured by the Indians, and only saved from death by Pocahontas, the Indian girl, and after his release and explorations in Chesapeake Bay, was made president of the Colonial Council. He fell into the hands of the French in 1615, and on his return to England met Pocahontas, and presented her to the queen. His "History of Virginia, New England, and the Summer Isles" appeared in 1624. He wrote various autobiographical works. Died, 1631.

Smith, Joseph, born in 1805; founder of Mormonism; was the son of a farmer in Vermont State, built Nauvoo on the Mississippi, where he was arrested for treason and murdered by the mob (1844). The "Book of Mormon" was, according to his account, a translation of records written on thin plates of metal, to the discovery of which he was supernaturally guided.

Smollett, Tobias George, born in 1721; novelist and historian; was several years in the navy, but afterwards became an author, his chief novels being "Roderick Random" and "Peregrine Pickle." He also continued Hume's "History of England," translated "Don Quixote" and "Gil Blas," and was employed as a writer against the Whigs. Died, 1771.

Socrates, born about 469 B. C., Athenian philosopher; worked at first as a sculptor, but afterwards devoted himself to gratuitous teaching. He served as a soldier in the Peloponnesian War, saving the lives of his pupils, Alcibiades and Xenophon, at Potidæa and Delium; was finally condemned to drink hemlock on a charge of impiety and the corruption of youth, 399 B. C.

Solomon, king of Israel from 1015 to 975 B. C.; second son of David and Bathsheba, and David's successor; in high repute far and wide for his love of wisdom and the glory of his reign; he had a truly Oriental passion for magnificence, and the buildings he erected in Jerusalem, including the Temple and a palace on Mount Zion, he raised regardless of an expense which the nation resented after he was gone; the burden of which it would seem had fallen upon them, for when his successor ascended the throne, ten of the tribes revolted, to the final rupture of the community, and the fall of first the one section and then the other under alien sway.

Solyman II., surnamed "The Magnificent" born in A. D. 1496; Sultan of Turkey, from 1520 to 1566. He was the greatest of the Turkish sultans, and was scarcely less remarkable for the wisdom and justice of his internal administration than for the extent of his conquests. He encouraged literature, and was himself a poet of no mean rank. He died, September 5, 1566, of fever while besieging the town of Szigeth, in Hungary, two days before the capture of the town.

Sonnino, Sidney, Baron, Italian statesman, born at Pisa, 1847. He graduated from the university of Pisa, 1865, and entered the diplomatic service. After 1880 he was a deputy in the Italian legislature. He was minister of finance, 1893-94, minister of the treasury, 1894-96, and premier and minister of the interior, 1906, and again, 1909-10. When Italy made preparations to enter the European war in December, 1914, Baron Sonnino became minister of foreign affairs and served during critical periods with ability and distinction.

Sophocles (*sŏf'o-klēz*), a famous Athenian tragic poet, was born in 495 B. C. He succeeded Æschylus in his improvement of the drama, and raised it to its highest pitch of excellence in Greece. We possess but seven of his plays, two of which belong to the trilogy of Œdipus. Died, 406 B. C.

Sothern, Edward H., actor; born in New Orleans, La., 1859; son of Edward A. S., famous comedian; first appeared in small parts with his father, Abbey's Park Theater, New York; later played in "One of Our Girls." First took leading rôle, Lyceum Theater, New York, May 23, 1887, as Jack Hammerton in "The Highest Bidder," and since has starred with his own company in "Lord Chumley" "The Maister of Woodbarrow," "The Prisoner of Zenda," "Under the Red Robe;" married Virginia Harned, 1896, Julia Marlowe, 1911.

Sousa, John Philip, musician; born in Washington, D. C., November 6, 1854; studied music; teacher at 15 and conductor at 17; was one of the first violins of Jacques Offenbach's orchestra when the latter was in the United States; band leader of United States Marine Corps, 1880–92; since 1892, director of Sousa's Band; has composed and published many marches, orchestral suites, "Te Deums," songs, waltzes and the light operas "El Capitan," "Bride Elect" (libretto and music), "The Charlatan," and "Chris, and the Wonderful Lamp." Author: "The Fifth String," "Pipetown Sandy."

Southey, Robert, born in 1774, poet and biographer, son of a linendraper at Bristol; settled at Keswick in 1803, and there wrote "The Curse of Kehama," and all his chief poems, except "Thalaba," as well as his lives of Nelson and of Wesley, "The Doctor," and contributions to the "Quarterly." He became poet laureate in 1813 and received a pension in 1835. He was twice married, first to Edith Fricker, sister of his friend Coleridge's wife, and secondly to Caroline Bowles, romance-writer and poet, who died in 1854. Died, 1843.

Sparks, Edwin Erle, educator, historian; was born in Licking County, O., 1860; was graduated from the Ohio State University, 1884; A. M., 1891; Ph. D., University of Chicago, 1900; was instructor in the Ohio State University, 1884–85; professor Pennsylvania State College, 1890–95; lecturer, instructor, and later professor American History, University of Chicago, 1895–1908, and dean of University College, 1905–06; president Pennsylvania State College, since 1908; member American Historical Association, Illinois Historical Society (director); and councilor American Institute of Civics. Author: "Expansion of the American People," "The Men Who Made the Nation," "Formative Incidents in American Diplomacy," "The United States of America," "Foundations of National Development."

Sparks, Jared, born in 1789; American writer; became professor of history at Harvard in 1839, and president of the college in 1849. His chief work was "Life and Writings of Washington." Died, 1866.

Spartacus, died, 71 B. C.; a Thracian, who headed the revolt of the gladiators at Capua. After some successes he was defeated by Crassus and slain.

Spencer, Herbert, born in 1820; utilitarian philosopher; was for some years a civil engineer before engaging in literature. Going to London he became intimate with George Eliot and G. H. Lewes, and in 1850, published "Social Statics." He undertook a lecturing tour in America, in 1882, previous to which had appeared "Principles of Psychology," "First Principles," "Education," "Principles of Biology," "The Study of Sociology," "The Data of Ethics," "The Man vs. The State," and other works followed. Died, 1903.

Spenser, Edmund, born in 1552; English poet; went to Ireland in 1580, as secretary to Lord Grey de Wilton, and lived in Cork County in the intervals till the rebellion of Tyrone. The "Faërie Queene" was partly printed in 1590, his other chief works being "The Shepherd's Calendar," "Colin Clout's Come Home Again," and "View of the State of Ireland." Died, 1599.

Speyer, James, banker; born in New York, 1861; educated at Frankfort-on-the-Main, Germany. Entered family's banking house in Frankfort-on-the-Main at age of 22; later transferred to Paris and London branches to receive thorough business education before returning to take charge of New York house; he is now senior of the Speyer houses. One of founders and treasurer of The Provident Loan Society, which lends money to needy people on personal property at legal rates of interest. Trustee or director of numerous corporations; member New York Chamber of Commerce.

Spofford, Ainsworth Rand, chief assistant librarian of Congress; born in Gilmanton, N. H., September 12, 1825; classical education from private tutors (LL. D., Amherst, 1882). Bookseller and publisher, Cincinnati; associate editor of "Cincinnati Daily Commercial," 1859–61; first assistant librarian of Congress, 1861–64; librarian-in-chief, 1864-97; after that chief assistant librarian. Editor: "Catalogues of the Congressional Library," "Annual American Almanac, 1878–89," edited, with others, "Library of Choice Literature" (ten volumes), "Library of Historic Characters and Famous Events" (ten volumes), "Library of Wit and Humor" (five volumes). Author: "Practical Manual of Parliamentary Rules," "A Book for all Readers — an aid to collection, use, and preservation of books, and the formation of libraries," and numerous articles in reviews and cyclopædias, lectures. Died, 1908.

Spreckels, Claus, sugar refiner; born in Lamstedt, Hanover, 1828; came to the United States in 1846; was employed at Charleston, S. C., and New York; went to San Francisco, 1856; conducted a store, and later a brewery. Established Bay Sugar Refinery, 1863, procuring raw material from Hawaii; invented new refining processes; acquired sugar properties in Hawaii; built new refineries; had a beet-sugar farm of 1,500 acres and factory at Watsonville, Cal., and was large owner in Oceanic Steamship Company, plying between San Francisco and Honolulu. Died, 1908.

Spring-Rice, Sir Cecil Arthur, British diplomat; born, 1859; educated at Eton and at Balliol college, Oxford. Secretary at Brussels, Washington, Tokyo, Berlin, and Constantinople; charge d'affaires, Teheran, 1900; British commissioner of public debt, Cairo, 1901; first secretary of embassy at Petrograd, 1903–05; minister and consul-general, Persia, 1906-08; envoy extraordinary and minister plenipotentiary to Sweden, 1908-12; British ambassador at Washington after 1913, succeeding the Rt. Hon. James Bryce. Died, 1918.

Spurgeon, Charles Haddon, born in Essex in 1834; Baptist preacher; went to London in 1853, the Metropolitan Tabernacle being opened in 1861. His sermons were published weekly almost from the beginning, and had a large sale. In 1887, he withdrew from the Baptist Union. Died, 1892.

Standish, Miles, one of the Puritan fathers, of Lancashire birth, and a cadet of a family of knightly rank in the country, served in the Netherlands as a soldier, and came to America in the "Mayflower," in 1620, and was helpful to the colony in its relations with both the Indians and the mother country. Standish is the hero of a poem of Longfellow's.

Stanley, Arthur Penrhyn, born in 1815; divine, son of Edward, Bishop of Norwich (died, 1849); author of "Familiar History of Birds"; was educated at Rugby and Balliol, and became professor of ecclesiastical history at Oxford in 1858. He visited the East in 1853 and 1862, and was appointed dean of Westminster in 1863. Among his works are "Life of Dr. Arnold," "Sinai and Palestine," and "Essays on Church and State." Died, 1881.

Stanley, Henry Morton, D. C. L., African explorer; born in Wales in 1841; took the name of his adopted father in place of that of Rowlands, and having served in the American Civil War, and been a war correspondent in Turkey and Abyssinia, was, in 1870, sent to find Livingstone, whom he met at Ujiji (November 10, 1871), and having explored with him, came home in 1872. In 1874, he again went to Africa, and in the course of four years explored Victoria and Albert Nyanza, and the Congo. In 1879–84 he once more visited the latter, and, in 1887, went to relieve Emin Pasha. "How I Found Livingstone," "Through the Dark Continent," and "In Darkest Africa" describe his expeditions. Died, 1904.

Stanton, Edwin M., an American statesman, was born in Steubenville, O., in 1814. He practiced law with success in his native town until 1847, when he settled in Pittsburgh, Pa., and there became leader of the bar. In 1857 he took up his abode in Washington, and, in 1860, was made attorney-general of the United States, and, in 1862, secretary of war. This arduous post he filled throughout the Civil War with conspicuous energy, industry, and ability. He retained office after the death of President Lincoln, until 1867, when he was suspended by President Johnson, who appointed General Grant in his place *ad interim*. The latter, however, held the appointment only a few months, that is to say, till Stanton's reinstation by the senate in January, 1868. In May, he definitely retired from the secretaryship; in December, 1869, was appointed an associate justice of the Supreme Court of the United States, and died during the same month.

Stead, William Thomas, English journalist, was born at Embleton, Northumberland, 1849, the son of a Congregational minister. At an early age he entered journalism, and in 1871 became editor of the Darlington "Northern Echo." He was assistant editor of "Pall Mall Gazette," 1880–83, editor, 1883-89. In 1890 he founded the English "Review of Reviews," and was its editor from 1890 to 1912. Among his publications are: "Maiden Tribute of Modern Babylon," "The Truth about Russia," "The Pope and the New Era," "The Story that Transformed the World," "If Christ Came to Chicago," "The Labor War in the United States," "Satan's Invisible World," "The Americanization of the World." He lost his life on the ill-fated Titanic in 1912.

Stedman, Edmund Clarence, poet, critic; born in Hartford, Conn., in 1833; educated at Yale, class of 1853, A. M. Editor of Norwich (Conn.) "Tribune," 1852–53; Winsted (Conn.) "Herald," 1854–55; on staff of New York "Tribune," 1859–61; war correspondent for "World," 1861–63; member of New York Stock Exchange, 1869–1900. Author: "Poems, Lyric and Idyllic," "Alice of Monmouth—an Idyl of the Great War," "The Blameless Prince," "Poetical Works," "Hawthorne, and Other Poems," "Lyrics and Idyls," "Mater Coronata." Critical works: "Victorian Poets," "Poets of America," "The Nature and Elements of Poetry." Editor: "A Library of American Literature," 1888–89; "A Victorian Anthology," "An American Anthology." Died, 1908.

Stefansson, Vilhjálmur, arctic explorer, born at Arnes, Manitoba, 1879. After graduating at the State University of Iowa, 1903, he studied at Harvard Divinity School, 1903–04, and at Harvard Graduate School, 1904–06. During 1904 and 1905 he made archæological trips to Iceland. In 1906–07 he made an ethnological expedition, under the auspices of Harvard and Toronto universities to the Eskimo of the Mackenzie delta. For the American Museum of Natural History in conjunction with the Canadian government, he made, 1908–12, a second expedition to the Mackenzie region. On this trip of 52 months he discovered and lived for a year with Eskimo who had never seen a white man; he also discovered Horton river, 500 miles long. As commander of the Canadian Arctic Expedition, 1913–18, he found new land north of Banks island and new islands west of Heiberg island. Author: "With the Eskimo," "Friendly Arctic," and various scientific papers.

Stephen, Leslie, born in 1832, son of Sir James; was for several years fellow and tutor of Trinity College, Cambridge; edited the "Cornhill" for eleven years, and, in 1882, undertook the editorship of the "Dictionary of National Biography," which he resigned in 1891. Among his works are "History of English Thought in the Eighteenth Century," "The Science of Ethics," and a "Life of Henry Fawcett." Died, 1904.

Stephens, Alexander Hamilton, an American statesman, was born in Georgia in 1812. Sent to Congress by the Whig party in 1843, he retained his seat in that body till 1859, during which period he supported the annexation of Texas, promoted the passage of the Kansas and Nebraska Act of 1854, and joined the Democratic party in upholding the measures of President Buchanan. In 1860, he opposed the secession of his State, but in the following year, gave in his adhesion to sectional views, and was elected vice-president of the Southern Confederacy. After the collapse of the latter, Stephens suffered a brief imprisonment in Fort Warren, and, after being reëlected senator to Congress, in 1866, was not allowed to take his seat. In 1869, he published "A History of the War of Secession," and, in 1870, "A Constitutional View of the War Between the States." Died, 1883.

Stephenson, George, engineer; was born in Wylam in 1781; worked as a collier and a brakesman. The invention of a safety lamp, in 1815, brought him fame and a public testimonial of 1,000 pounds. His first engine had been constructed before this, and, in 1829, he won a prize of £500 for the best engine, his locomotive, the "Rocket," being fitted with the "blast-pipe." Died, 1848.

Stephenson, Robert, born in 1803; son of the above; won the mathematical prize in a six-months' course at Edinburgh University, and returned to help his father. He constructed the "Planet," the model of the modern locomotive, and won world-wide reputation as a constructor of bridges, and in connection with railways. He entered parliament in 1847. Died, 1859.

Sterne, Laurence, born in 1713; Irish divine and writer, author of "Tristram Shandy" (1759–67), "The Sentimental Journey," and "Letters to His Friends" (posthumous). Died, 1768.

Stevenson, Adlai Ewing, vice-president of the United States, 1893–97; born in Christian County, Ky., October 23, 1835; educated in common schools and Center College, Danville, Ky.; was not graduated; family removed to Bloomington, Ill., when he was 17 years old; admitted to bar, May, 1857; master in chancery, 1860–64; member of Congress, 1875–77; delegate to Democratic National Convention, 1884 and 1892; first assistant postmaster-general, 1885–89; after term as vice-president, appointed in 1897 member of the commission to Europe to try to secure international bimetallism. Democratic nominee for vice-president of the United States, 1900. Died, 1914.

Stevenson, Robert Louis, noted novelist and poet, was born in Edinburgh, 1850. He was the son of a Scotch engineer but gave up the family profession for literature, rising to foremost rank. His works include: "An Inland Voyage," "Virginibus Puerisque," "New Arabian Nights,"

"Treasure Island," "A Child's Garden of Verses," "Prince Otto," "Strange Case of Dr. Jekyll and Mr. Hyde," "Kidnapped," "The Master of Ballantrae," "The Wrecker," "A Footnote to History." In 1890 he went to live in Samoa, where he died in 1895.

Steyn, Martinus Theunis, a Boer statesman; born in Winburg, Orange Free State, October 2, 1857; worked on his father's farm till 1876, when he went to England to study. He returned to Africa in 1882, and practiced law in Bloemfontein till 1889, when he was made second puisne judge and state attorney. Later, he became first puisne judge, and in 1896 was chosen last president of the Orange Free State. Died, 1916.

Stillman, James, banker, president National City Bank; born in Brownsville, Tex., June 9, 1850; youth spent in Hartford, Conn., and in private school at Sing Sing, N. Y.; partner, 1871–73, in Smith, Woodman & Stillman, and after 1873 in their successors, Woodman & Stillman, cotton commission merchants; director New York Central & Hudson River Railroad Company, Chicago & North-Western Railway Company, Baltimore & Ohio Railroad, Delaware, Lackawanna & Western Railroad Company (member board of managers), Western Union Telegraph Company, Hanover National Bank, Riggs National Bank (Washington), Southern Pacific Company, United States Trust Company, Lincoln National Bank, Northern British & Mercantile Insurance Company, Queen Insurance Company, and many railway, financial, insurance, and other corporations. He lived much abroad, especially in France. Died, 1918.

Stimson, Frederic Jesup, American lawyer, and author; born in Dedham, Mass., July 20, 1855; graduate of Harvard, 1876; Harvard Law School, 1878. Member of New York and Boston bars; assistant attorney-general, Massachusetts, 1884–85; general counsel to the United States Industrial Commission, 1898–1902. Professor of comparative legislation, Harvard. Besides writing law books, he has written several novels (the earlier ones under the pen-name, "J. S. of Dale"), and essays. Author: "Rollo's Journey to Cambridge," "Guerndale," "The Crime of Henry Vane," "American Statute Law" (two volumes), "The Sentimental Calendar," "First Harvests," "Stimson's Law Glossary," "In the Three Zones," "Government by Injunction," "Labor in Its Relation to Law," "Mrs. Knollys and Other Stories," "Handbook to the Labor Law of the United States," "Uniform State Legislation," "Pirate Gold," "King Noanett," "Jethro Bacon of Sandwich," also a series of magazine articles on "The Ethics of Democracy."

Stolypin, Peter Arkazhevich, Russian prime minister; born in 1863; the son of a popular general, he had a brilliant career at the University of Petrograd, and, after graduating in 1884, obtained an appointment at the Ministry of the Interior. After two years he was transferred to the Ministry of Agriculture, where he remained another two years, then retiring for a time into private life and devoting himself to the management of his estate in Kovno Government. He served as marshal of the district nobility, president of the arbitration board and justice of the peace, and in 1899 became marshal of the provincial nobility. He was appointed vice-governor of Grodno in 1902, governor of Saratoff in 1903, and from Saratoff he was called to Petrograd to take up the portfolio of the interior. He was one of the few ministers to whom the Duma was ready to listen. When Goremykin resigned in 1906, Stolypin succeeded him as premier, was thanked by the czar for his services, and appointed a member of the Council of the Empire, January 13, 1907. His integrity and equity are recognized by all. Died, 1911.

Stone, Marcus, English painter, born in 1840. At an early age he illustrated books by Dickens, Trollope, and others. His pictures are mostly subjects of human and historical interest. He exhibited in more than fifty exhibitions of the Royal Academy. Most of his works have been engraved; he received medals at exhibitions in various parts of the world. Died, 1921.

Storey, Moorfield, lawyer; born in Roxbury, Mass., March 19, 1845; graduated from Harvard, 1866, A. M., 1869; studied at Harvard Law School; admitted to bar, September, 1869; private secretary to Charles Sumner, 1867-69; editor, "American Law Review," 1873–79; overseer, Harvard College, 1877–88 and 1892–1910; president of American Bar Association, 1896; president of Massachusetts Reform Club, 1898–1901; independent in politics. President of Anti-Imperialist League since 1905; president bar association, city of Boston, 1909–12. Author: "Life of Charles Sumner" (statesman series), "The American Legislature," "A Year's Legislation," "The Government of Cities," pamphlet "Politics as a Duty and as a Career" and various other pamphlets and occasional addresses.

Story, Joseph, a distinguished American jurist; born in Marblehead, Mass., in 1779; graduated at Harvard College in 1798, and after being called to the bar rapidly rose to eminence as a special pleader. In 1808, he entered Congress, and in 1811 became one of the justices of the United States Supreme Court. As a jurist and an exponent of international law, Judge Story stands in the front rank, not only in his own country, but also in Europe. His published works embrace the masterly "Commentaries on the Conflict of Laws," "Commentaries on the Constitution of the United States," "Commentaries on Equity Jurisprudence," "A Treatise on the Law of Agency." Died, 1845.

Story, William Wetmore, born in 1819; son of the above; published "Contracts not under Seal," and other legal works, but afterwards devoted himself to literature and sculpture. Among his publications are several poems, "Origin of the Italian Language and Literature," and "Conversations in a Studio." He executed numerous monuments, statues, and busts. Died, 1895.

Stowe, Harriet Beecher, an American novelist; was born in Litchfield, Conn., in 1811; a daughter of Dr. Lyman Beecher, and married, in 1836, Professor C. E. Stowe of Andover. In 1851 she made a sensation in the literary world by the publication of "Uncle Tom's Cabin," a work of fiction which had quite an astonishing success, and was translated into almost every language of Europe. To this book she added a "Key" in 1853. Her later productions comprise "Dred, a Tale of the Great Dismal Swamp," "The Minister's Wooing," "Agnes of Sorrento," and "Oldtown Folks." In 1869 she brought out a brochure entitled "The True Story of Lord Byron's Life," in which she accused Lord Byron of incest. This article evoked a storm of literary criticism, which was by no means allayed by the publication, in 1869, of Mrs. Stowe's work, entitled "Lady Byron Vindicated." In 1871, appeared "Oldtown Fireside Stories," "Pink and White Tyranny," and "My Wife and I," or "Harry Henderson's History." Died, 1896.

Strathcona, Baron, Canadian statesman; born in 1820; joined the Hudson Bay Company at an early age, and acted as special commissioner in Red River Rebellion; became governor of the company and director of Canadian Pacific and other Canadian railways; honorary president Bank of Montreal; chancellor of Aberdeen University and McGill University; represented Selkirk and Montreal in the Dominion House, and was high commissioner for Canada, 1896–1911. Raised Strathcona's Horse for service in South African War; was a munificent benefactor to Canada. With Lord Mount-Stephen, gave an endowment of £16,000 a year to the king's hospital fund. Died, 1914.

Straus, Oscar S., secretary of commerce and labor, 1906–09; was born December 23, 1850; graduated from Columbia College (now Columbia University), New York City, and Columbia Law School; practiced law, 1873–81; engaged in mercantile pursuits as a member of the New York firm of L. Straus & Sons; minister to Turkey, 1887–89, 1898–1901, 1909–11; appointed by President Roosevelt, in 1902, as a member of the permanent court of arbitration at The Hague in the place of ex-President Harrison, deceased. Progressive candidate for governor of New York, 1912. Author of numerous publications dealing with history and international law: "The Origin of Republican Form of Government in the United States," "Roger Williams, the Pioneer of Religious Liberty," "The Development of Religious Liberty in the United States," "United States Doctrine of Citizenship and Expatriation," and "Reform in the Consular Service"; Litt. D., Brown University, and LL. D., University of Pennsylvania, Washington and Lee, and Columbia universities.

Strauss, Richard, musical composer; was born June 11, 1864, in Munich, where his early studies began, his father being first horn player in the orchestra of the Court opera house. Appointed conductor at Meiningen in 1885; from 1889 to 1894, he was Hofkapellmeister (with Eduard Lassen) at Weimar, and later conductor at the Munich opera house. He has written many charming songs, but his distinctiveness as a modern composer is chiefly due to extraordinarily elaborate instrumental works. A Richard Strauss festival was held at St. James's Hall, London, England, in June, 1903, when "Ein Heldenleben," "Also Sprach Zarathustra," and other symphonic poems from his pen were performed. His opera "Salome," based on Oscar Wilde's work, has provoked much discussion.

Stuart, Gilbert Charles, "American Stuart"; born in 1755; portrait-painter; went to England when young, and lived there till 1793. He was a pupil of West, and executed portraits of George III., George IV., Louis XVI., Washington, Reynolds, and others. Died, 1828.

Stuart, James E. B., born in 1833; American general; celebrated for his services to the Confederates, his chief exploits being the night attack of August, 1862, when General Pope's papers were captured, and the raid across the Potomac in the same year. He was mortally wounded at Yellow Tavern; died at Richmond, 1864.

Stubbs, William, D. D., born in 1825; historian and divine; became Regius professor of modern history at Oxford in 1866, Bishop of Chester in 1884, and of Oxford in 1889. His chief works are "Select Charters," "Constitutional History of England to 1485," and editions of the "Chronicles" of Benedict of Peterborough and Roger of Hoveden. Died, 1901.

Sudermann, Hermann, German dramatist and novelist, was born in Matzicken, in East Prussia, September 30, 1857; studied in the universities of Königsberg and Berlin, and became a teacher and journalist. He published a series of tales, of which "Frau Sorge," "Der Katzensteg," and "Es War," are the most impressive. The drama "Sodom's Ende" was produced in 1890, and was followed by "Die Heimat," which, translated as "Magda," has been represented by Duse, Sarah Bernhardt, and Mrs. Patrick Campbell. His later works include "Das Glück im Winkel," "Reiherfedern," "Morituri," "Johannes," and "Das Johannisfeuer." In October, 1906, "Das Blumenboot" was produced in Berlin, and "Rosen" at Vienna in October, 1907.

Sue, Eugène, an eminent French novelist, was born in Paris, 1804. His most popular works are, "The Mysteries of Paris," and "The Wandering Jew." Died, 1857.

Sully, Thomas, an eminent American painter, was born in County of Lincoln, England, in 1783. While a boy he emigrated to America, and studied his art at Charleston, afterwards successively taking up his residence in Richmond, Va., New York, and Philadelphia. As a portrait painter, he enjoyed great reputation, many of the most illustrious personages of the time being among his sitters. His chief historical work is "Washington Crossing the Delaware," now in the Boston Museum. Died, 1872.

Sumner, Charles, born in 1811; American statesman and jurist; delivered a powerful speech against war in 1845, "The True Grandeur of Nations," and in 1851 was elected United States senator. In 1856, he made a speech, "The Crime Against Kansas," which caused a personal attack upon him by a Southern delegate. In 1860, he made his oration, "The Barbarism of Slavery," was chairman of Committee on Foreign Relations, 1861-71; was a strong supporter of the American claims in the "Alabama" case. Died, 1874.

Swedenborg, Emanuel, founder of the "New Church," was born in Stockholm, 1688, and occupied himself as a scientific engineer until 1743, from which time he began to write, when living in Sweden or England, among his numerous works being "Arcana Cœlestia," "De Cultu et Amore Dei," "The True Christian Religion," and several scientific treatises. Died, 1772.

Swift, Jonathan, the greatest of English satirists; born in Dublin, Ireland, 1667. He was the posthumous son of Jonathan Swift, an Englishman; and was educated at Kilkenny and at Trinity College, Dublin. In 1701, he took his doctor's degree, and in 1704, he published anonymously his famous "Tale of a Tub," to which was appended the "Battle of the Books." In 1710, Swift began his "Journal to Stella," which constitutes a splendid commentary on his own history. He wrote many political pamphlets supporting the Tory policy of his day, the most powerful of which was "The Conduct of the Allies." His celebrated "Drapier's Letters" made him the idol of the Irish people. His famous "Gulliver's Travels," appeared in 1726. Swift did much to make public opinion a governing power in English politics. He died in Dublin (1745), bequeathing the greatest part of his fortune to a hospital for lunatics and idiots.

Swinburne, Algernon Charles, son of Admiral Swinburne, was born in London, 1837. Educated at Balliol College, Oxford. Visited Florence, and passed some time there. His first productions were two plays "Queen Mother," and "Rosamond." These were followed by two tragedies, "Atalanta in Calydon," and "Chastelard," and "Poems and Ballads," which met with severe criticism. His later works are "A Song of Italy," "William Blake, a critical essay"; "Songs Before Sunrise," in which he glorifies Pantheism and Republicanism; "Studies in Song," "A Century of Roundels," "Life of Victor Hugo," a poem on "The Armada," "A Study of Ben Jonson," "Astrophel, and other Poems," "Studies in Prose and Poetry," "The Tale of Balen," "Rosamund, Queen of the Lombards," "A Channel Passage, and other Poems," and "Love's Cross-Currents." Died, 1909

Sybel, Heinrich von, born in 1817; German historian and politician, held chairs at Marburg, Munich, and Bonn, and in 1875, became director of state archives. He opposed Bismarck's Polish policy in the "Prussian Landtag," and entered the Reichstag in 1867. His chief work is "History of the French Revolution." Died, 1895.

Sylvester, James Joseph, mathematician, born in 1814; after holding chairs at University College, in the University of Virginia, at Woolwich, and at the Johns Hopkins University, Baltimore, became Savilian professor of geometry at Oxford, in 1883. He dicovered the "theory of reciprocants," invented the plagiograph and other instruments. Published "Laws of Verse" and other works. Died, 1897.

Tacitus, Çaius Cornelius, born in 55 A. D.; Roman historian; married the daughter of the consul Agricola, was quæstor under Vespasian, ædile under Titus, prætor under Domitian, and consul under Nerva. His chief works are the "Life of Agricola" and the "Germania," both written about 98, the "Histories" extending from 68 to 96, and the "Annals," extending from 14 to 68. Died about 117.

Taft, Lorado, sculptor; born in Elmwood, Ill., April 29, 1860; graduate of University of Illinois, 1879; studied at École des Beaux Arts, Paris, 1880-83. Instructor in Chicago Art Institute since 1886; lecturer on art University Extension Department of University of Chicago, 1892–1902. Author: "The History of American Sculpture."

Taft, William Howard, twenty-seventh President of the United States; born in Cincinnati, September 15, 1857; graduate of Yale, B. A., 1878; Law School, Cincinnati College, LL. B., 1880; admitted to Ohio bar, 1880; law reporter Cincinnati Times, and later of Cincinnati Commercial, 1880–81; assistant prosecuting attorney, Hamilton County, Ohio, 1881–83; collector internal revenue, first district, Ohio, 1882–83; practiced law, Cincinnati, 1883–87; assistant county solicitor, Hamilton County, 1885–87; judge Superior Court of Ohio, 1887–90; solicitor-general of United States, 1890–92; dean and professor in law department, University of Cincinnati, 1896–1900; United States circuit judge, sixth circuit, 1892–1900; president of United States Philippine Commission, 1900–01; first civil governor of Philippine Islands, 1901 to 1904; secretary of war, United States, 1904–08. On November 3, 1908, he was elected President of the United States, and inaugurated March 4, 1909. In 1912 he was nominated for president by the republican party, but was defeated. Made Kent professor of law, Yale, 1913. In 1921 he was appointed chief-justice of the United States Supreme Court.

Tagore (*tä-gōr'*)**, Sir Rabindranath,** Hindu poet, was born in Calcutta, 1860. He spent his childhood in his native city but at seventeen was taken to Europe for further education. Returning to India and devoting his time to writing, he became a prominent journalist and well known also as an educator, philosopher, and religious teacher. His early productions were romantic and sensuous, but his later work reveals a marked change to idealism and spirituality. His poetry has exerted a remarkable power over the masses in Bengal. His native tongue is Bengali, but he has also acquired a fine English style so that his influence, at first confined to the Bengal peoples, has extended to the western world. In 1913 he was awarded the Nobel prize for literature. Among his works available in English are: "The Crescent Moon (child poems)," "The Gardener," "Gitanjali," "Song Offerings," and "Sadhana: The Realization of Life."

Tait, Peter Guthrie, born in 1831; a man of science, educated at Cambridge, became professor of natural philosophy at Edinburgh, in 1860. He published works on "Quaternions," "Heat and Light," a "Treatise on Natural Philosophy," written in conjunction with Sir William Thomson, and other works. Died, 1901.

Talfourd, Sir Thomas Noon, born in Reading, in Berkshire, 1795; an English judge, distinguished also as a graceful novelist. He was the author of a tragedy; "Letters of Charles Lamb, with a sketch of his Life," "Final Memorials of Charles Lamb," and several other works. Died, 1854.

Talma, François Joseph, born in 1763; French actor; made his début at the Comédie Française, in 1787. He confined himself to tragedy in his later years. Among his finest impersonations were Marigny in "Les Templiers," and Charles IX. Died, 1826.

Tamerlane, or Timour, surnamed The Great, an Asiatic conqueror, was born of Mongol race, at Kesh in Independent Tartary, 1336. After subjecting to his arms Khorasan, Armenia, and the greater part of Persia, he defeated the Bashkirs, took Bagdad and Damascus, subjugated Georgia, and advanced into Russia as far as Moscow. In 1398, he invaded India, where he defeated the army of the Grand Mogul near Delhi. After gaining

in 1402, a decisive and sanguinary battle in Angora, over the Ottoman Turks commanded by their sultan Bajazet, Tamerlane died, 1405, on his march towards China, which country he next intended to invade.

Tarquinius, Lucius Priscus (*tar-kwĭn'e-us*), the fifth King of Rome, according to the legends, succeeded Ancus Martius, 616, and died 578 B. C. Tarquinius Lucius Superbus was a grandson of the preceding. He had married one of the daughters of Servius Tullius, but her sister, whose ambition resembled his own, by a series of horrid crimes, secured him as her husband, and urged him to the murder of her father to secure the throne, 534 B. C. He reigned as a tyrant; but in the end it was the rape of Lucretia, by his son Sextus, which overthrew at once both him and the kingly rule in Rome. The date of the Regifuge or expulsion of the Tarquins was said to be 510 B. C.

Tasso, Torquato, Italian poet, was born in Sorrento, 1544, and studied law at the university of Padua, where he published his earliest poem, "Rinaldo," in 1562. In 1565, he entered the service of Cardinal Luigi d'Este, and was invited to the court of his brother, Alfonso, Duke of Ferrara. While there he wrote his pastoral drama "Aminta," and in 1575, finished his great epic, "La Gerusalemme Liberata," describing the first Crusade, which was published in 1581. In 1577 he was imprisoned by Alfonso in a convent, from which he escaped. In 1579, he returned to Ferrara, but was confined in a madhouse, where he remained till 1586, when he was released at the intercession of the Duke of Mantua and other princes. In 1594, Clement VIII. summoned him to Rome to receive a laurel crown, but he died soon after his arrival (1595).

Taussig, Frank William, professor of political economy, Harvard; born in St. Louis, December 28, 1859; graduate of Harvard, 1879 (Ph. D., 1883; LL. B., 1886). Author: "Tariff History of United States," "Silver Situation in United States," "Wages and Capital," etc. Editor of "Quarterly Journal of Economics."

Taylor, Bayard, an American author and traveler, was born in Chester County, Pa., 1825. In 1847, he became one of the editors of the "New York Tribune," and later traveled extensively, giving the results of his observation in numerous works, prominent among which are "El Dorado, or Adventures in the Path of Empire," or "Mexico and California," "Central Africa," "Greece and Russia," "India, China, and Japan," and "Lands of the Saracen." He is author also of several novels, volumes of poetry, etc. Some of his works have been translated into French, German, and Russian. Taylor was appointed United States minister at Berlin, in 1878, and died the same year.

Taylor, Hannis, lawyer; born in Newbern, N. C., September 12, 1851; educated in University of North Carolina (LL. D., Edinburgh, Dublin); admitted to bar, 1870; practiced at Mobile, Ala., 1870–92; minister to Spain, 1893–97. Special counsel for Government of United States before Spanish Treaty Claims Commission, 1902, and before the Alaskan boundary commission, 1903. Author: "The Origin and Growth of the English Constitution," "International Public Law," "Jurisdiction and Procedure of the Supreme Court of the United States."

Taylor, Jeremy, divine; born in Cambridge in 1613; after studying in the university of that town, attracted the attention of Archbishop Laud, who presented him to a fellowship at Oxford (1636). He soon afterwards became chaplain to Charles I., was rector of Uppingham, 1638–42, and accompanied the king to Oxford. About 1645, he withdrew into Wales, where he kept a school at Newton, in Caermarthenshire, and afterwards found a shelter in the house of the Earl of Carbery. He removed to Ireland in 1658, and, after the Restoration, was made bishop of Down and Connor. His chief works are "Rules and Exercises of Holy Living and Dying," the "Liberty of Prophesying," "Ductor Dubitantium," and his "Sermons." Died, 1667.

Taylor, Robert Love, lawyer, United States senator; born in Happy Valley, Carter County, Tenn., in 1850; educated in Pennington, N. J.; admitted to Tennessee bar, 1878; member of Congress, 1879–81; elector at large on Cleveland ticket, 1884; pension agent at Knoxville, 1885–87; elected governor, 1886, as Democrat, his opponent being his brother, Alfred A. Taylor; was governor, 1887–91; practiced law, 1891–96; presidential elector on Cleveland ticket, 1892; again governor, 1897–99; United States senator, 1907–12. Was editor Taylor-Trotwood Magazine. Died, 1912.

Taylor, Zachary, American general, and twelfth President of the United States; born in Orange County, Va., in 1784; was educated in Kentucky, and, after entering the army in 1808, obtained the rank of colonel in 1832, and fought in the Black Hawk War. After defeating the Seminoles at Okechobee in 1837, he was given the chief command in Florida in the following year. In 1846, he was entrusted with the command of the army which entered Mexico; there he gained the battles of Palo Alto, Resaca de la Palma, and Buena Vista, and brought the campaign to a successful conclusion in 1847. In the following year he was returned as Whig candidate for the presidency. His tenure of office was chiefly signalized by the passing of Clay's Compromise Bill with regard to the admission of California into the Union. Died, 1850.

Tecumseh, a famous Shawnee chief, was born on the Scioto River, Ohio, about 1768. He headed an Indian alliance against the whites in the Northwest, and was defeated by the American General Harrison at Tippecanoe, in 1811. In the War of 1812, he became an ally of the English, obtained the rank of brigadier-general in their service, and commanded the right wing in the battle of the Thames, in 1813, where he fell mortally wounded.

Tempest, Marie Susan (Mrs. Cosmo Stuart), opera singer; born in London, July 15, 1866; daughter of Edwin and Sarah Etherington; musical education in Convent des Ursulines, Thildonck, Belgium, and Royal Academy of Music, London; first sang in concert, but soon went into light opera in leading rôles; came to United States as prima donna in New York Casino Company; has appeared in comic opera in principal American cities; more recently in England; received numerous medals for Italian and declamatory English singing; married, 1898, to Cosmo Charles Gordon-Lennox (Cosmo Stuart), son of Lord Alexander Gordon-Lennox. Created Nell Gwyn in "English Nell," and Becky Sharp.

Tennyson, Alfred, Lord, was the son of the Rev. George Tennyson, rector of Somersby in Lincolnshire, where he was born in 1809. He was educated at Louth grammar school, and, in 1827, published "Poems by Two Brothers," partly the work of his brother Charles. In 1828, he matriculated at Cambridge, where he gained the chancellor's medal. "Poems: Chiefly Lyrical" was followed in 1833, by a volume containing "The Palace of Art," "Œnone," and other of his best known pieces. "The Gardener's Daughter," "Locksley Hall," and other poems were added in 1842, and, in 1847, appeared "The Princess, a Medley," in blank verse. "In Memoriam," a tribute to the memory of Arthur Hallam, was published in 1850. In the same year, Tennyson succeeded Wordsworth as poet-laureate. Among his subsequent poems were "Maud," "The Idylls of the King," "Enoch Arden," "Becket," a drama, and "Demeter," "The Foresters," etc. In 1884, he was created a peer. Died, 1892.

Terry, Ellen (Mrs. Carew), English actress; born February 27, 1848; first appearance, April, 1856, at Princess Theater, London, under Charles Kean's management; in 1867, first acted with Henry Irving in "The Taming of the Shrew," at Queen's Theater, then acted at Haymarket Theater; retired for seven years; reappeared at Queen's Theater in "The Wandering Heir"; played Olivia, among others, at Court Theater (John Hare's management), and Portia, among others, at Prince of Wales Theater (Bancroft's management); played Ophelia, December 30, 1878, for first time at Lyceum with Henry Irving; visited America with him, 1883, and many times subsequently; remained at Lyceum until its dissolution in 1901; produced Ibsen's "The Vikings," 1903, and Shakesperean plays with her own company at Imperial Theater; in 1905, played at Duke of York's Theater in J. M. Barrie's "Alice-sit-by-the-fire." Celebrated her stage jubilee in 1906.

Tesla, Nikola, an American electrical inventor; born in Smiljan, Austria-Hungary, in 1857; studied engineering in Gratz; and, in 1884, came to the United States, and for several years was employed at Edison's laboratory, near Orange, N. J. He then opened a laboratory of his own. In 1888, he completed his discovery of the rotating magnetic field by the invention of the rotary field-motor, the multi-phase system of which is used in the 50,000 horse power plant built to transmit the water power of Niagara Falls to Buffalo and other cities. He invented many methods and appliances for the use of electricity, among them the production of efficient light from lamps without filaments, and the production and transmission of power and intelligence without wires. In November, 1898, Tesla announced the discovery of, and, on May 1, 1900, patented, a method of transmitting electrical energy without wires. Working along the same line, William Marconi invented his wireless telegraphy. In 1901, Tesla discovered that the capacity of the electrical conductor is variable. Since 1903, has been engaged

in developing his system of world telegraphy and telephony. Received Nobel prize for physics, 1915.

Tetrazzini, Signora Luisa, operatic prima donna, was born in Florence, 1874. She was educated under Cecherini. First appeared in Florence, 1895; at Covent Garden, 1907. Has toured in South America, Russia, and other countries. Some rôles that made Patti famous were never successfully sung since her retirement until Tetrazzini appeared upon the scene. Her voice is remarkable for its purity and range.

Thackeray, William Makepeace, novelist; born in Calcutta in 1811; was educated at the Charterhouse and Cambridge; studied art in Paris, but determined to devote himself to literature, and, in 1837, became connected with "Fraser's Magazine," to which he contributed the "Great Hoggarty Diamond." In 1840, he published the "Paris Sketch-book," and, in 1842, began to write for "Punch," in which appeared his "Book of Snobs." His first great novel, "Vanity Fair," was followed by "Pendennis," "Esmond," "The Newcomes," and others. He delivered a series of lectures in England and America on the "English Humorists of the Eighteenth Century," and "The Four Georges," and edited the "Cornhill Magazine." Died, 1863.

Thales (*tha'lēz*), a celebrated Grecian philosopher, flourished in the Seventh and Sixth Centuries B. C. He was one of the seven wise men of Greece; and he also predicted the famous eclipse of the sun, which happened in 585 B. C.

Thierry, Jacques Nicholas Augustin, born in Blois, May 10, 1795; an eminent French historian, best known as the author of "The History of the Conquest of England by the Normans." He was the author of numerous other historical works, his last being "An Essay on the Formation and Progress of the Third Estate." For the last twenty-five years of his life he was afflicted with total blindness. Died, May 22, 1856.

Thiers, Louis Adolphe (*te-air'*), an eminent statesman and historian, and president of the French Republic; born of humble parentage in Marseilles in 1797; was educated for the law, but discarding the idea of following that profession, he, at an early age, entered the field of journalism as a contributor to the columns of the "Constitutionnel." Between the years 1823–27, appeared his "History of the French Revolution," a work which stamped him an historian of the first order. He largely contributed to the Revolution of 1830. In 1832, he was made minister of the interior; in 1834, he was admitted into the French Academy; and from February to August, 1836, filled the post of president of the council and minister for foreign affairs. In March, 1840, he was recalled to power, but being unable to prevail upon Louis Philippe to support his Eastern policy, he resigned office in October and employed his leisure in writing his "History of the Consulate and Empire" (twenty volumes, 8vo.), one of the greatest historical works of the age. In July, 1870, he resolutely opposed the impending war against Germany. In 1871, he succeeded in effecting peace on the best terms possible under the circumstances, and, in the same year, was elected president of the new republic. In 1873, after an adverse vote of the legislative body, he resigned, and was succeeded by Marshal MacMahon. Died, 1877.

Thomas, M. Carey (Miss), president of Bryn Mawr College; born in Baltimore, January 2, 1857; daughter of Dr. James Carey and Mary (Whitall) Thomas; graduate of Cornell, 1877; studied in Johns Hopkins, 1877-78; Leipzig University, Germany, 1879–83 (Ph. D., University of Zürich, 1883; LL. D., Western University of Pennsylvania, 1896). Since 1885, professor of English, 1885–95 dean, and since 1895, president of Bryn Mawr College; first woman trustee of Cornell, 1895–99; trustee of Bryn Mawr College since 1903. Author: "Sir Gawayne and the Green Knight," "Education of Women." Also "Should the Higher Education of Women Differ from That of Men?" and "The College," in "Educational Review"; also various educational addresses.

Thompson, William Oxley, president of Ohio State University; born in Cambridge, O., November 5, 1855; graduated from Muskingum College, 1878; Western Theological Seminary, Allegheny City, Pa., 1882 (A. M., 1881; D. D., 1891, Muskingum College; LL. D., Western University of Pennsylvania, 1897); ordained to Presbyterian ministry, 1882; president of Miami University, 1891–99; president of Ohio State University since 1899.

Thomson, Elihu, electrician; born in Manchester, England, March 29, 1853; graduated from Central High School, Philadelphia, 1870 (A. M.; honorary A. M., Yale; Ph. D., Tufts College); professor of chemistry and mechanics, Philadelphia Central High School, 1870–80; since 1880 electrician for Thomson-Houston and General Electric companies, which operate under his inventions, more than 500 patents having been obtained; inventor of electric welding, which bears his name, and many other important inventions in electric lighting and power.

Thomson, Sir William (Lord Kelvin), born in Belfast in 1824; was educated at Glasgow and Cambridge; became professor of natural philosophy at Glasgow in 1846. From 1846 to 1851, he edited the "Cambridge and Dublin Mathematical Journal," to which he contributed several important papers. Some of his chief discoveries are announced in the "Secular Coating of the Earth," and the Bakerian lecture, the "Electrodynamic Qualities of Metals." He invented the quadrant, portable, and absolute electrometers, and other scientific instruments. To the general public he is best known by his work in connection with submarine telegraphy. In January, 1892, he was raised to the peerage as Lord Kelvin. Died, 1907.

Thoreau, Henry David, born in 1817; American naturalist; was a friend of Emerson, and a member of the Transcendental school. In 1845, and the following years he lived a life of complete solitude, described in "Walden." He became acquainted with John Brown in 1859, and devoted the rest of his life to the Liberationist cause. Died, 1862.

Thorwaldsen, Bertel, born in 1770; noted Danish sculptor, of Icelandic origin; studied at the free school of the Academy of Copenhagen, and was sent by that body to Rome in 1796. His first great work was his "Jason." Except for a visit to Denmark in 1819–20, when he executed the statues of "Christ and the Twelve Apostles" for the Frue Kirke at Copenhagen, he remained in Rome till 1838. After that date he, for the most part, lived in Denmark. His masterpieces include the "Entry of Alexander into Babylon," the statue of "Prince Poniatowski," and the "Dying Lion" at Lucerne. Died, 1844.

Thucydides, Greek historian; born at Athens, about 471 B. C.; is said to have been descended from Olorus, King of Thrace. At the outbreak of the Peloponnesian War he received a command, but failed to relieve Amphipolis when besieged by Brasidas, and was banished (423 B. C.). After twenty years of exile, during which he is supposed to have written his "History of the Peloponnesian War," he returned to Athens about 403. Died about 400 B. C.

Thwing, Charles Franklin, president of Western Reserve University and Adelbert College since 1890; born in New Sharon, Me., November 9, 1853; graduated from Harvard, 1876; Andover Theological Seminary, 1879 (D. D., LL. D.); pastor North Avenue Congregational Church, Cambridge, Mass., 1879–86; Plymouth Church, Minneapolis, 1886–90. Author: "American Colleges: Their Students and Work," "The Reading of Books," "The Family" (with Mrs. Thwing), "The Working Church," "Within College Walls," "The College Woman," "The American College in American Life," "The Best Life," "College Administration," "The Youth's Dream of Life," "God in His World," "If I Were a College Student," "The Choice of a College," "A Liberal Education and a Liberal Faith," "College Training and the Business Man." Associate editor of "Bibliotheca Sacra," contributor to magazines and speaker on educational topics.

Ticknor, George, born in 1791; American author; traveled in Europe (1815–19); was professor of modern languages at Harvard (1819–35). He wrote a "History of Spanish Literature" and a "Life of Prescott." Died, 1871.

Tilden, Samuel Jones, born in 1814; American politician; was called to the bar in 1841; became chairman of the Democratic State Convention in 1866; took a leading part in exposing the "Tammany Ring"; was elected governor of New York in 1874, and was elected president of the United States in 1876, but failed to be seated on account of alleged irregularities in Louisiana. Died, 1886.

Tillman, Benjamin Ryan, United States senator, farmer; born in Edgefield County, S. C., August 11, 1847; academic education; joined Confederate States Army, July, 1864, but was stricken with severe illness which caused the loss of his left eye and kept him an invalid for two years, so that he saw no military service; followed farming as his sole pursuit until 1886, when he became prominent in an agitation for industrial and technical education and other reforms. Elected governor of South Carolina in 1890 and 1892, United States senator, 1895, for four terms. Founded Clemson Agricultural and Mechanical College at Calhoun's old home, Fort Hill, and Winthrop Normal and Industrial College at Rock Hill; the former for boys, the latter for girls; they are the largest schools of the kind in the South; author of dispensary system of selling liquor under

State control; was central figure in the South Carolina Constitutional Convention, 1895, which instituted educational qualification for suffrage; one of the leaders in securing the insertion of advanced positions in Democratic platform of 1896. Prominent in Democratic national conventions of 1900 and 1904, and in latter was active in work of harmonizing contending factions of Democracy. Died, 1918.

Tilly, Johann Tserklaes, Count of, one of the great generals of the Thirty Years' War; born in Brabant in 1559; was designed for the priesthood and educated by Jesuits, but abandoned the church for the army. He was trained in the art of war by Parma and Alva, and proved himself a born soldier. He reorganized the Bavarian Army, and, devoted to the Catholic cause, was given command of the Catholic Army at the outbreak of the Thirty Years' War, during the course of which he won many notable battles, acting later on in conjunction with Wallenstein, whom, in 1630, he succeeded as commander-in-chief of the imperial forces, and in the following year sacked with merciless cruelty the town of Magdeburg, a deed which Gustavus Adolphus was swift to avenge by crushing the Catholic forces in two successive battles — at Breitenfeld and at Rain — in the latter of which Tilly was mortally wounded (1632).

Titian, Tiziano Vecelli, Venetian painter, born in 1477; studied under Giovanni Bellini, and was much influenced by his fellow-pupil Giorgione; in 1512, was employed in decorating the ducal palace at Venice; in 1514, was invited to the court of Alphonso, Duke of Ferrara, for whom he executed several works; painted the portrait of Charles V. during his visit to Bologna in 1530; visited Rome, 1545-46, and was afterwards several times summoned to Germany by Charles V. Among his masterpieces is the "Bacchus and Ariadne" in the National Gallery, London. Died, 1576.

Togo, Count Heihachiro, admiral in command of the Japanese fleet — the Nelson of Japan — was born in 1847. After Nogi's guns from the land had completed the destruction of the Port Arthur fleet, Togo hid his ships for three months, pending the arrival of the Baltic fleet. Numerically the Russians were his superior, notably in battleships; but in speed, manœuvring, gunfire, and discipline, the advantage was all with the Japanese. The battle of the Sea of Japan was fought May 27–28, 1905, when of the Baltic fleet twenty ships were sunk, six captured, two demolished and six disarmed and interned. Admirals Rojestvensky and Nebogatoff were captured with some 8,000 men, while 4,000 Russians were killed. The Japanese losses were three torpedo boats sunk, 116 men killed, and 538 wounded. Made count, 1907.

Tolstoi, Leo Nikolaievitch, Russian author and social reformer, born in 1828; studied at the University of Kazan; served in the Crimean War; published "War and Peace," "Anna Karenina," "The Kreutzer Sonata," also several essays in moral philosophy, including "My Religion." Died, 1910.

Torricelli (*tŏr-re-chĕl'le*)**, Evangelista,** a distinguished Italian philosopher, born in the Romagna in 1608; succeeded Galileo as professor of mathematics at Florence in 1641, and made for himself a title to celebrity as the inventor of the barometer. Died, 1647.

Toussaint L'Ouverture, François Dominique, born in 1743; son of African slaves, in San Domingo. He was, in 1796, appointed by the Directory chief of the army of San Domingo and afterwards established his authority throughout the island, which he ruled with justice and vigor. When Bonaparte sought to restore slavery in San Domingo (1801), Toussaint resisted, but was forced to surrender, and was sent to France, where he died in prison in 1803.

Tree, Herbert Beerbohm, actor, the son of a grain merchant named Beerbohm, was born in London in 1853. Shortly after entering his father's office, in 1870, he became a member of the irrationals amateur dramatic club, and joined the profession in 1877. His first hit was as the timid curate in "The Private Secretary," and immediately after he played the grim spy Macari in "Called Back." Taking the Comedy Theater (1887), he produced "The Red Lamp"; and in the autumn of the same year took the Haymarket Theater. In April, 1897, he opened his new theater, "His Majesty's," in the Haymarket. Here he produced the greatest of his successes: "Julius Cæsar," "King John," "A Midsummer Night's Dream," "Herod," "Twelfth Night," "The Merry Wives of Windsor," with Miss Ellen Terry and Mrs. Kendal in the cast, "Ulysses," "The Eternal City," "King Richard II," "The Darling of the Gods," "The Tempest," "Much Ado About Nothing," "Business is Business," "Oliver Twist," "Nero," and "Colonel Newcome." In 1905 he inaugurated a Shakespere Festival, which is now one of the annual arrangements of the theater. During the Shakespere celebrations in 1906, he revived "Hamlet," "Julius Cæsar," "Twelfth Night," "Much Ado About Nothing," "Henry IV." (Part I.), and "The Tempest." In April, 1907, he produced several of Shakespere's plays in Berlin, and was received by the German Emperor. His wife, an admirable Greek scholar formerly connected with Queen's College, is a very refined actress. Died, 1917.

Tripler, Charles E., physicist, inventor, born in New York, 1849; educated in New York; made special study of physical sciences and phenomena; established private physical laboratory; experimented in electricity and mechanics and later in the study of gases; greatest achievement is the manufacture of "liquid air," which he experimentally applied to the operation of an engine with remarkable results, this product being obtained by compression of atmospheric air at a temperature of over 300 degrees below zero. Died, 1906.

Trollope, Anthony, born in 1815, a popular English novelist, the author of a large number of works, all of which exhibited ingenuity, if not genius. He was the third son of Mrs. Frances Trollope, herself a novelist of some eminence, and received his education first at Winchester School, and subsequently at Harrow. For many years he held a position in the post-office. Besides his novels, he was the author of a "Life of Cicero," and of several other works. Died, December 6, 1882.

Troubetzkoy, Amélie, Princess (Amélie Rives), novelist; born in Richmond, Va., August 23, 1863; daughter of Alfred Landon Rives, engineer; educated by private tutors, married, in 1888, John Armstrong Chanler of New York, from whom she was divorced; married 2d, the Prince Troubetzkoy (Russian). Author: "The Quick or the Dead," "A Brother to Dragons," "Virginia of Virginia," "Herod and Mariamne," "Witness of the Sun," "According to St. John," "Barbara Dering," "Athelwold," "Tanis," "Seléné," and magazine articles.

Trumbull, John, a distinguished American painter, was born in Connecticut, 1756. After passing some time in the army, during which he acted as aide-de-camp to Washington, 1775, he became a pupil of Benjamin West, in London. His principal works are to be found in the rotunda of the Capitol at Washington, numbering among them "The Surrender of Cornwallis," "The Declaration of Independence," and "The Surrender of Burgoyne." Died, 1843.

Tupper, Sir Charles, a Canadian statesman, born in Amherst, Nova Scotia, July 2, 1821; studied medicine in Edinburgh University and practiced his profession in his native town. In 1855, he was made a member of the provincial legislature and was prime minister of Nova Scotia, 1864–1867. He warmly advocated the formation of the Dominion of Canada, which took place in 1867 and became a member of Sir John A. Macdonald's cabinet in 1870; became minister of public works in 1878; and in 1879–1884 was minister of railways and canals. While filling the latter office he promoted the construction of the great Canadian Pacific Railway. In 1884, he was appointed high commissioner for Canada, in London. He was one of the negotiators of the fisheries treaty with the United States in 1887–1888, and was created a baronet in the latter year. In 1895, he represented Canada at the International Railway Conference in London. In 1896, was premier of Canada. Died, 1915.

Turenne, Henri de la Tour d'Auvergne, Vicomte de, born in 1611; French general, son of the Duc de Bouillon, and grandson of William I., Prince of Orange; entered the French army in 1630; became maréchal de camp in 1635; in 1643 was placed in command of the forces in Germany, where he remained till the close of the Thirty Years' War, distinguishing himself by his retreat from Marienthal and his victory at Nördlingen; opposed Condé with success in the war of the Fronde; was made marshal-general in 1660; became a Roman Catholic in 1668; greatly distinguished himself in the war with Holland, in the course of which he was killed by a cannon shot (1675).

Turgenieff, Ivan Sergyevitch, Russian novelist, born in 1818; studied at the University of Berlin; after the Franco-German War removed to Paris, where he mainly resided thereafter. Among his novels are "A Nest of Nobles," "Fathers and Sons," and "Virgin Soil." Died, 1883.

Turgot, Anne Robert Jacques, a distinguished French statesman and economist, was born in Paris in 1727; from 1774 to 1776, comptroller-general of France under Louis XVI. By his enlightened measures he did much during his brief period of office to ameliorate the condition of the people and to reform the revenue; but he was driven from power by a combination of the privileged classes, to whom his schemes were odious. The last years of his life were devoted chiefly to literary pursuits. His "Life" was written by Condorcet. Turgot died in 1781.

Turner, Joseph Mallord William, born in 1775; landscape painter; son of a hairdresser in Covent Garden, studied at the schools of the Royal Academy; became A. R. A. in 1799, and R. A. in 1802, and soon won a reputation as a painter both in water-colors and in oils. In 1807, he began the "Liber Studiorum," a series of prints for the most part executed by himself. For "England and Wales," the "Southern Coast," and other series of engravings, he prepared drawings, which are now highly prized. Among the finest of his oil-paintings in the National Gallery, London, are "Dido Building Carthage," and "The Sun Rising in a Mist." Died, 1851.

Tyler, John, American statesman; born in Virginia, 1790; entered Congress in 1816; became vice-president under Harrison in 1840, and president in 1841, upon the death of President Harrison. During his government Texas was annexed to the United States. On the outbreak of the war he espoused the side of the South. Died, 1862.

Tyndall, John, man of science; born in County Carlow, Ireland, 1820; joined the Irish Ordnance Survey in 1839; was a railway engineer 1844–47; studied at the Universities of Marburg and Berlin (1848–51); became professor of natural philosophy in the Royal Institution in 1853. After an expedition to Switzerland with Professor Huxley in 1856 wrote, in conjunction with him, a treatise "On the Structure and Motion of Glaciers," presided at the meeting of the British Association at Belfast, in 1874. Among his works are "Heat as a Mode of Motion," and "Fragments of Science." Died, 1893.

Underwood, Oscar W., Democratic floor leader of the House of Representatives, was born in Louisville, Kentucky, 1862. Educated at Rugby school, Louisville, and at University of Virginia; admitted to bar, 1884; member of 54th to 63rd congresses (1895–1915), 9th Alabama district. Chairman of the House committee that framed the Underwood-Simmons tariff bill in 1913. Elected U. S. senator for term, 1915–21.

Untermyer, Samuel, lawyer; born in Lynchburg, Va., March 2, 1858; educated in New York public schools, College of the City of New York and Columbia University Law School. Admitted to bar, 1879, and since practicing in New York; now member of law firm of Guggenheimer, Untermyer & Marshall; organized and is counsel for many trade combinations.

Urban II. (Eudes), elected pope in 1088, when Bishop of Ostia; continued the policy of Gregory VII., and opposed the Emperor Henry IV., who set up an antipope against him, and took Rome; convened the Council of Clermont in 1095, at which the first crusade was proclaimed, and Philip I. of France was excommunicated; in 1098 made the Norman counts of Sicily apostolic legates, and held the Council of Bari. Died, 1099.

Usher, James, born in 1580; Irish divine; became bishop of Meath in 1620, and four years later archbishop of Armagh. His chief work was "Annales Veteris et Novi Testamenti," the author, by Cromwell's order, being buried in Westminster Abbey. Died, 1656.

Van Buren, Martin, American statesman, and eighth President of the United States; was born of Knickerbocker stock, in Columbia County, N. Y., 1782. After studying law and becoming a member of the bar, he was elected by the Democratic party to the State Senate in 1812, and became attorney-general in 1815. In 1816, he largely contributed to the organization of the so-called Albany regency, a political body which maintained a political ascendancy for many years in the State. In 1821, Van Buren entered the National Senate, and was reëlected in 1827. As a senator he supported the protective tariff of 1828, and in the same year was elected governor of New York. In 1829, he became secretary of state in President Jackson's cabinet, resigning the same in April, 1831. After the rejection by the senate of his nomination as minister to England, he was elected in the Jackson interest vice-president of the republic, and in 1836, became the successful Democratic candidate for the presidential chair. During his tenure of office occurred the financial crisis of 1837 and the suspension of specie payments by the banks, a state of things which induced the president to recommend to Congress the establishment of an independent treasury — a measure carried into effect in 1840. In the latter year, Van Buren's renomination for the presidency was defeated by General Harrison, and in 1841, he temporarily retired into private life. His third candidature for the presidency, in 1844, was frustrated by the Southern vote, and he subsequently seceded from the Democrats to become a Free-soiler, and the unsuccessful nominee of the latter party in the presidential election in 1848. Died, 1862.

Vanderbilt, Cornelius, American capitalist; born near Stapleton, Staten Island, N. Y., May 27, 1794; early engaged in steamboat transportation between Staten Island and New York and so enlarged his business that he soon gained the complete control of the New York and Staten Island lines. Later, he started steamboats in various waters — the Hudson, the Delaware, Long Island Sound, and established steamboats and other connections between New York and California. In 1864, he withdrew his capital from shipping and invested it in railroads. He secured the management of one railroad after another and, in 1877, controlled stocks representing an aggregate capital of $150,000,000, of which he owned fully one-half. In 1861, he presented the swift $800,000 steamship "Vanderbilt" to the United States Government to be used for the capture of Confederate privateers. Later he endowed Vanderbilt University, founded at Nashville, Tenn., in 1872, with $500,000, afterward increased to $700,000. At the time of his death in New York City, January 4, 1877, his fortune was estimated at nearly $100,000,000, and he was supposed to be the richest man in the world.

Van Dyck, or **Vandyke, Sir Anthony,** eminent painter of the Flemish school, distinguished by his surpassing excellence in portraiture; was born in Antwerp, 1599, and became a pupil of Rubens. In 1632, he became court painter to Charles I. of England, was knighted by that monarch, married a daughter of the Earl of Gowrie, and lived in great magnificence. His "Crucifixion" (at Antwerp), is his greatest historical work, and his full-length picture of "Charles I. on Horseback" his "chef d'œuvre" as a limner. Died in London, 1641.

Van Dyke, Henry, American educator, author, was born in Germantown, Pa., in 1852; was graduated at Princeton University in 1873, at the Princeton Theological Seminary in 1877, and at Berlin University in 1879. He soon afterward assumed the pastorate of the United Congregational Church in Newport, R. I. He was pastor of the Brick Presbyterian Church, New York City, 1882-1900; professor of English Literature, Princeton University, 1900–13; served as minister to the Netherlands, 1913–17. His publications include: "The Reality of Religion," "The Poetry of Tennyson," "The Ruling Passion," "The Blue Flower."

Van Dyke, John Charles, author, educator; born in New Brunswick, N. J., April 21, 1856; privately educated; studied at Columbia (L. H. D., Rutgers, 1899). Admitted to New York bar, 1877, but turned attention to literature; since 1878, librarian of Sage Library, New Brunswick, N. J.; studied art many years in Europe; traveled much on both continents and has written extensively on both art and nature; professor of history of art, Rutgers College; lecturer in Columbia, Harvard, and Princeton. Editor "The Studio," 1883-84; "Art Review," 1887-88; "College Histories of Art," "History of American Art." Author: "Books and How to Use Them," "Principles of Art," "How to Judge of a Picture," "Notes on Sage Library," "Serious Art in America," "Art for Art's Sake," "History of Painting," "Old Dutch and Flemish Masters," "Modern French Masters," "Nature for Its Own Sake," "The Desert," "Italian Painting," "Old English Masters," with Cole's engravings, "The Meaning of Pictures."

Velasquez, Diego Rodriguez de Silva, born in Seville in 1599; distinguished Spanish painter. He was principal painter to Philip IV., to whom he became also chamberlain. His works consist chiefly of portraits, and of historical and classical subjects. Died, 1660.

Venizelos (*vā'-nē-zā'-lōs*), **Eleutherios,** Greek statesman, was born in Crete, 1864, and was educated in law at Athens. Entering the Cretan legislature, he became active in politics and led the movement for uniting Crete with Greece. He removed to Athens about 1910 and became prominent in Balkan affairs, organizing the league which made war on Turkey in 1912. In 1914, as premier of Greece, Venizelos urged the nation to join the Allies but was opposed by the pro-German king, Constantine, and resigned the premiership. Following the abdication of King Constantine in 1917, he again became premier and actively supported the allied cause. In 1919 he was a delegate from Greece to the peace conference at Versailles.

Verdi, Giuseppe, the most eminent Italian composer of the nineteenth century, was born at Roncole, in Parma, 1813. He was liberally educated at the Academy at Busseto and at the Conservatory at Milan. His first opera "Oberto" appeared in 1839, and he won wide recognition with "Nabuccodonosor," "I Lombardi" and "Ernani," 1842–1844. During 1851-52 he achieved international fame with "Rigoletto," "Il Trovatore" and "La Traviata." His later works, "Aida," "Manzoni Requiem," "Otello," and "Falstaff" added to his great earlier triumphs. In 1898 he founded a home for invalid musicians at Milan. Died in 1901.

Vesalius, Andreas, anatomist; born in Brussels in 1514; accompanied Charles V. in his campaigns as physician, and also attended Philip II. He died in 1564,

in Zante, where he had been wrecked on his return from Jerusalem. His great work was "De Corporis Humani Fabrica."

Vespasian, Titus Flavius Sabinus (*vĕs-pa'zhe-ăn*), was Emperor of Rome from 70 to 79 A. D. He distinguished himself in many military commands before he became emperor, and was engaged in the war with the Jews when he was raised to the throne. His government was highly beneficial to the state.

Victor Emmanuel II., first King of Italy, born in 1820; became King of Sardinia on the abdication of his father in 1849, and immediately began to reorganize the kingdom and to enforce toleration. He sent a contingent during the war with Russia to help the allies in the Crimea, and, in 1859, he secured the alliance of France in his struggle with Austria. The price agreed on was the cession of Savoy and Nice, but the result was the union of Italy under the ruler of Sardinia. By the help of Prussia the liberation of Venice was gained in 1866, and Rome was evacuated by the French in 1870. Victor Emmanuel was called by his people "Ré Galantuomo." Died, 1878.

Victoria Alexandrina, Queen of Great Britain and Empress of India; born in 1819; daughter of Edward, Duke of Kent, fourth son of George III.; was crowned on June 28, 1838. She married, in 1840, Prince Albert of Saxe-Coburg-Gotha, who died in 1861, by whom she had nine children. The chief events of the reign have been the establishment of the penny post, the repeal of the corn laws, the annexation of the Punjaub, the great exhibition, the Crimean War, the Indian mutiny, followed by the assumption of sovereignty over India, the second and third reform bills, wars in Afghanistan, China, South Africa, and Egypt, and the Fenian and home rule agitations in Ireland. The jubilee of the queen's accession was celebrated in 1887, and her diamond jubilee in 1897. Five attempts were made on her life, in 1840, 1842 (three), and 1882. She died at Osborne House, Isle of Wight, in 1901.

Vincent de Paul, St., a French philanthropist and ecclesiastic reformer; was born in Landes, in 1576. Captured by Tunisian pirates in 1605, he remained for two years in slavery. After his escape he repaired to Paris, where he became curate of Clichy, and preceptor to the celebrated Cardinal de Retz, and engaged himself in various works of benevolence and Church improvement. He established a foundling hospital at Paris in 1638; organized the congregation of the Missions, and instituted the order of Sisters of Charity. Died in 1660, and was canonized by Pope Clement XII. in 1737.

Vincent, John Heyl, bishop of Methodist Episcopal Church and chancellor of Chautauqua system; born in Tuscaloosa, Ala., in 1832; educated in Lewisburg and Milton, Pa.; began to preach at 18; studied in Wesleyan Institute, Newark, N. J. (S. T. D., Ohio Wesleyan; LL. D., Washington and Jefferson; S. T. D., Harvard); joined New Jersey Conference, 1853; ordained deacon, 1855; elder, 1857; transferred to Rock River Conference; pastor at Galena, Chicago, etc., 1857–65; established "Northwest Sunday School Quarterly," 1865; "Sunday School Teacher," 1866; corresponding secretary of Sunday School Union and editor of Sunday School publications, 1868–84; one of founders, 1874, of Chautauqua Assembly; founder, 1878, of Chautauqua Literary and Scientific Circle, becoming its chancellor. Preacher to Harvard, Yale, Cornell, Wellesley, and other colleges; in 1900, made resident bishop in charge of European work of Methodist Episcopal Church; retired from active episcopate in 1904. Author: "The Modern Sunday School," "Studies in Young Life," "Little Footprints in Bible Lands," "The Church School and Sunday School Institutes," "Earthly Footsteps of the Man of Galilee," "Better Not," "The Chautauqua Movement," "To Old Bethlehem," "Our Own Church," "Outline History of England," "Outline History of Greece," "The Church at Home," and "Family Worship for Every Day in the Year." Died, 1920.

Vinci, Leonardo da (*vĭn'che*), one of the most eminent of Italian painters, was born in Vinci, near Florence, in 1452. He early became a sort of universal genius, exhibiting a talent for anatomy, astronomy, botany, mathematics, music, and engineering, and, in 1482, entered the service of Ludovico Sforza, Duke of Milan, who made him director of an academy of arts and sciences. In 1498, he painted at Milan his masterpiece, the picture of "The Last Supper," and, in 1516, entered the service of Francis I., accompanying that monarch to France, in which country he died in 1519. Leonardo surpassed all his predecessors as a master of chiaroscuro, and was the author of "Trattato della Pittura," an excellent treatise on painting, which has been translated into English.

Virchow, Rudolf, born in 1821; German pathologist; after being involved in trouble on account of his share in the movement of 1848, obtained chairs of pathological anatomy at Würzburg and Berlin (1856), having recently published his "Cellular Pathology." Three years later he returned to politics, and ultimately became leader of the Liberal opposition in the Prussian Assembly, and was challenged to a duel in 1865 by Bismarck. In 1878, he retired from public life. He was much consulted during the illness of the Emperor Frederick. Died, 1902.

Virgil, Publius Virgilius Maro, Roman poet; born near Mantua in 70 B. C. Found patrons in Mæcenas and Augustus, who restored to him his estate. He died in Brundusium, on his return from a visit to Greece. His chief works were "The Eclogues" or "Bucolics," "The Georgics," and the "Æneid." The Æneid has been translated by Dryden, Conington, William Morris and others. Died, 19 B. C.

Vittoria Colonna, the most celebrated poetess of Italy, was born at Marino, in 1490. At 17 she was married, and after her husband's death, in the battle of Pavia, found her chief consolation in solitude and the cultivation of her poetical genius. Her poems were chiefly devoted to the memory of her husband. Died, 1547.

Volta, Alessandro, born in 1745; natural philosopher; was for thirty years professor at Pavia, and became F. R. S. Besides making other discoveries, he invented the voltaic pile or electrical column. Died, 1826.

Voltaire, whose original name was François Marie Arouet; was born in Paris in 1694; educated by the Jesuits, and became a protégé of Ninon de l'Enclos. In 1717, he was imprisoned in the Bastille on suspicion of writing a libel on the king, and "Ædipe" was produced in 1718. After another imprisonment, he went to England, where, in 1728, the "Henriade" was published. He escaped prosecution by disavowing his writings, and, in 1736, began to correspond with Frederick the Great. After the rise of the Pompadour he secured a reception at court and at the Académie. In 1750, he went to the court of Berlin, where he stayed three years, the result being a historical quarrel. Soon after this he settled at Ferney, where the rest of his life was spent, but before his death he visited Paris, and was received as a popular hero. He wrote numerous plays and romances (Candide, Zadig), etc., "Histoire de Charles XII.," "Siècle de Louis XIV.," and other historical works, and "Essai sur les Mœurs et l'Esprit des Nations." Died, 1778.

Volterra, Daniele de, born in 1509; Italian artist, pupil of Michel Angelo. His masterpiece, "The Descent from the Cross," was torn by the French, who attempted to take it from Trinita de Monti at Rome. Died, 1566.

Wagner, Richard, a popular German composer; born in Leipzig in 1813; became chapel master at Dresden in 1843, and later took up his residence at Munich, upon the invitation of his admirer and patron, the King of Bavaria. His well-known operas, "Rienzi," "Tannhäuser," and "Lohengrin," have elicited great, but comparatively undeserved, praise. Wagner wrote his own librettos, and his æsthetic theories on music and dramatic art involved him in much critical controversy. Died, 1883.

Wallace, Alfred Russel, F. R. S., born in 1823; scientific writer; visited South America and the Malay Archipelago, publishing the results of his observations on his return, among his other works being "Contributions to the Theory of Natural Selection," "On Miracles and Modern Spiritualism," "Land Nationalization," and "Darwinism." The discovery of the evolution hypothesis was arrived at by him at the same time as by Darwin. Died, 1913.

Wallace, Lewis, born in 1827; American general, diplomatist, lawyer, and author. He served as first lieutenant in the Mexican War; engaged in the practice of law in Indiana from 1848; became a brigadier-general in 1861; served through the Civil War. From 1881 to 1885, he was United States minister to Turkey. Author of "The Fair God," "Ben Hur," "The Boyhood of Christ," "The Prince of India." Died, 1905.

Wallace, Sir William, born about 1274; Scotch hero; headed the rising of 1297 against the English, and won a victory at Cambus Kenneth, after which he crossed the border, and was named guardian of Scotland on his return. Next year, however, he was defeated by Edward I. at Falkirk, after which, deserted by the nobles, he carried on a guerilla warfare for seven years. After being imprisoned in France, whose aid he had sought, he was declared an outlaw in 1304, and was captured and sent to London where he was hanged in 1305.

Wallenstein, Albrecht, Graf von Waldstein, born in 1583; Duke of Friedland, Imperialist general,

of noble Bohemian family; after serving against the Turks, the Venetians, and Bethlen Gabor, raised an army at his own expense, in 1626, for the emperor, and defeated Mansfeld and the Danes. In 1630, he was deprived of his command by the jealousy of the League, but was soon recalled to oppose Gustavus Adolphus. The Swedish king was victorious at Breitenfeld (1631), and Wallenstein was defeated at Lützen, where Gustavus fell. After his defeat he negotiated with France, was outlawed by the emperor, and assassinated at Eger, 1634.

Walter, Thomas Ustick, an American architect; born in Philadelphia, Pa., September 4, 1804. In 1833, he made the designs for the Girard College building, which on its completion in 1847, was pronounced the finest specimen of classic architecture in the United States. His next great work was the breakwater at La Guayra for the Venezuelan Government. In 1851, his design for the extension of the National Capitol at Washington, D. C., was adopted. Having been appointed government architect, he removed to Washington, and remained there till the completion of the work in 1865. While in Washington he also designed the extensions of the patent office, treasury, and post-office buildings, the dome of the capitol, and the government hospital for the insane. Died, 1887.

Ward, Elizabeth Stuart Phelps, author; born in Boston, Mass., August 31, 1844; daughter of Rev. Austin and Elizabeth Stuart Phelps; married October 20, 1888, Herbert D. Ward; began to write for press when 13 years old. Author: "The Gipsy Series" (four volumes), "The Gates Ajar," "Men, Women, and Ghosts," "The Trotty Book," "Hedged in," "The Silent Partner," "What to Wear," "Trotty's Wedding-Tour and Story Book," "Poetic Studies," "The Story of Avis," "Sealed Orders," "Friends," "Doctor Zay," "Beyond the Gates," "Songs of the Silent World," "Old Maids, and Burglars in Paradise," "The Madonna of the Tubs," "The Gates Between," "Jack the Fisherman," "The Struggle for Immortality," "Come Forth" (with Herbert D. Ward), "The Master of the Magicians" (with Herbert D. Ward), "Fourteen to One," "Donald Marcy," "A Singular Life," "The Supply at St. Agatha's," "Chapters from a Life," "The Story of Jesus Christ," "Within the Gates," "Successors to Mary the First," "Avery," "Trixy," "A Lost Hero" (with Herbert D. Ward). Died, 1911.

Warfield, David, American actor, was born at San Francisco, 1866. He received a public school education, and made his first appearance at the Wigwam theater, San Francisco, 1886. He went to New York in 1890; played in Casino theater and Weber and Field's music hall, 1895–98; was starred by David Belasco in "The Auctioneer," 1898–1901; "The Music Master," 1901–07, and 1909; "A Grand Army Man," 1907–08; "The Return of Peter Grimm," 1911, etc.

Warren, Samuel, born in 1807; English lawyer and writer, whose chief works were "Passages from the Diary of a Late Physician," "Ten Thousand a Year," and "The Moral and Intellectual Development of the Age"; was appointed master in lunacy in 1859. Died, 1877.

Warwick, Richard Neville, Earl of, "the kingmaker"; born about 1428; was created earl in 1449, and joined the Yorkists, getting Edward IV. crowned by his influence, and defeating his enemies at Towton (1461); quarreled with Edward, and restored Henry VI. in 1470, but was defeated and slain (1471), at Barnet next year.

Washington, Booker Taliaferro, principal of Tuskegee Normal and Industrial Institute, 1881–1915; born near Hale's Ford, Va., about 1859; of African descent; graduated from Hampton Institute, Va., 1875 (A. M., Harvard, 1896; LL. D., Dartmouth, 1901); was teacher at Hampton Institute until elected by State authorities as head of Tuskegee Institute, which he organized and made successful; writer and speaker on racial and educational subjects. Author: "Sowing and Reaping," "Up From Slavery," "Future of the American Negro," "Character Building," "Story of My Life and Work," "Tuskegee and Its People," etc. Died, 1915.

Washington, George, illustrious American patriot, general, and statesman, and first President of the United States; was born in Westmoreland County, Va., February 22, 1732. He descended from an old English family, one of whose younger sons — his great-grandfather John — emigrated to Virginia in 1657. Washington inherited a considerable farm on the banks of the Rappahannock, and, after leaving school in 1747, passed much of his time with Lord Fairfax, and the latter's cousin, Sir William, both great feudal proprietors in the colony. Between 1748 and 1751 Washington was employed by Lord Fairfax in surveying certain outlying properties of his beyond the Blue Ridge, and, at the age of 19, was appointed adjutant-general (holding the rank of major) of one of the military districts formed in Virginia at the outbreak of the war with France. In 1754, Washington as lieutenant-colonel, defeated the French on the frontier, and afterwards accompanied General Braddock as aide-de-camp in his untoward expedition against Fort Duquesne. In the following year he was made commander-in-chief of the forces ordered to be raised by the Assembly of Virginia for the defense of the provinces, and commanded a division of the force which took Fort Duquesne in 1758. Marrying in the next year, Washington resigned his commission, and settled down at Mount Vernon as a planter. Though long a member of the House of Burgesses, Washington does not appear to have taken any prominent part in its deliberations, although, in 1773, he became one of the delegates to the Williamsburg Convention, met to declare the right of the colonists to self-government, and in 1774, one of the five representatives of Virginia at the General Congress in Philadelphia.

On the breaking out of armed resistance to the home country, the Continental Congress at once conferred the chief command upon Washington. In the face of well-appointed and successful British armies already on American soil, he had to oppose to them undisciplined and raw militia, ill-found in war material, and with a government to fall back upon almost destitute of both money and credit. He, however, met the enemy at Long Island, N. Y., where he was defeated with heavy loss, and compelled to make a disastrous retreat through the Jerseys into Pennsylvania. In 1776–77, he gained advantage at Trenton and Princeton, only to be badly defeated at Brandywine, on September 11th of the latter year, thus allowing the British troops to occupy Philadelphia. The surrender of Burgoyne at Saratoga, in the following month, served to brighten the American cause, since it procured for the colonists the support of France. In 1778, Washington fought an indecisive battle at Monmouth Court-house with Sir Henry Clinton, after which he was compelled to remain in defensive inactivity, in consequence of the destitute condition of his army and the exhaustion of the public treasury, until July, 1780, when a French army of 6,000 men arrived to the assistance of the insurgents. In that year, too, occurred the treason of General Arnold, and the sad episode of the fate of André. In 1781, the Articles of Confederation between the States were ratified, and the war was transferred to the South with varying success. This state of things lasted until September of that year, when, reinforcements having arrived from France, the combined American and French armies advanced upon Yorktown, where the British commander-in-chief, Lord Cornwallis, was forced to capitulate, surrendering his entire force of 7,000 men. This event closed the war, a treaty of peace being signed at Paris, September 3, 1783, in which the English Government recognized the independence of the United States.

In the December following, General Washington resigned his commission and retired into private life, from which he was again called forth, in 1787, to preside over the National Convention assembled in Philadelphia to consolidate the National Constitution and place the federal system of government upon a firm and permanent basis. This accomplished, on February 4, 1789, General Washington was elected to the presidency of the newly constituted nation, and in 1792, reëlected to the same high office. The chief events which signalized his administration were the rise of the two great political parties, the Federalists and the Democrats (or Republicans), to the former of which Washington naturally belonged, both by principle and policy, and a new treaty entered into with England, in 1795, which evoked great animosity against Washington and his government on the part of the Democratic party headed by Jefferson, on account of his hostile attitude against the Jacobinism of revolutionary France. Washington declined a third nomination to the presidency, in 1796, and, after a "Farewell Address to the People of the United States," the "Father of his Country" sought his well-won repose, passing the close of his days at Mount Vernon, where he died, December 14, 1799.

Watson, John ("Ian Maclaren"), born in 1850; until 1893 Dr. Watson was known as a popular preacher and able minister, and in that year he acquired additional distinction and wider fame by writing a series of Scotch idyls for the "British Weekly"; under the title of "Beside the Bonnie Brier Bush" they became widely popular in the United States and Great Britain. "The Days of Auld Lang Syne," a second series of idyls, published in 1895, also reached a large circulation. A novel, "Kate Carnegie and Those Ministers," was published in 1896. "The Upper Room" and "The Life of the Master" are perhaps his best known religious works. Died, 1907.

Watson, Thomas E., lawyer, ex-congressman; born in Georgia, in 1856; studied two years in Mercer College; taught school; admitted to bar, 1875; prac-

ticed in Thomson, Ga.; member Georgia Legislature, 1882-83; Democratic elector-at-large, 1888; member Congress, 1891–93, as Populist; was candidate and claims election (on honest count), at elections in 1892 and 1894, but his opponent was given the certificate; resumed practice of law, 1895. While in Congress secured first appropriation for free delivery of mails in rural districts that Congress ever passed. Nominated for vice-president of United States at St. Louis Populist Convention which endorsed Bryan for president, 1896; for some time conducted Populist paper at Atlanta. Nominated for president by People's party, 1904, and made an active campaign; began publication of "Tom Watson's Magazine," in New York, 1905. In 1920 was elected United States Senator for the term 1921–27. Author: "The Story of France," "Life of Thomas Jefferson," "Life of Napoleon," "Life and Times of Thomas Jefferson," "Bethany, a Study and Story of the Old South."

Watt, James, an eminent British engineer and mechanical inventor; was born at Greenock in 1736. He early developed extraordinary talents in practical mechanics, and, in 1765, perfected his grand discovery of the condensation of steam by means of an air-tight cylinder, and likewise invented an apparatus to depress the piston of an engine by steam instead of atmospheric pressure. For some years he occupied himself in the surveying and engineering of various public works in Scotland, and in 1774, entered into partnership with the Messrs. Boulton of Soho, Birmingham, for the manufacture of steam engines, perfecting numerous and great improvements in their mechanism — among others the regulator by centrifugal force, the throttle valve, the machinery of parallel motion, and the steam barometer. In 1782, he invented the double-acting engine, and retired from business in 1800. Died, 1819.

Watterson, Henry, American editor, was born in 1840 at Washington, D. C., where he did his first journalistic work. He edited newspapers in Nashville, Tenn., before and after the Civil War, in the interim serving with distinction in the Confederate Army. In 1868, he removed to Louisville, Ky., where he consolidated the "Journal" with the "Democrat" and the "Courier," as the "Courier-Journal," which he edited, 1868-1919. He published "History of the Spanish-American War," "The Compromises of Life," and various lectures, addresses, and reminiscences. For a half century he ranked as one of the most brilliant of American journalists. Died, 1921.

Watts, George Frederick, R. A., born in 1817; painter, gained a reputation by his "Caractacus Led in Triumph through the Streets of Rome." Among his chief works are "Fata Morgana," "Love and Death," "Time, Death, and Judgment," and portraits of Joachim, Manning, William Morris, etc. Died, 1904.

Watts, Isaac, an English dissenting minister and poet, the "very father of English hymnology," was born in 1674, and died, 1748.

Wayne, Anthony, an American general of the Revolutionary epoch; was born in Chester County, Pa., in 1745. He entered the army as a colonel, in 1775, and, after serving with distinction in the Canadian campaign, commanded a division at the battle of Brandywine, and the right wing at Germantown, 1777. After distinguishing himself at Monmouth in the following year, he captured by assault the fortified works at Stony Point on the Hudson, in 1779, and received the thanks of Congress therefor. After participating in the capture of Cornwallis' army at Yorktown, 1780, he put down the Indians in Georgia, and in 1794, gained a signal victory over the Miami Indians in Ohio. Died, 1796.

Webster, Daniel, an illustrious American statesman, jurist, and orator, was born in Salisbury, N. H., in 1782, of respectable but comparatively humble parentage. After receiving his rudimentary education at Exeter and Boscawen academies, he entered Dartmouth College, in 1797, as a freshman, and, after graduating in 1801, entered upon the study of the law at Salisbury and Boston, in which latter city he was called to the bar in 1805. In 1807, he went into practice at Portsmouth, and, after earning a high legal reputation, was elected by the Federal party to the lower house of Congress in 1812, where he opposed the war with England, and at once rose into prominence as an able debater. Reëlected in 1815, he shared in the discussion of the United States Bank Charter and specie payment questions. Meanwhile he had risen to the highest rank in his profession as a constitutional lawyer, and as a consummate leader in criminal causes. In 1820, he served as a member of the Convention met to revise the Constitution of Massachusetts, and in 1822, was reëlected to Congress, where, as chairman of the Judiciary Committee, he rendered eminent assistance in the entire revision of the United States criminal code. In 1827, he became senator, and in 1830, in opposing the Nullification doctrine advanced by South Carolina statesmen, delivered perhaps the most splendid outburst of patriotic oratory ever heard within the Congress of the American Union. In 1834, Webster became a prominent leader of the Whig party, and, in 1841, was appointed secretary of state under President Harrison, retaining the office during Tyler's chief magistracy, and again under Fillmore, in 1850. The most remarkable event of his official term was the so-called Ashburton Treaty with England, in the settlement of the northeastern boundary question. Reëlected to the senate in 1844, he opposed alike the admission of Texas into the Union and the prosecution of the war with Mexico, and supported Henry Clay's "Compromise Measures" of 1850, in relation to the extension of slavery to new territories. He was unsuccessfully nominated for the presidency by the National Whig Convention of 1852. Died, October 24, in the latter year.

Webster, Noah, author and philologist; born in Hartford, Conn., in 1758, and educated at Yale College. He was admitted to the bar in 1781, but engaged in scholastic and literary occupations. Employed in teaching a school at Goshen, N. Y., he prepared his "Grammatical Institutes of the English Language," published in three parts, and edited "Governor Winthrop's Journal." In 1784, he wrote "Sketches of American Policy," advocating the formation of a new constitution, and gave public lectures on the English language, which were published 1789. In 1807, he published "A Philosophical and Practical Grammar of the English Language," and commenced his American "Dictionary of the English Language," but finding difficulties in etymology, he devoted ten years to its study, and prepared a "Synopsis of Words in Twenty Languages," then began his dictionary anew, and, in seven years, completed it. His "Elementary Spelling-Book," founded on his "Institutes," up to 1862, had been sold to the extent of 41,000,000 copies. A new and thoroughly revised and enlarged edition of his dictionary was finished in 1890, and it is now one of the most complete dictionaries of the English language published. Webster also published a popular "History of the United States," and a "Manual of Useful Studies." He was a judge and a member of the State Legislature, and one of the founders of Amherst College. Died in New Haven in 1843.

Welch, William Henry, professor of pathology at Johns Hopkins University, 1884-1916, was born in Norfolk, Conn., April 8, 1850; graduate of Yale, A. B., 1870; M. D., College of Physicians and Surgeons, New York, 1875 (LL. D., Western Reserve, 1894; Yale, 1896; Harvard, 1900; Toronto, 1903; Columbia, 1904). Author: "General Pathology of Fever"; also numerous papers on pathological and bacteriological subjects.

Wellington, Arthur Wellesley [Wesley], **Duke of,** was born 1769, was educated at Eton and the Military Academy of Angers, and entered the army in 1787. As lieutenant-colonel he served in Holland (1794), and in 1796 was sent to India. In 1799, under General Harris, he stormed Seringapatam, defeated the Mahrattas at Assaye in 1803, and returned home two years later. After sitting in parliament for two years (being Irish secretary in 1807), and serving at Copenhagen, he was sent to Portugal in 1808. Having won the victories of Roliça and Vimeiro, he was superseded, but in 1809 was again in the Peninsula. He was made a peer for the victory of Talavera, and won the battle of Busaco in 1810, after which he constructed the lines of Torres Vedras. This was followed by Fuentes d'Oñoro (1811), the capture of Ciudad Rodrigo and Badajoz (1812), and the victory of Salamanca in the same year. He was now created marquis, and after the battle of Vitoria drove the French across the Pyrenees. After being made field-marshal and duke, he attended the Congress of Vienna, which he left to meet Napoleon at Waterloo. In 1827, he became commander-in-chief, and in 1828 was for the first time premier. After yielding on the Catholic question, he resigned in 1830 on that of Reform, incurring great unpopularity. In 1834, he again held office, but resigned next year, and in 1841 joined the cabinet of Sir R. Peel. He attended the House of Lords to the last, and received a state funeral at St. Paul's Cathedral. Died, 1852.

Wenceslas, or **Wenzel** (*ven'-tsel*), a German emperor, of the house of Luxemburg, born in Nuremberg in 1361. He was the eldest son of Charles IV., was crowned King of Bohemia in his third year, and in 1378 succeeded his father as emperor. He annulled all debts due to Jews on the payment to himself of fifteen to thirty per cent. of the amount. The mob of Prague having slaughtered 3,000 Jews, he appropriated their property. In 1394, he was imprisoned at Prague by a conspiracy among the nobles,

headed by Jodocus of Moravia, but the German princes secured his release. He joined France in urging the abdication of Boniface IX. and Benedict XIII., in order that a new pope might take their place. Hereupon several German princes deposed him in 1400, electing Rupert of the Palatinate. He abdicated his claims to the imperial crown in favor of his brother Sigismund in 1410, and indulged in excesses till he died of apoplexy in 1419.

Wesley, John, was born at Epworth, in Lincolnshire, June 17, 1703; an eminent evangelist and divine, the founder of "the people called Methodists." He was the son of a clergyman of the Church of England; and he himself became a clergyman, after having been educated at the Charterhouse School, and at Christ Church, Oxford. The year after he took orders (1725) he was chosen a Fellow of Lincoln College, and was appointed lecturer on Greek; but shortly afterwards he became curate to his father, and labored at Epworth and in the neighborhood, where his father was vicar, till he returned to Oxford in 1729. It was during his residence at Oxford that the first Methodist Society was formed, he and his brother Charles (born, 1708; died, 1788), being accustomed to meet together, with a few others, for the purpose of mutual edification. Wesley continued to act as tutor at Oxford till 1735, when he was induced to visit Georgia, in North America. After about two years he returned to England, and soon after commenced preaching in association with his friend George Whitefield, from whom, however, he separated in 1740 on account of a difference in theological belief. His labors were incessant. During fifty years he traveled all over the country everywhere preaching the gospel, and founding societies; at the same time he administered the affairs of an organization which at the time of his death embraced no fewer than 80,000 members; and during the whole period he was a very copious writer — his works, when first collected, amounting to no fewer than thirty-two volumes. During the whole of his career he continued still, professedly, a minister of the Church of England. Wesley died in the house adjoining his chapel in the City Road, London, 1791, and in the adjoining graveyard he was buried. His brother Charles, who died three years before him, is chiefly celebrated as the author of numerous hymns, some of which are considered among the best in the language.

West, Benjamin, was born at Springfield, Pennsylvania, October 10, 1738; an eminent painter, who settled in England in 1763, and in 1792 succeeded Sir Joshua Reynolds as president of the Royal Academy, an office which he held until his death. His works were formerly very highly esteemed, and he is still considered one of the greatest painters whom America has produced. Died in London, 1820. He is buried in St. Paul's Cathedral.

Westinghouse, George, inventor and manufacturer; born in New York in 1846; educated in public and high schools; spent much time in his father's machine shop, inventing, at 15, a rotary engine. Served in Union army, 1863–64; assistant engineer in United States Navy, 1864–65; then attended Union College to sophomore year (Ph. D., 1890). Invented, 1865, a device for replacing railroad cars on the track; invented and successfully introduced, 1868, the Westinghouse air brake, which he later greatly improved; also made other inventions in railway signals, steam and gas engines, steam turbines, and electric machinery. Was pioneer, against great opposition, in introducing alternating current machinery in America, which has rendered possible the great development of water power for long distance electrical transmission; built the great generators at Niagara Falls and those for elevated railway and rapid transit system in New York; established large works in United States, Canada, England, France, Germany, Russia, Austria, and Italy for manufacturing air brakes, electrical and steam machinery; was president of numerous corporations, employing about 50,000 men, and with a capitalization of about $200,000,000. His inventions of the air brake and of automatic railway signals have been largely instrumental in the possibility and safety of modern high-speed railroading. Died, 1914.

Weyman (*wī'-man*), **Stanley John,** English novelist, was born at Ludlow, 1855. After receiving his education at Shrewsbury and at Christ Church, Oxford, he engaged in the practice of law, 1881-89. His first work of fiction, "The House of the Wolf," appeared in 1890. In 1893 he won wide fame by his novel, "A Gentleman of France." Among his later writings are: "Under the Red Robe," "My Lady Rotha," "Shrewsbury," "Count Hannibal," "The Abbess of Vlaye," "The Man in Black," "The Castle Inn," "The Red Cockade," "Starvecrow Farm," and "The Wild Geese."

Wharton, Edith, American novelist, was born at New York, 1862; received her education at home, and in 1885 married Edward Wharton of Boston. Her first novel, "The Greater Inclination," 1899, was followed by many works of fiction, noted for searching character analysis and finished style. Among the best known are: "The Valley of Decision," "The Descent of Man," "The House of Mirth," "The Hermit and the Wild Woman," "Sanctuary," "The Touchstone," "The Custom of the Country," "The Reef," "Xingu," and "The Fruit of the Tree." While engaged in relief work during the world war, she wrote "Fighting France," and was made a chevalier of the legion of honor.

Whately, Richard, was born in London, February 1, 1787; an eminent prelate, theologian, and mental and moral philosopher; from 1831 to his death archbishop of Dublin. In 1822, he was made Bampton lecturer, and in that capacity preached his sermons on "The Use and Abuse of Party Feeling in Religion." In 1825, he became principal of St. Alban's Hall, Oxford; and four years later was appointed professor of political economy, an office which he held till his appointment to the archbishopric. Whately's intellectual activity was remarkable. In 1820, he wrote "Historic Doubts Relative to Napoleon Bonaparte," a logical satire upon historical scepticism; in 1826 he published in a separate form his admirable treatises on "Logic and Rhetoric," both of which had already appeared in the "Encyclopædia Metropolitana"; and in 1856–59 he published his annotated editions of Bacon's "Essays" and Paley's "Moral Philosophy," both admirable specimens of criticism, and full of interesting original discourse. Died in Dublin, 1863.

Wheatstone, Sir Charles, was born at Gloucester, 1802; an eminent electrician and physicist, for many years professor of natural philosophy in King's College, London. He was the first to introduce and to give practical application to the electric telegraph in England, his experiments having been made, in conjunction with Mr. Cooke, when he was quite unaware of the experiments being made about the same time by Professor Morse in America. He was also the inventor of the stereoscope. He received his knighthood in 1868, and was for some years a vice-president of the Royal Society, of which he had been elected a Fellow in 1836. He twice received the Royal Medal at the Royal Society, and in 1868 won the Copley Medal. Died, 1875.

Wheeler, Benjamin Ide, president of the University of California, 1899-1919; born at Randolph, Mass., 1854; A. B., Brown University, 1875, A. M., 1878; Ph. D., University of Heidelberg, 1885; LL. D. from nine colleges and universities. Instructor Latin and Greek, Brown University, 1879–81; instructor German, Harvard, 1885–86; acting professor classical philology, 1886–87, professor comparative philology, 1887–88, Greek and comparative philology, 1888–89, Cornell University. Professor Greek literature, American school of classical studies, Athens, 1895–96; Roosevelt professor, University of Berlin, 1909–10. Author: "The Greek Noun Accent," "Analogy in Language," "Introduction to the History of Language," "Organization of Higher Education in the United States," "Life of Alexander the Great."

Wheeler, Joseph, an American military officer; born in Augusta, Ga., September 10, 1836; was graduated at the United States Military Academy in 1859; served in the cavalry till the outbreak of the Civil War, when he entered the Confederate army, in which he was commissioned major-general and senior commander of cavalry. He won great distinction during the Civil War as a raider. After the war he entered the law profession; held a seat in Congress in 1881–99; and was made major-general of volunteers in May, 1898. During the Santiago campaign in Cuba he commanded the cavalry division; participated in the battles of Las Guasimas and San Juan Hill; was appointed senior member of the commission to make arrangements for the surrender of the Spanish army; served in the Philippines from August, 1899, to January, 1900; was appointed a brigadier-general, U. S. A., June 16, 1900. Died, 1906.

Whewell (*hu'-el*), **William,** was born at Lancaster, 1794; an eminent writer on many various subjects; from 1841 to his death Master of Trinity College, Cambridge. In 1833 he published his Bridgewater Treatise, on "Astronomy and General Physics Considered in Reference to Natural Theology"; and this was followed by a "History of the Inductive Sciences" (1837), and "The Philosophy of the Inductive Sciences" (1840), "Lectures on Political Economy" (1861), undoubtedly his three greatest works, displaying equal learning and independent power. Died, 1866.

Whistler, James Abbott McNeill, painter, born in Lowell, Mass., in 1834; was educated at the United States Military Academy; studied drawing and painting in Paris, France, and in 1863 settled in London, England. He held original views concerning his art, and made interesting experiments with color, in quest of novel effects. He also gained celebrity as an etcher, and is the author

of etchings and paintings of established reputation and worth. His paintings include many portraits, among which are "The White Girl," "Portrait of my Mother," "Nocturne in Blue and Gold," "Harmony in Gray and Green." In 1890, he wrote the "Gentle Art of Making Enemies." Died in London, 1903.

White, Andrew Dickson, American diplomatist and educator; born in Homer, N. Y., November 7, 1832. He was graduated at Yale in 1853; traveled in Europe; attaché to legation of the United States, Petrograd, 1854–1855; studied in the University of Berlin; professor of history and English literature, University of Michigan, 1857–1863; returned to Syracuse and elected state senator, 1863-1867; was first president of Cornell University, 1867-85; in addition to the presidency filled the chair of modern history; was appointed by President Grant commissioner to Santo Domingo to study and report on question of annexation, 1871; by President Hayes, minister to Berlin, 1879–1881; by President Harrison, minister to Petrograd, and continued under President Cleveland, 1892–1894; member of the Venezuelan Commission, 1896–97; ambassador to Berlin, 1897-1902; president of the American delegation to the international peace congress at The Hague in 1899. His best-known works are "Warfare of Science with Theology," "The New Germany," and "Studies in General History." Died, 1918.

White, Edward Douglass, an American jurist; born in the parish of Lafourche, La., 1845; was educated at Mount St. Mary's College, Md., and at the Jesuit College in New Orleans. During the Civil War he served in the Confederate army. After the war he practiced law. He was state senator of Louisiana in 1874; associate justice of the Supreme Court of Louisiana in 1878; and United States senator, 1891–94. While still in the senate he was appointed an associate justice of the United States Supreme Court; appointed chief-justice by President Taft in 1910. Died, 1921.

White, Henry, American diplomat, was born at Baltimore, 1850. He was educated privately in the United States and in France. Possessed of an ample fortune, he chose a diplomatic career, serving as secretary of legation at Vienna, 1883-84, at London, 1884-93, and again, 1897-1905. He was American ambassador to Italy, 1905-07, to France, 1907-09, and was special ambassador to Chile, 1910. In 1906 he headed the United States delegation to the Algeciras conference concerning Moroccan affairs. In 1919 he was one of the American delegates to the international peace conference at Versailles.

White, Horace, journalist; born in Colebrook, N. H., August 10, 1834; graduate of Beloit College, Wis., 1853; for many years with "Chicago Tribune" and was its editor and one of its chief proprietors, 1864–74; in 1883, became connected with "New York Evening Post" as president of company, editorial writer, and editor-in-chief; retired January 1, 1903. Edited "Bastiat's Sophismes Economiques," and "Luigi Cossa's Scienza delle Finanze." Author: "Money and Banking Illustrated by American History," "The Roman History of Appian of Alexandria." Died, 1916.

White, William Allen, editor and author, was born at Emporia, Kan., 1868. He was educated at Emporia college and at the university of Kansas. Entering journalism he became, in 1895, editor and owner of the Emporia "Gazette," acquiring a national reputation with his editorial entitled "What's the Matter with Kansas," and similar articles. His writings include: "The Real Issue, and Other Stories," "The Court of Boyville," "Stratagems and Spoils," "In Our Town," "A Certain Rich Man," "The Old Order Changeth," "God's Puppets," "In the Heart of a Fool," and "The Martial Adventures of Henry and Me." In 1919 he was chosen by President Wilson as special envoy to confer with representatives of various Russian political factions at Princes Islands.

Whitney, Eli, inventor, born in Westborough, Mass., December 8, 1765. In 1792 he was graduated at Yale, went to Georgia, and for a time read law, while living on the plantation of the widow of General Nathanael Greene. Here he invented the cotton gin, but owing to litigation growing out of the claims of fraudulent imitators, and despairing of obtaining his rights in the South, Whitney went to New Haven, Conn., in 1798, where he became engaged in the manufacture of firearms, introducing the extension of machinery in place of manual labor. Died at New Haven, Conn., 1825.

Whitney, William Dwight, a distinguished American philologist, born in 1827 at Northampton, Mass., studied at Williams College, Williamstown, and at Yale College, giving special attention to Sanskrit. He also studied Sanskrit in Germany from 1850 to 1853, returning in the latter year to America. The first fruits of his studies in Sanskrit was an edition of the Atharva-Veda in conjunction with Roth (1856). He had previously (1854) been made professor of Sanskrit and of comparative philology at Yale College. Among his independent works may be mentioned: "Language and the Study of Language" (1867), "Oriental and Linguistic Studies" (1872–74), "Life and Growth of Language" (1875), "Sanskrit Grammar" (a highly important work), "German Grammar." He was editor of the "Century Dictionary of the English Language." He died in 1894.

Whittier, John Greenleaf, American poet, was born of Quaker parents in 1807 at Haverhill, Mass., and educated at the academy of his native place. In his younger days he worked on his father's farm and learned the shoemaking trade, but early began to write for the press, and in 1831 published his first work, "Legends of New England" in prose and verse. He carried on the farm himself for five years, and in 1835–36 he was a member of the Legislature of Massachusetts. After having edited several other papers he went to Philadelphia to edit the "Pennsylvania Freeman," an anti-slavery paper, the office of which was burned by the mob in 1838. In the following year he returned to his native State, settling at Amesbury, where (or at Danvers, Mass.) he chiefly resided until his death. Among the numerous volumes of poetry which he from time to time gave to the world the following may be mentioned: "Moll Pitcher," "Lays of my Home," "Miscellaneous Poems," "The Voices of Freedom," "Songs of Labor," "The Chapel of the Hermits," "Home Ballads," and poems "Snow Bound," "In War-time," "National Lyrics," "Ballads of New England," "Miriam," "Mabel Martin," "Hazel Blossoms," "The King's Missive," "Poems of Nature." Died, 1892.

Wiggin, Kate Douglas, author; born in Philadelphia, September 28, 1859; graduate of Abbott Academy, Andover, Mass., 1878; married, March 30, 1895, George C. Riggs. Organized the first free kindergartens for poor children on the Pacific coast; has been interested in that work ever since. Continues her name of "Kate Douglas Wiggin" in her literary work. Author: "The Birds' Christmas Carol," "The Story of Patsy," "A Summer in a Cañon," "Timothy's Quest," "The Story Hour" (with Nora A. Smith), "Children's Rights" (with same), "A Cathedral Courtship," "Penelope's English Experiences," "Polly Oliver's Problem," "The Village Watch Tower," "Froebel's Gifts" (with Nora A. Smith), "Froebel's Occupations" (with same), "Kindergarten Principles and Practice" (with same), "Nine Love Songs and a Carol," "Marm Lisa," "Penelope's Progress," "Penelope's Experiences in Ireland," "The Diary of a Goose Girl," "Rebecca," "The Affair at the Inn" (collaboration), "Rose o' the River." Editor (with Nora Archibald Smith): "Golden Numbers," "The Posy Ring."

Wilberforce, Samuel, bishop, born in 1805, was third son of W. Wilberforce, and an active High Church leader, who became Bishop of Oxford in 1845, and of Winchester in 1869. He was an able speaker in the House of Lords, and had much social influence. Died, 1873.

Wilberforce, William, was born 1759; philanthropist, entered parliament in 1780, and seven years later entered upon the movement against the slave trade, his abolition motion in 1789 gaining the support of the leaders of every party in the House, though it was not carried for eighteen years. Just before his death slavery itself was abolished in the British dominions. Died, 1833.

Wilcox, Ella Wheeler, an American poet and writer, was born in 1855 near Madison, Wis., and educated at the State University in that city. She was for many years a contributor to the Milwaukee and Madison papers, of poems and sketches, the demand for her productions extending to the leading journals and periodicals of the country. Author of "An Ambitious Man," "Sweet Danger," "Poems of Passion," "Poems of Pleasure," "Kingdom of Love," "Men, Women and Emotions," and "A Woman of the World." Died, 1919.

Wiley, Harvey Washington, chief of bureau of chemistry, United States Department of Agriculture, 1883–1912; born in Kent, Ind., in 1844; graduate of Hanover College, 1867 (Ph. D., LL. D.); Harvard, 1873; professor of chemistry, Purdue University, and State chemist of Indiana, 1874–83; professor of agricultural chemistry in graduate school, Columbia (now George Washington) University, since 1899. Author: "Principles and Practice of Agricultural Chemistry," "Songs of Agricultural Chemists"; also 60 government bulletins and 225 scientific papers.

Wilhelmina Helene Pauline Marie (*vil-hel-mē'nah*), Queen of the Netherlands, only child of William III., by his second wife, born at The Hague, August 31, 1880. Her mother was Regent until August 31, 1898,

the queen's majority; crowned September 6, 1898. Married Duke Henry of Mecklenburg-Schwerin, 1901.

Wilkes, Charles, American navy, explorer, was born in 1798; discovered several islands in Antarctic region, and in 1861 caused a dispute with Great Britain by his seizure of Confederate commissioners on the "Trent," a British vessel. Died, 1877.

Willard, Frances Elizabeth, was born near Rochester, N. Y., September 28, 1839; died in New York, February 18, 1898. After some years spent in teaching she became professor of æsthetics in the Northwestern University, and was made dean of the Woman's College in 1871; she began her active temperance work in 1874, as secretary of the National Woman's Christian Temperance Union; in 1879, she was made president of that organization and held the office till her death; she was chosen president of the World's Christian Temperance Union in 1888, and, in 1892, visited England as the guest of Lady Henry Somerset, the well-known temperance worker. She was an orator of great eloquence, humor, and power. By her work for temperance and social purity she left an impressive mark on her country as one of its greatest social reformers.

William I., surnamed the Conqueror, King of England, founder of the Norman Dynasty, was born, 1027. He was the bastard son of Robert I. or II., Duke of Normandy, and a tanner's daughter of Falaise named Arletta, and succeeded to the dukedom when eight years old. He claimed the throne of England through Emma, sister of his grandfather and mother of Edward the Confessor. When Harold, son of Earl Godwin, visited the Norman court about 1065, he was compelled to swear fealty to William; but in Edward's death, in 1066, Harold procured his own elevation to the throne. William then prepared to enforce his pretension by arms, and on September 28, 1066, landed at Pevensey with 60,000 men. On October 14th was fought the battle of Senlac or Hastings, in which the Saxons were defeated and their king was slain. William was crowned in London, December 25th. At first his rule was mild and just, but after the sanguinary suppression of a league of the Saxon nobles he treated the Saxons as a conquered nation, distributed their estates among his Norman followers, and deposed the principal Saxon clergy. Died, 1087.

William I., seventh king of Prussia and first German emperor, was born in 1797. He took part in the campaign of 1814-15 under Blücher and was commander of the forces which suppressed the revolutionary movement of 1849 in Baden. On the death of the king, his brother, 1861, he succeeded to the throne of Prussia. During his reign Prussia defeated Denmark in 1864, annexing the duchies of Schleswig-Holstein, overwhelmed Austria at the battle of Sadowa, 1866, and, with the rest of Germany, conquered France in 1870. At Versailles, Jan. 18, 1871, during the siege of Paris, William I. was proclaimed German emperor. Died, 1888.

William II., emperor of Germany, 1888–1918, eldest son of Frederick III. and grandson of Queen Victoria of England, was born in 1859. He was educated at Cassel and Bonn. Soon after his accession he took a strong and independent attitude toward political affairs. This led to differences of opinion resulting, in 1890, in the dismissal of Prince Bismarck as chancellor. In foreign affairs William II. continued the policy of Bismarck in maintaining the Triple Alliance with Austria and Italy. He abandoned, however, efforts to continue close relations with Russia. Entering energetically into the field of world-politics, he determined to secure for Germany a "place in the sun." With this object in view, he urged colonial expansion, cultivated relations with Turkey, and pushed German interests in Asia Minor. He upheld the "divine right" of kings, opposed socialism, insisted upon the creation of a great navy, and constantly increased the army. He proclaimed, "It is in the army that my confidence rests." After the war with Japan had revealed Russia's weakness, William II. strongly supported Austria's policies in the Balkans. When Austria, rejecting Servia's reply to her drastic ultimatum, declared war against Servia, July 28, 1914, William declined to interpose and almost immediately declared war on Russia and France. On Aug. 4 German troops violated the neutrality of Belgium and began a series of atrocities which finally aroused all the great nations of the world to take up arms against Germany. Deaf to all humane appeal, William II. continued to justify the increasing barbarities of his army and navy as necessary punishments inflicted in "defense" of the fatherland and repeatedly proclaimed his partnership with the Almighty. Following terrible defeats in the campaign of July–November, 1918, the German high command compelled the signing of an armistice on Nov. 11th. Coincident with this event, William II. abdicated all rights to his throne, fled from Germany, and took refuge in Holland.

William III. of England, born in 1650. Having married Mary, daughter of James II., was regarded as a Protestant champion against the latter, and, in 1688, was called in to replace him. He defeated James at the Boyne in 1690, obtained the acknowledgment of his title from Louis XIV. by the Peace of Ryswick (1697), but had prepared a grand alliance to renew the war with him just before he died, Louis having favored the claim of James Edward. Died, 1702.

Williams, George Fred, lawyer; born in Dedham, Mass., July 10, 1852; graduate of Dartmouth, 1872; studied at Heidelberg and Berlin; admitted to bar. Edited "Williams' Citations of Massachusetts Cases"; edited volumes 10 to 17 "Annual Digest of the United States." Member of Massachusetts Legislature, 1889; member of Congress, 1891–93. Served as minister to Greece, 1913–14.

Williams, John Sharp, senator; born in Memphis, Tenn., July 30, 1854; educated in Kentucky Military Institute, University of the South, University of Virginia, and University of Heidelberg, Germany; studied law at University of Virginia and in Memphis, Tenn.; admitted to Tennessee bar, 1877; removed to Yazoo City, Miss., 1878; has since practiced law; is also a cotton planter: delegate to Democratic National conventions, 1892, 1904; temporary chairman of St. Louis Convention, July 6–9, 1904; member of Congress from Mississippi from 1893 to 1911; elected United States senator for term 1911–17, re-elected, 1917–23.

Williams, Roger, founder of the State of Rhode Island, United States, was born in Wales in 1600. Being a Puritan, he fled from the country to escape persecution, and settled in New England, where he hoped to enjoy the religious freedom he was denied at home, but was received with disfavor by the earlier settlers as, from his extreme views, a "troubler of Israel," and obliged to separate himself and establish a colony of his own. This he did at Providence by favor of an Indian tribe he had made friends of, and under a charter from the Long Parliament of England, obtained through Sir Henry Vane. Here he extended to others the toleration he desired for himself; he was characterized by Milton, who knew him, as "that noble champion of religious liberty." Died, 1683.

Wilson, Francis, actor; born in Philadelphia, Pa., February 7, 1854; first professional appearance in a minstrel company; engaged in legitimate comedy at Chestnut Street Theater, 1877–78, Philadelphia; as Cyril in "London Assurance," 1878–79; with Annie Pixley in "Miss," 1879; with "Mitchell's Pleasure Party," 1880–83; started in comic opera as Sir Joseph Porter in "Pinafore"; became leading comedian of McCaull Opera Company and of Casino, New York, 1885–89, where he created the character of Cadeaux in "Erminie." Subsequently he took leading comedy rôles in "The Oolah," "The Merry Monarch," "The Lion Tamer," "Devil's Deputy," "Half a King," "Cyrano de Bergerac," and in "The Bachelor's Baby" written by himself. He wrote also: "Joseph Jefferson" and "The Eugene Field I Knew."

Wilson, Henry, an American senator; born in Farmington, N. H., in 1812, of poor parents; received scanty education, and was taught the trade of shoemaker. Elected to the Massachusetts House of Representatives by the Whig party, in 1840, he there became a prominent anti-slavery advocate, and largely contributed to the formation of the Free-soil party in 1848. In 1855, he succeeded Edward Everett as United States senator, and became one of the leaders of the Republican party. In 1872, he was nominated by the Republican Convention a candidate for the vice-presidency of the United States and was elected. Died, 1875.

Wilson, James, United States secretary of agriculture, 1897–1913; born in Ayrshire, Scotland, 1835; came to United States, 1851, settling in Connecticut with parents; in 1855 went to Tama County, Ia. In 1861, engaged in farming; member 12th, 13th, and (speaker) 14th assemblies of Iowa; member Congress, 1873–77, and 1883–85; regent State University of Iowa, 1870–74; for six years director Agricultural Experiment Station and professor of agriculture, Iowa Agricultural College. Died, 1920.

Wilson, Woodrow, 28th president of the United States, was born at Staunton, Va., 1856. He graduated from Princeton university, 1879, A. M., 1882, from the law school, university of Virginia, 1881, and did post-graduate work at Johns Hopkins university, 1883-85, Ph.D., 1886. He engaged in law practice at Atlanta, Ga., 1882-83. After teaching history and political economy at Bryn Mawr College, 1885-88, and at Wesleyan university, 1888-90, he was professor of jurisprudence, political economy, and politics, 1890-1910, and president, 1902-10, Princeton university. He was governor of New

Jersey, 1911-13. In 1912 he was elected president of the United States, and reelected, 1916. During his administration problems of greater gravity arose than during any presidency since that of Lincoln. On April 2, 1917, he delivered before congress a momentous address on the rights of nations, which was followed by the declaration of war against Germany. During the remainder of the conflict he occupied a position of preeminence in world affairs. In 1919 he led the American delegation at the international peace conference at Versailles. He secured the establishment of the League of Nations as a part of the peace treaty but the United States Senate refused ratification. In 1920 he was awarded the Nobel prize for peace. Author: "Congressional Government, a Study in American Politics," "The State: Elements of Historical and Practical Politics," "Division and Reunion," "George Washington," "A History of the American People," "The New Freedom," "Constitutional Government in the United States," "Free Life," "When a Man Comes to Himself," "On Being Human."

Winslow, Erving, commission merchant; born in Boston, 1839; educated at English High School, Boston, and Lawrence Scientific School, Harvard; was assistant United States Coast Survey; assistant in Dudley Observatories, Albany, N.Y.; in 1868 engaged in business, Boston. Translator: "Maeterlinck's 'Pelléas et Mélisande';" founder, and joint editor, two years, "Time and the Hour." Contributor to magazines, reviews, and newspapers.

Winthrop, John, governor of Massachusetts colony, was born in Suffolk, England, 1588; became a lawyer; in 1629 chosen governor by Massachusetts Bay Company. Came to America with 900 others, 1630; served as governor 1630–34, 1637–40, 1642–44, and 1646–49. His influence on the history of New England was very great. Died at Boston, 1649.

Wirt, William, an eminent American advocate and author; was born at Bladensburg, Md., 1772. He became a member of the bar of Virginia, was a leading counsel in the prosecution of Aaron Burr, and from 1817 to 1829, filled the position of attorney-general of the United States. In 1832, he was the unsuccessful nominee of the Anti-Masonic party for the presidency. His "Life of Patrick Henry" was very popular. Died, 1834.

Wiseman, Nicholas, Cardinal, born of Irish parents at Seville, 1802. He was educated at Waterford and the Roman Catholic College, Ushaw, near Durham; joined the English College then newly formed (1818) at Rome; became professor of Oriental languages and (1828) rector of the English College; returned to England (1835), and was appointed successively rector of Ushaw, vicar apostolic of the central district of England, and Roman Catholic archbishop of Westminster (1850). He was the author of "Lectures on the Connection between Science and Revealed Religion," "Letters on Catholic Unity," "Papal Supremacy," "Fabiola," "Four Last Popes," and joint-editor for many years of the Dublin "Review." Died, 1865.

Wister, Owen, author; born in Philadelphia, July 14, 1860; graduated from Harvard, 1882, A. M., LL. B., 1888. Admitted to Philadelphia bar, 1889; engaged in literary work, 1891. Author: "The Dragon of Wantley: His Tail," "Red Men and White," "Lin McLean," "The Jimmy John Boss," "U. S. Grant, a Biography," "The Virginian," "Philosophy 4," "Journey in Search of Christmas," "The Pentecost of Calamity"; also much prose and verse in magazines.

Witte, Count Sergiej Juliewitsh, Russian statesman of German origin, born in 1849 at Tiflis; educated at Odessa in mathematics and physics; entered the railway administration, and first gained distinction by his clever organization of the transport of troops in the war of 1877-78; was called to Petrograd for employment there in 1879, and appointed in 1886 director of Russian southwest railways. In 1888 he became head of the railway department in the ministry of finance, chairman of commission on tariffs; in 1892, minister of means of communications, and, in 1893, minister of finance. In August, 1903, he was removed from the ministry of finance and made president of the committee of ministers. He was one of the Russian plenipotentiaries in the negotiations for peace with Japan in 1905, and was afterwards made a count. Died, 1915.

Wolfe, James, a distinguished English general; was born in Kent, 1727. After serving with high distinction during the Seven Years' War, he was appointed commander-in-chief of the army sent against the French in Canada, 1759, and fell, mortally wounded, in the moment of victory, on the Plains of Abraham at Quebec; his opponent in command, the Marquis de Montcalm, was also carried from the field in a dying condition. This battle terminated the French possession of Canada.

Wolseley, Garnet Joseph, Viscount, born in 1833; served in Burmah, in the Crimean War, the Indian Mutiny, and the Chinese War of 1860; commanded the Red River expedition (1870); commanded on the Gold Coast during Ashanti War (1873); governor of Natal, and, later, Cyprus; gave up latter post to command in the South African War of 1879–80. Commanded Egyptian expedition (1882), and Gordon relief expedition (1884). While commanding in Ireland was made field-marshal, and commander-in-chief, 1895. Died, 1913.

Wolsey, Thomas, born in 1471; ecclesiastical statesman; was employed diplomatically by Henry VII., and made Dean of Lincoln, becoming in the next reign successively Dean of York, Bishop of Lincoln, and Archbishop of York, while holding at the same time the sees of Bath and Wells, Durham and Winchester. He became also chancellor (1515), cardinal, and papal legate, and aimed at being pope. His overthrow, in 1529, was caused by the jealousy of the great nobles and his disagreement with the king on the divorce question. He founded Christ Church (Cardinal College), Oxford, where there is a portrait of him by Holbein, and built a palace at Hampton Court. Died, 1530.

Wood, Leonard, army officer; born in Winchester, N. H., October 9, 1860; graduated from Harvard Medical School, 1884; LL. D., Harvard, 1899, Williams, 1902, University of Pennsylvania, 1903; appointed first lieutenant and assistant surgeon, United States Army, 1886; recruited and commanded the "Rough Riders," 1898; brigadier-general volunteers, 1898, for gallant service at Las Guasimas and San Juan Hill; major-general volunteers, 1898; military governor Santiago, 1898–99; military governor of Cuba, 1899 to 1902; honorary discharge as major-general United States Volunteers, 1899; appointed brigadier-general United States Army, 1901, major-general, 1903; appointed governor of Moro Province, 1903; of Philippines, 1906; of department of East in United States, 1908-09; chief of staff, 1910; commanded department of East, 1914-17, later Southeastern department; appointed commander at Camp Funston, Kan., 1918; again governor of Philippines, 1921.

Woolsey, Theodore Salisbury, professor of international law, Yale, 1878–1911; born in New Haven, Conn., October 22, 1852; graduated from Yale, 1872 (A. M., 1877), Yale Law School, 1876 (LL. D., Brown University, 1903); instructor of public law, Yale, 1877. Editor: "Woolsey's International Law," "Pomeroy's International Law." Author: "America's Foreign Policy," also many articles in magazines, journals.

Worcester, Joseph Emerson, born in 1784; American lexicographer. His "Dictionary of the English Language" was published in 1860. Died, 1865.

Wordsworth, William, English poet; was born in Cumberland, 1770; visited France in the early years of the revolution, 1790-91; gained the friendship of Coleridge by the publication of his first poems, and went to live near him in Somersetshire. The friends went on a walking tour, the result of which was "Lyrical Ballads," published in 1798, at Bristol. After a tour in Germany, Wordsworth and his sister lived at Grasmere till 1808, the poet being married in 1802, and "The Prelude" (begun in 1799) being finished in 1805. In 1813 Wordsworth was named distributor of stamps for Westmoreland, and henceforth lived at Rydal Mount. "The Excursion" appeared next year, and in 1815 "The White Doe of Rylstone" was published. Other poems followed, but the whole fragment of "The Recluse" was not published till 1888. In 1843 Wordsworth became poet-laureate. Died, 1850.

Wren, Sir Christopher, born in East Knoyle, in Wiltshire, October 20, 1632; an eminent English architect, best known as the architect of St. Paul's cathedral. He was, however, the architect of numerous other churches, and of many public buildings. He received his knighthood in 1672. Died at Hampton Court, February 25, 1723. He is buried in the crypt of St. Paul's, with the appropriate inscription, "Si monumentum requiris, circumspice" (If you seek a monument, look around).

Wright, Carroll Davidson, educator, economist, statistician; born in Dunbarton, N. H., July 25, 1840; academic education (A. M., LL. D., Tufts; Ph. D., Dartmouth; LL. D., Wesleyan and Clark universities); served in Civil War, private to colonel, 14th New Hampshire volunteers; member of Massachusetts senate, 1872-73; chief of Massachusetts bureau of statistics of labor, 1873-88; United States commissioner of labor, 1885–1902; also, 1893–97, completed eleventh United States census. Honorary professor of social economics, Catholic University of America, 1895–1904; professor of statistics and social economics, school of comparative jurisprudence and diplomacy, Columbia University, 1900; university lecturer on wage statistics, Harvard University, 1900–01; president of Clark College, Worcester, Mass., 1902-1909. Appointed by President member

and recorder of United States anthracite strike commission, 1902. Trustee of Carnegie Institute, Washington. Author: "The Factory System of the United States," "Relation of Political Economy to the Labor Question," "The Social, Commercial, and Manufacturing Statistics of the City of Boston," "History of Wages and Prices in Massachusetts, 1752–1883," "The Industrial Evolution of the United States," "The Public Records of Parishes, Towns, and Counties in Massachusetts," "Outline of Practical Sociology," "History and Growth of the United States Census." Died, 1909.

Wright, Harold Bell, author, born in Rome, N. Y., 1872; student two years, preparatory department, Hiram college, Ohio. Painter and decorator, 1887–92; landscape painter, 1892–97; pastor in various places, 1897–1908. Author: "That Printer of Udell's," "The Shepherd of the Hills," "The Calling of Dan Matthews," "The Uncrowned King," "The Winning of Barbara Worth," "Their Yesterdays," "The Eyes of the World," "When a Man's a Man," "The Re-Creation of Brian Kent."

Wright, Orville, aëronaut, born at Dayton, Ohio, August 19, 1871; educated at public schools. Since 1903, has devoted attention mainly to Wright Bros.' aeroplane flying machine. His first successful flight was made at Kitty Hawk, N. C., in 1903; successful long distance test near Dayton, Ohio, 1905; has since made many flights in United States and abroad and been awarded many medals. Employed by the United States government in perfecting the machine and instructing army officers in its construction and operation.

Wright, Wilbur, aëronaut; was born near Millville, Ind., April 16, 1867; son of a clergyman, was educated in high schools of Richmond, Ind., and Dayton, Ohio. From 1903 to 1912 engaged with his brother Orville in a scientific and experimental study of the possibilities of the heavier-than-air flying machine, patented by Wright Bros. in the leading countries of the world. Made numerous flights in United States and abroad; sold a machine to United States government for $30,000. Awarded gold medal by French Academy of Sciences, 1909; also many others. The brothers achieved remarkable results, and their machines are now used by the leading aëronauts of the world. They completely demonstrated the practicability of the heavier-than-air machine. Died, 1912.

Wu Ting-Fang, Chinese lawyer, diplomat and statesman, was born in the Hsin-hin district of Kwang-tung, China, 1842. He was educated at St. Paul's College, Canton; later entered the colonial service. He studied law at Lincoln's Inn from 1874 to 1877, when he was admitted to the bar. In 1882 he became a member of the official staff of Li Hung Chang, then governor-general of Chihli, and grand chancellor of the empire. He took part in the negotiations which led up to the treaty of Shimonoseki, which ended the Chinese-Japanese war. He was vice-president of the imperial clan court, vice-president of the board of war, and superintendent of railways. From 1897 to 1902 he was minister of China to the United States, Spain, and Peru; reappointed to the United States, 1907. Appointed minister of foreign affairs for China, 1916.

Wycliffe, John, born in 1324; divine; actively opposed the Mendicant Friars, and, in 1361, was elected master of Balliol College; obtained the favor of John of Gaunt by his reply to the pope's claim for tribute, and, in 1374, obtained the living of Lutterworth. In 1377, he was summoned to St. Paul's to answer a charge from the pope of heretical opinions, but was protected by the court. Next year he was again accused but with no effect, and after this he was occupied with his translations of the Bible and attacks on transubstantiation, his opinions on which he was forced partially to withdraw, and was expelled from Oxford. Died, 1384.

Xavier, St. Francis (*zav'-i-er*), a Jesuit missionary, styled usually the "Apostle of the Indies," was born in 1506, of a noble family, in the north of Spain. He was a student of Sainte-Barbe in Paris, took to philosophy, became acquainted with Ignatius Loyola, and was associated with him in the formation of the Jesuit Society. He was sent, in 1541, under sanction of the pope, by John III. of Portugal, to Christianize India, and arrived at Goa in 1542, from whence he extended his missionary labors to the Eastern Archipelago, Ceylon, and Japan, in which enterprises they were attended with signal success. On his return to Goa, in 1552, he proceeded to organize a mission to China, in which he experienced such opposition and so many difficulties that on his way to carry on his work there he sickened and died, and was buried at Goa. Xavier was beatified by Paul V. in 1619, and canonized by Gregory XV. in 1622.

Xenophon, born in 430 B. C.; a Greek historian and philosopher. Xenophon played an important part in the adventurous retreat known in history as the "Retreat of the Ten Thousand," the description of which he wrote in "Anabasis." His other works are, "Memorabilia," or "Recollections of Socrates"; "Hellenica," a continuation of Thucydides' history of the Peloponnesian War; and the "Cyropædia," or "Education of Cyrus." Died, 357 B. C.

Xerxes I., King of Persia; came to the throne in 485 B. C., invaded Greece in 480, but was defeated at Salamis. He was murdered in 465 B. C.

Yonge, Charlotte M., born in 1823; novelist and historical writer; author of "The Heir of Redclyffe," "The Dove in the Eagle's Nest," and other stories, besides "Landmarks of History," "Cameos from English History." Died, 1901.

Young, Brigham, president of the Mormon church, 1847-77, was born at Whitingham, Vt., in 1801. Having embraced the teachings of Joseph Smith, he began preaching at Kirtland, O., in 1832. Following the death of Joseph Smith at Nauvoo, Ill., 1844, Young assumed leadership. In 1845 he led a party westward from Nauvoo, reaching, in 1847, the central valley of Utah, where he founded Salt Lake City and established the site of the new temple. In 1852 he proclaimed polygamy which was finally officially prohibited in 1890. He established in 1868 Zion's cooperative mercantile institution, which still transacts a large volume of business. The growth and prosperity of the Mormon settlements in Utah under his direction attest his remarkable administrative ability. Died, 1877.

Zangwill, Israel, British writer, of Jewish parentage, was born in London, 1864. He became noted for his stories of the Jews, of which his "Children of the Ghetto" is best known. His writings include novels, essays, poems, and plays. Among his plays are: "Merely Mary Ann," "The Melting Pot," and "Plaster Saints."

Zeller, Eduard, German philosopher, was born in 1814. He was professor at Marburg, Heidelberg, and Berlin. Author: "History of Greek Philosophy" and "History of German Philosophy since Leibnitz." Died, 1908.

Zeno, a Greek philosopher, of Elea (Velia), in Italy, who lived in the Fifth Century before Christ. He was one of the reputed founders of the Eleatic school of philosophy. Only fragments of his writings have come down to us.

Zeno, a Greek philosopher, who flourished in the Third Century before Christ. He was a native of Citium, in the island of Cyprus, but most of his life was spent in Athens. He was the founder of the Stoic school of philosophy, a name derived from the Painted Porch (Stoa Poikile), in which he was accustomed to meet his disciples. He is said to have lived to the age of 98 years.

Zenobia, Queen of Palmyra (Third Century), married Odenathus, who was named "Augustus" by Gallienus in 264, and on his death, three years later, reigned alone; but in 272 Aurelian invaded her territories, defeated and captured her and took her to Rome in 274.

Zinzendorf, Nikolaus, Graf von, born in 1700; founder Moravian settlement at Herrnhut; traveled much in America for religious purposes; in 1737 went to London where he met John Wesley. Died, 1760.

Zola, Émile, born in 1840; French novelist of the "naturalist" school, began life as an employé of the Hachette firm, but in 1864 published "Contes à Ninon." Among his chief works are "Thérèse Raquin," "Les Rougon Macquart," a series of which "L'Assommoir" and "Nana," "Germinal," "La Terre," "La Bête Humaine," "La Débacle," are the most striking. Died, 1902.

Zoroaster, an ancient philosopher, of whose history little or nothing that is authentic is known. There are supposed to have been several of the name. The most celebrated, however, the Zerdusht of the Persians, is believed to have been the reformer of the Magian system of religion, and the author of the Zendavesta, which contains the doctrines that he taught. Irreconcilable differences exist among the learned as to the time in which he flourished. Volney fixes his birth 1250 B. C.

Zwingle, or **Zwingli, Ulrich,** born in 1484; Swiss reformer; served in Italy as a soldier, visited Erasmus at Basel, in 1514, and two years later at the monastery of Einsiedeln began to preach freely. In 1518, he was appointed to the cathedral at Zürich, having previously opposed the sale of indulgences by Sansom. Attempts were made to prohibit his preaching, but the reformation grew at Zürich. In 1529, Zwingle met Luther and Melanchthon at Marburg, but two years later he fell in the battle of Kappel in the war with Berne, 1531.

COLOGNE CATHEDRAL

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GEOGRAPHY, TRAVEL, ARCHITECTURE

Africa (*af're-kah*), the second largest of the continents of the Old World lies nearly due south of Europe and southwest of Asia. It is of a compact form, being nearly equal at its extreme points in length and breadth. The north section of the continent, however, has an average breadth of nearly double the south. This great change of form arises mostly from the greater projection of the upper part toward the west, and the transition on this side from the broad to the narrow section is effected suddenly by an inward turn of the west coast, which faces south for nearly 20° of longitude, forming the Gulf of Guinea, the greatest indentation of the coast. Africa is united to Asia at its northeast extremity by the Isthmus of Suez, now crossed by a great ship canal. From this point the coast runs in a westerly and somewhat northerly direction to the Strait of Gibraltar, the point of greatest proximity to Europe. This north coast forms the south shore of the Mediterranean Sea, and brings all the north countries of Africa into close proximity with the European and Asiatic countries lying contiguous to that great ocean highway, which formed the chief medium of communication between the principal divisions of the ancient world.

The center of Africa possesses an exuberant tropical vegetation. The open pastoral belt at the extremities of the tropics is distinguished by a rich and varied flora. A special characteristic of the vegetation of the south extremity of Africa is the remarkable variety, size, and beauty of the heaths, some of which grow to twelve or fifteen feet in the fertile parts of Nubia.

The fauna of Africa is extensive and varied, and numerous species of mammals are peculiar to the continent. According to a common view of the geographical distribution of animals, the north of Africa belongs to the Mediterranean sub-region, while the rest of the continent forms the Ethiopian region. Africa possesses numerous species of the order quadrumana (apes and monkeys), most of which are peculiar to it. They abound especially in the tropics. The most remarkable are the chimpanzee and the gorilla. The lion is the typical carnivore of Africa. Latterly he has been driven from the coast settlements to the interior, where he still reigns king of the forest. There are three varieties, the Barbary, Senegal, and Cape lions. The leopard and panther rank next to the lion among carnivora. Hyenas of more than one species, and jackals, are found all over Africa. Elephants in large herds abound in the forests of the tropical regions, and their tusks form a principal article of commerce. These are larger and heavier than those of Asiatic elephants. The elephant is not a domestic animal in Africa as it is in Asia. The rhinoceros is found, like the elephant, in Middle and Southern Africa. Hippopotami abound in many of the large rivers and the lakes. The zebra and quagga used to abound in Central and Southern Africa, but the latter is said to be now entirely extinct. Of antelopes, the most numerous and characteristic of the ruminating animals of Africa at least fifty species are considered peculiar to this continent, of which twenty-three used to occur in Cape Colony. The giraffe is found in the interior, and is exclusively an African animal. Several species of wild buffaloes have been found in the interior, and the buffalo has been naturalized in the north. The camel, common in the north as a beast of burden, has no doubt been introduced from Asia. The horse and the ass are natives of Barbary. The cattle of Abyssinia and Bornu have horns of immense size, but extremely light. In Barbary and the Cape of Good Hope the sheep are broad-tailed; in Egypt and Nubia they are long-legged and short-tailed. Goats are in some parts more numerous than sheep. The ibex breed extends to Abyssinia. Dogs are numerous but cats rare, in Egypt and Barbary.

There is a marked distinction between the races in the north and east of the great desert and those in the Central Soudan and the rest of Africa and the south. The main elements of the population of North Africa, including Egypt and Abyssinia, are Hamitic and Semitic, but in the north the Hamite Berbers are mingled with peoples of the same race as those of prehistoric Southern Europe, and other types of various origins, and in the east and southeast with the peoples of the negro type. The Semitic Arabs are found all over the north region, and even in the Western Sahara and Central Soudan, and far down the east coast, as traders. The Somalis and Gallas are mainly Hamitic. In the Central Soudan and the whole of the country between the desert and the Gulf of Guinea the population is pure negro—people of the black, flat- or broad-nosed, thick-lipped type, with narrow heads, woolly hair, high cheek-bones, and prognathous jaws. Scattered among them are peoples of a probably Hamitic stock. Nearly the whole of the narrow south section of Africa is inhabited by what are known as the Bantu races, of which the Zulu or Kaffir may be taken as the type. The languages of the Bantu peoples are all of the same structure, even though the physical type vary, some resembling the true negro, and others having prominent noses and comparatively thin lips. The Bushmen of South Africa are of a different type from the Bantu, probably the remains of an aboriginal population, while the Hottentots are apparently a mixture of Bushmen and Kaffirs. Scattered over Central Africa, mainly in the forest regions, are pigmy tribes, supposed to be the remains of an aboriginal population. The bulk of the inhabitants of Madagascar are of Malay affinities. The total population is estimated at about 150,000,000. Area, about 11,500,000 square miles.

Political Divisions. Only two independent governments exist in Africa, Abyssinia and Liberia. With these two exceptions, the whole

continent is subject to European domination. By recent arrangements, mainly since 1884, great areas in Africa have been allotted to Great Britain, France, Germany, Portugal, Belgium, and Italy, as coming within their respective spheres of influence, in addition to colonial possessions proper. The following table exhibits the division of Africa among the European powers:

	Area (Sq. Miles)	Pop.
British Africa: Cape Province, Natal, Transvaal, Orange Free State, South West Province, Basutoland, Bechuanaland, Rhodesia, Gambia, Gold Coast, Sierre Leone, Nigeria, Somaliland, Kenya, Uganda, Zanzibar, Nyasaland, Egypt, Sudan, Mauritius, Seychelles, Ascension, St. Helena, Togoland, Cameroon, Tanganyika, Swaziland, . . .	4,652,000	60,000,000
French Africa: Algeria, Sahara, Tunis, Sénégal, French Sudan, Upper Volta, Guinea, Ivory Coast, Dahomey, Mauritania, Military Territory of Niger, Congo, Cameroon, Togoland, Réunion, Madagascar, Mayotte, Somali Coast, ...	4,820,548	35,773,895
Italian Africa: Eritrea, Italian Somaliland, Tripoli and Cyrenaica, ...	591,230	7,100,000
Portuguese Africa: Cape Verde Islands, Guinea, Principe & St. Thomas' Islands, Angola, Mozambique, ...	927,292	7,734,701
Spanish Africa: Rio de Oro and Adrar, Ifni, Spanish Guinea, Fernando Po, Annobon, Corisco, Great Elobey, Little Elobey, Spanish Morocco, . . .	128,149	844,399
Belgian Africa: Belgian Congo,	909,654	14,659,000

Alaska, an organized territory comprising the extreme northwestern part of the American continent; purchased from Russia in 1867 for $7,200,000; given a territorial district government in 1884 and enlarged political powers in 1906; in 1912 congress passed an act creating a legislative assembly; Juneau is the seat of government. Area, 590,884 square miles; population in 1920, 54,899.

The waters of Alaska contain over one hundred species of food fish. Among the sea products are seal and salmon which afford leading industries; halibut, cod, herring and whale are also caught. Gold production is hastening the development of the country and the yield of the precious metal promises to be a large factor for many years to come. Lead is produced; coal is worked; petroleum, gypsum, copper, and marble are found. There are large timber resources, mostly spruce, hemlock, and cedar. There are agricultural experimental stations giving valuable demonstrations. Agricultural products are: oats, wheat, rye, barley, among cereals; potatoes, turnips, onions and other vegetables; also several kinds of fruit. In 1914 a navigable channel through the delta of the Kuskokwin river was discovered. This channel, 100 miles in length, connects with the Kuskokwin river running 600 miles inland, thus opening to commerce a valley covering many thousands of square miles. In this valley and along the river are large areas of mineral lands.

By an act of congress of March 12, 1914, President Wilson was authorized to locate, build, or purchase and operate a system of railroads in Alaska, at a cost not to exceed $35,000,000. The decision of the president to adopt the Susitana route was made April 10, 1915, the work to be carried on by the Alaskan engineering commission. The route extends from Seward on Resurrection bay to Fairbanks on the Tanana river, a distance of 471 miles; it includes the existing Alaska Northern railroad which runs from Seward to Turnagain Arm, a distance of 71 miles, purchased at a cost of $1,500,000. In January, 1922, the main line from Seward to Fairbanks was completed.

Albania. A small country of southeastern Europe, situated in the western portion of the Balkan Peninsula. It is bounded on the north and east by Jugoslavia, on the south by Greece, and on the west by the Adriatic Sea. While the entire country is mountainous, the plateaus and valleys are fertile and well populated. Cattle-raising and agriculture are the chief industries. Durazzo, the capital, Scutari, the chief seaport, Elbasan, and Tirena are leading towns. Area 11,000 square miles; population 800,000.

Algiers, the capital of Algeria, founded by the Arabs in 935, called the "silver city," from the glistening white of its buildings, presenting a striking appearance as seen sloping up from the sea, was for centuries under its Bey the headquarters of piracy in the Mediterranean. This began to cease only when Lord Exmouth bombarded the town and destroyed the fleet in the harbor. Since the city fell into the hands of the French, it has been greatly improved, the fortifications strengthened, and its neighborhood has become a frequent resort of English people in winter. Population, 180,000.

Alps, the greatest European mountain system, forming the watershed between the Mediterranean and the Atlantic, and the North and Black seas, extending through 14° of longitude and 5° of latitude, with spurs to the Apennines, Pyrenees, Vosges, Hartz, Sudetes, Carpathians, and the Balkan. They are of crescent-like form, and average in height about 7,700 feet; over 400 peaks rise to the perpetual snow line, which averages from 8,000 to 9,000 feet. The central point of all the Alpine chains is the St. Gothard group, which is in a direct line 150 miles from the Mediterranean, 500 miles from the North Sea, and 550 miles from the Baltic. The principal Alpine divisions are: I. The Maritime Alps, consisting of two portions, the first (Ligurian Alps) extending from the vicinity of Nice to the Col de Lauzania in Piedmont; the second (upper Maritime Alps) terminating in Monte Viso, on the western frontier of Piedmont. II. The Cottian Alps, extending from Monte Viso to Mont Cenis, with Piedmontese and French territories on three sides. III. The Graian Alps, extending from Mont Cenis (11,755 feet) to the Col du Bonhomme, between Savoy on the west and Piedmont on the east. IV. The Pennine Alps, from the Col du Bonhomme to Monte Rosa, between Upper Savoy and the Swiss canton of Valais on one side, and Piedmont on the other, including Mont Blanc (15,781 feet), Monte Rosa (15,217), and the Matterhorn

(14,780). V. The Lepontine or Helvetian Alps, including the Bernese Alps. This division covers West Switzerland, one branch terminating at Monte Bernardino, the other uniting with the Jura, north of lake Geneva. This comprises the finest scenery, and includes the Finsteraarhorn (14,106 feet), Furca (14,037), Jungfrau (13,718), Mönch (13,498), Schreckhorn (13,386), and Monte Leon on the Simplon (11,541). VI. The Rhætian Alps commence at Monte Bernardino, extend along the confines of Switzerland, Italy and Germany, and terminate at the northeast end of Tyrol. VII. The Noric Alps, extending through Salzburg, North Carinthia, Styria, and Upper and Lower Austria. VIII. The Carnic Alps, extending on the confines of Venetia and Carinthia, from Pellegrino to Terglou. IX. From Terglou this chain is prolonged through Görz and Carniola to Mt. Kleck, as the Julian or Pannonian Alps. X. A southern continuation, called Dinaric Alps, extends from Mt. Kleck through Croatia, Dalmatia, and Herzegovina, to the vicinity of the Balkan. Among the most celebrated passes are those of the Great and Little St. Bernard, St. Gothard, Simplon, and Splügen. Over the Simplon Pass (6,628 feet high), Napoleon constructed a road extending from Brieg to Domo d'Ossola, forty-six and one-half miles, connecting Geneva with Milan. Railway tunnels have been cut through Mont Cenis, St. Gothard, and the Simplon.

Amazon, Maranon, or **Orellana,** a river which traverses nearly the whole extent of the equatorial region of South America, running chiefly from west to east, and entering the Atlantic almost at the equator. It is one of the largest rivers in the world, running a course of about 3,300 miles. Its current is so great that it overlies the ocean more than 200 miles from the shore. With its enormous tributaries — the Rio Negro, the Madeira, the Japura, and many others — it is estimated that it affords an inland navigation of 50,000 miles. The area drained is about 2,500,000 square miles. The mouth is nearly 200 miles wide. Several hundred miles of a tributary to the Madeira, previously unexplored, were discovered by Roosevelt, 1914.

Amsterdam, the metropolis of the Netherlands, in the province of North Holland, on the river Amstel, is divided into small islands, connected by bridges, and is almost wholly built upon piles. The site of Amsterdam was originally a peat-bog. About A. D. 1200 it was a small fishing village. It was formerly very strongly fortified, but now its only defense consists in its sluices, which can flood in a few hours the surrounding land. The approach to the city from the Zuyder Zee is intricate and dangerous, owing to the numerous shallows. In the 17th century Amsterdam was the center of the banking transactions of the world. It is still the chief commercial city of the Netherlands, and has a large trade with both the East and the West Indies. The diamond cutters of Amsterdam are greatly celebrated. Population (1919), 647,120.

Andes, the great mountain system of South America, extends along its west coast from Cape Horn to the Isthmus of Panama, with a breadth of from forty to four hundred miles, and covers with its offshoots, plateaus, and declivities, nearly a sixth part of that continent. The highest summit is Aconcagua, in Chile, 23,083 feet high. The Andes are composed partly of granite, gneiss, mica, and clay slate, but chiefly of greenstone, porphyry, and basalt, with limestone, red sandstone, and conglomerate. Volcanoes are numerous in the Chilean Andes, where there are no less than nineteen in a state of activity; and the mountains of Ecuador consist almost altogether of volcanic summits, either now or formerly in active eruption. Of these, the most dreaded is Cotopaxi. The Andes are celebrated for their mineral riches — producing gold and silver in large quantities, with platinum, mercury, copper, lead, tin, and iron. The limit of perpetual snow in the Andes reaches the height of 18,300 feet in the West Cordillera of Chile; near the equator it is 15,000 feet. The potato is cultivated at an elevation of 9,800 to 13,000 feet; wheat grows luxuriantly at 10,000 feet, and oats ripen in the vicinity of Lake Titicaca at an elevation of 12,795 feet.

Antarctic Exploration. The search for land in the Antarctic regions was the motive of explorers as early as the seventeenth century. Up to 1910 the principal explorers were:

Year	Explorer	South Latitude
1700	Halley	52°
1739	Bouvet	54° 10′
1774	James Cook	71° 10′
1842	Ross	78° 10′
1900	Borchgrevink	78° 50′
1902	Scott	82° 17′
1909	Shackleton	88° 23′

The goal for three centuries was finally attained by Capt. Roald Amundsen, a Norwegian, who reached the South Pole and planted the Norwegian flag December 14, 1911.

Amundsen left Norway in the summer of 1910 on his ship the Fram equipped with provisions for seven years. No less than five expeditions were sent to the Antarctic regions the same year, one of the most important of which was that of Robert Scott, an Englishman, who left London on the Terra Nova June 1st. Capt. Scott with four of his companions reached the pole on January 18, 1912, and found the hut and records left there by Amundsen in December, 1911. The return journey was one of struggle and heroism. One man became ill and died, another deliberately walked to his death for the safety of his companions. When within ten miles of a camp where shelter and supplies awaited them, Capt. Scott and the remaining two men perished amid a blinding storm. In February, 1913, the world learned of this tragedy through a relief expedition which recovered Scott's last message, dated March 25, 1912, and found on his body eight months later.

The achievements of Amundsen and Scott have demonstrated that the Antarctic is essentially a land area, whereas the North Pole is surrounded by an open sea.

Antarctic Ocean, the great water division of the globe within the Antarctic regions, which is in many respects the antithesis of the Arctic Ocean. It is bounded by the Atlantic, Pacific, and Indian Oceans. One vast land mass extends around the pole. The entire region lies under ice and snow, with

almost no vegetation and no mammals. There are numerous birds, whales, seals and fish.

Antioch, a city of Syria, in the vilayet of Aleppo, on the left bank of the Asi, formerly the Orontes. It derived its name from Antiochus, a distinguished officer in the service of Philip of Macedon, and was one of the sixteen cities built by his son, Seleucus Nicator. Antioch was a city of great magnificence. It was the residence of the Syrian monarchs, and is said to have been then one of the largest cities in the world. In Roman times, it was the seat of the Syrian governor, and the center of a widely-extended commerce. It now exhibits scarcely any traces of its former grandeur, except the ruins of the walls built by Justinian, and of a fortress erected by the Crusaders. The modern name is *Antakieh*. Population, about 28,000.

Antwerp (Dutch and German *Antwerpen*, French *Anvers*), the chief port of Belgium, and the capital of a province of the same name, on the Scheldt, about fifty miles from the open sea. It is strongly fortified, being completely surrounded on the land side by a semicircular inner line of fortifications, the defenses being completed by an outer line of forts and outworks. The cathedral, with a spire 400 feet high, one of the largest and most beautiful specimens of Gothic architecture in Belgium, contains Rubens's celebrated masterpieces, the Descent from the Cross, the Elevation of the Cross, and The Assumption. The other churches of note are St. James's, St. Andrew's, and St. Paul's, all enriched with paintings by Rubens, Van Dyck, and other masters. Among the other edifices of note are the exchange, the town-hall, the palace, theater, academy of fine arts, and picture and sculpture galleries. The harbor accommodation is extensive and excellent, new docks and quays with modern equipment having been recently built. The shipping trade has greatly advanced in recent times, and is now very large, the goods being largely in transit. There are numerous and varied industries. Antwerp is mentioned as early as the Eighth Century, and in the Eleventh and Twelfth it had attained a high degree of prosperity. In the Sixteenth Century it is said to have had a population of 200,000. The wars between the Netherlands and Spain greatly injured its commerce, which was almost ruined by the closing of the navigation of the Scheldt in accordance with the peace of Westphalia (1648). It was only in the Nineteenth Century that its prosperity had revived, and it is now one of the important active seaports of Western Europe. Population (1919), 322,857.

Aqueduct (Lat. *aqua*, water, *duco*, to lead), an artificial channel or conduit for the conveyance of water from one place to another: more particularly applied to structures for conveying water from distant sources for the supply of large cities. Aqueducts were extensively used by the Romans, and many of them still remain in different places on the Continent of Europe.

The following are the names of the Roman aqueducts, chronologically arranged:

1. The *Aqua Appia*, begun by and named after the censor Appius Claudius about 313 B. C. It ran a course of between six and seven miles, its source being in the neighborhood of Palestrina. With the exception of a small portion near the Porta Capena, it was subterranean. No remains of it exist.

2. *Anio Vetus*, constructed about 273 B. C. by M. Curius Dentatus. It also was chiefly underground. Remains may be traced both at Tivoli and near the Porta Maggiore. From the point at which it quitted the river Anio, about twenty miles above Tivoli, to Rome, is about forty-three miles.

3. *Aqua Marcia*, named after the prætor Quintus Marcius Rex, 145 B. C., had its source between Tivoli and Subiaco, and was consequently about sixty miles long. The noble arches which stretch across the Campagna for some six miles on the road to Frascati, are the portion of this aqueduct which was above ground.

4. *Aqua Tepula* (125 B. C.) had its source near Tusculum, and its channel was carried over the arches of the last-mentioned aqueduct.

5. *Aqua Julia*, constructed by Agrippa, and named after Augustus, 33 B. C. Like the Tepulan, it was carried along the Marcian arches, and its source was also near Tusculum. Remains of the three last-mentioned aqueducts still exist.

6. *Aqua Virgo*, also constructed by Agrippa, and said to have been named in consequence of the spring which supplied it having been pointed out by a girl to some of Agrippa's soldiers when in search of water. The Aqua Vergine, as it is now called, is still entire, having been restored by the popes Nicholas V. and Pius V., 1568. The source of the Aqua Virgo is near the Anio, in the neighborhood of Torre Salona, on the Via Collatina, and about fourteen miles from Rome. The original object of this aqueduct was to supply the baths of Agrippa; its water now flows in the Fontana Trevi, that of the Piazza Navona, the Piazza Farnese, and the Barcaccia of the Piazza di Spagna. The water of the Aqua Virgo is the best in Rome.

7. *Aqua Alsietina*, constructed by Augustus, and afterwards restored by Trajan, and latterly by the popes. This aqueduct, now called the Aqua Paolo, is situated on the right bank of the Tiber, and supplies the fountains in front of St. Peter's and the Fontana Paola on the Montorio. Its original object was to supply the Naumachia of Augustus which was a sheet of water for the representation of sea fights.

8. *Aqua Claudia*, commenced by Caligula and completed by Claudius, 51 A. D. A line of magnificent arches which formerly belonged to this aqueduct still stretches across the Campagna, and forms one of the grandest of Roman ruins. It was used as a quarry by Sixtus V. for the construction of the Aqua Felici, which now supplies the Fountain of Termini, and various others in different parts of the city.

9. *Anio Novus*, which was the most copious of all the Roman fountains, though inferior to the Marcia in the solidity of its structure; it was also the longest of the aqueducts, pursuing a course of no less than sixty-two miles. By the two last-mentioned aqueducts the former supply of water was doubled. In addition to the aqueducts already mentioned, there was the Aqua Trajana, which may, however, be regarded as a branch of the Anio Novus and several others of later construction, such as the Antoniana, Alex-

andrina, and Jovia, none of which were to be compared with the older ones in extent and magnificence.

Other great aqueducts were built in other parts of the Roman Empire. One of the most perfect was that of Nîmes, including the bridge spanning the valley of the river Gard, and now known as the Pont du Gard. In the reign of Louis XIV. a magnificent aqueduct was constructed for supplying Versailles. The bridge of Maintenon over which it is carried is seven-eighths of a mile long, upward of 200 feet high, and contains three tiers of arches, 242 in each tier, with fifty feet span.

Among the most notable aqueducts of modern times are the following: The *Old Croton* aqueduct, in New York, completed in 1842 at a cost of $12,500,000; its length from its source at Croton river to the distributing reservoir at 5th Ave. and 40th St. is about 41 miles, its capacity 115,000,000 gallons daily. The *New Croton* aqueduct, with a capacity of 302,000,000 gallons daily, was completed in 1893 at a cost of $20,000,000. The *Catskill* aqueduct takes water from the Esopus, Rondout, Schoharie and Catskill creeks and delivers it to Greater New York, under rivers and deep valleys, a distance of 127 miles. It taps the Ashokan reservoir which has a capacity of 130,000,000,000 gallons. The entire aqueduct, built at a cost of about $200,000,000, is designed to give Greater New York a water supply of 500,000,000 gallons daily. The *Los Angeles* aqueduct, 246 miles in length, has its source in the Sierra Nevada mountains; it is carried over the Sierra at an elevation of 7,000 feet and the resulting fall is utilized to generate about 150,000 horse power of electrical energy. It has a capacity of about 200,000,000 gallons daily, and its cost is about $25,000,000.

Architecture (*ar'-kĭ-tekt-yur*), the art of building, embracing every kind of structure designed for purposes of civil life. Throughout the globe remains of edifices proclaim an early possession of certain degrees of architectural knowledge. The most remarkable vestiges of these primitive structures, save the Celtic monuments, were once supposed to be the works of giants or Cyclops like those mentioned in the Odyssey. By whom they were erected, however, is unknown, though they have been attributed to the Pelasgians. The walls of the cities and of the sacred enclosures and tombs were composed of blocks of stone of a polygonal form well adjusted. No cement was used, the interstices being filled with small stones. At times they present horizontal layers whose upright joints are variously inclined. At Mycenæ and Tiryns several examples are to be found. No entire architectural monument has come down to us from Babylon or Nineveh, nor from the Phenicians, the Hebrews, the Syrians, the Philistines, and many other nations. Of the very ancient Chinese monuments, too, we have no trace. Japan, Siam, and the islands of the Indian Ocean abound in ancient ruins once sacred to the divinities of the Buddhist faith. The Hindoo structures are remarkable for their colossal size and their severe and grotesque appearance. — The architectural types of all other structures of antiquity sink into insignificance when compared with those of the Egyptians. Their earliest works are the hypogea or spea, wherein their dead were interred, and which served also as subterranean temples. These were the prototypes of the open-air temples, of which the most ancient example is perhaps that at Amada. The plan is very similar to that of the hypogea, or caves. The walls, ceilings, and columns were decorated with figures in bas-relief and hieroglyphics richly colored, generally with yellow, red, green, and blue. The palaces were constructed upon a plan very similar to that of the temples. Besides their wonderful cities of the dead, the Egyptians reared their stupendous pyramids, the most gigantic monuments existing. The pyramidal shape pervades most of their works, the walls of their temples inclining inward. Columns were employed to form porticoes to their interior courts, and also to support the ceilings. The shafts, of different forms, being conical, or cylindrical, or bulging out at the base, sometimes presented a smooth surface; they were rarely fluted, and generally covered with hieroglyphics. The capitals resemble the lotus, either spreading out at the top or bound together, assuming the bulbous shape; above is a square tablet forming the abacus.—The Grecian monuments belonged to the states, and upon the public works the governments lavished fabulous sums. Hence the Grecian cities were adorned with temples, theaters, odeons, gymnasiums, choragic monuments, and the like.

The earliest architectural remains of Greece are of unknown antiquity, and consist of massive walls built of huge blocks of stone. In historic times the Greeks developed an architecture of noble simplicity and dignity. This style is of modern origin compared with that of Egypt, and the earliest remains give indications that it was in part derived from the Egyptians. It is considered to have attained its greatest perfection in the age of Pericles, or about 460–430 B. C. The great masters of this period were Phidias, Ictinus, Callicrates, etc. All the extant buildings are more or less in ruins. The style is characterized by beauty, harmony, and simplicity in the highest degree. Distinctive of it are what are called the *orders* of architecture, by which term are understood certain modes of proportioning and decorating the column and its superimposed entablature. The Greeks had three orders, called respectively the *Doric, Ionic*, and *Corinthian*. Greek buildings were abundantly adorned with sculptures, and painting was extensively used, the details of the structures being enriched by different colors or tints. Lowness of roofs and the absence of arches were distinctive features of Greek architecture, in which, as in that of Egypt, horizontality of line is another characteristic mark. The most remarkable public edifices of the Greeks were temples, of which the most famous is the Parthenon at Athens. Others exist in various parts of Greece as well as in Sicily, Southern Italy, Asia Minor, etc., where important Greek communities were early settled. Their theaters were semi-circular on one side and square on the other, the semi-circular part being usually excavated in the side of some convenient hill. This part, the auditorium, was filled with concentric seats, and

might be capable of containing 20,000 spectators. A number exist in Greece, Sicily, Asia Minor, and elsewhere. No remains of private houses are known to exist. By the end of the Peloponnesian War (say 400 B. C.) the best period of Greek architecture was over; a noble simplicity had given place to excess of ornament. After the death of Alexander the Great (323) the decline was still more marked.

Among the Romans there was no original development of architecture as among the Greeks, though they early took the foremost place in the construction of such works as aqueducts and sewers, the arch being in early and extensive use among this people. As a fine art, however, Roman architecture had its origin in copies of the Greek models, all the Grecian orders being introduced into Rome, and variously modified. Their number, moreover, was augmented by the addition of two new orders—the *Tuscan* and the *Composite*. The Romans became acquainted with the architecture of the Greeks soon after 200 B. C., but it was not till about two centuries later that the architecture of Rome attained (under Augustus) its greatest perfection. Among the great works now erected were temples, aqueducts, amphitheaters, magnificent villas, triumphal arches, monumental pillars, etc. The amphitheater differed from the theater it being a completely circular or rather elliptical building, filled on all sides with ascending seats for spectators and leaving only the central space, called the Arena, for the combatants and public shows. The Coliseum is a stupendous structure of this kind. The Thermæ, or baths, were vast structures in which multitudes of people could bathe at once. Magnificent tombs were often built by the wealthy. Remains of private residences are numerous, and the excavations at Pompeii in particular have thrown great light on the internal arrangements of the Roman dwelling-house. Almost all the successors of Augustus embellished Rome more or less, erected splendid palaces and temples, and adorned, like Hadrian, even the conquered countries with them. But after the period of Hadrian (117–138 A. D.) Roman architecture is considered to have been on the decline. The refined and noble style of the Greeks was neglected, and there was an attempt to embellish the beautiful more and more. This decline was all the more rapid latterly from the disturbed state of the empire and the incursions of the barbarians.

In Constantinople, after its virtual separation from the Western Empire, arose a style of art and architecture which was practiced by the Greek Church during the whole of the Middle Ages. This is called the Byzantine style. Then appeared the dome, the glory of the Byzantine school, the requirements of which led to the abandonment in the ground plan of churches of the Latin cross in favor of the Grecian cross, whose branches are of equal length. The dogmas of the iconoclasts obliged the architects to seek some other means than sculpture of enriching their temples; hence the profusion of Mosaic work. Their ornaments represented foliage in bas-relief and interlaced lines. Under Belisarius and Narses the dome was introduced into Italy. The Byzantine style also became the basis of the new Persian, Russian, and Saracen schools. We find its peculiarities existing during the Middle Ages in Greece, Italy, Sicily, Spain, Arabia, and India. Among the chief edifices of this school are St. Sophia at Constantinople, St. Mark's at Venice, and San Vitale at Ravenna. The Saracens and Moors introduced into Europe certain forms of architecture founded on the remains of the Grecian school, blended with the Oriental elements of the Byzantine. Their chief peculiarity was in the form given to the arch. The Saracenic arch was of greater depth than width. The Moorish style was distinguished by arches in the shape of a horseshoe or a crescent. Their mural ornamentations, styled arabesque, presented more varied designs of graceful and ingenious combinations of geometrical and floral traceries than had before been known. The Lombards, who possessed themselves of North Italy after the middle of the Sixth Century, originated a complete and systematized style, which the people of each country where it was introduced modified to suit their climate, customs, and wants. Its branches are variously known as the Merovingian, Carlovingian, Saxon, Norman, etc., which together were styled old Gothic, and out of which grew the pointed style, after the introduction into Europe of the pointed arch. During the Middle Ages the study of the arts, sciences, and literature took refuge in the monasteries. The influence of the clergy declined, however, as free institutions arose, and the pointed Gothic must be regarded as the work rather of secular than of clerical architects. This change was doubtless made more complete by the increasing importance of the fraternity of Freemasons, who became in time sole directors or supervisors of all the religious structures. Protected by the Church, architecture in their hands passed from the old Gothic through various phases of the pointed style. This style is customarily divided into three periods: the first, or primary, dating from the end of the Twelfth Century; the second, or decorated, or rayonnant, from the commencement of the Fourteenth Century; and the third, or perpendicular, or flamboyant, from the end of the Fourteenth to the Sixteenth Century. The essential element of this style is the pointed arch. It is during the first period that the spire surmounting the tower becomes of so great importance. Buttresses and flying buttresses also form a striking feature.

The windows gradually assume a less pointed form; the clustered columns composing the columnar piers are more elaborate; and the ribs, bosses, and carved ornaments throughout have more relief and are more elegant. The third period is remarkable for its profuse ornamentation. The panelled walls, with their niches, tabernacles, canopies, and screens, highly decorated, the flying buttresses enriched with pinnacles and tracery, the corbelled battlements and turrets, and the balustrades intricately carved and pierced, are characteristic of the epoch.

During the Fourteenth Century, or the *trecento* period, we discover in Italy, in the secular structures more especially, numerous examples exhibiting a return to the classic styles. At length, in

the Sixteenth Century, the classic taste prevailed throughout Europe, and hence the different names, *cinquecento*, *renaissance*, revival, given to that style which supplanted everywhere the so-called Gothic architecture. Brunelleschi of Florence (died 1446) was among the first to encourage and disseminate this taste for a return to the classic architecture. He had numerous distinguished followers, among whom were Alberti, Bramante, Peruzzi, Sangallo, San Micheli, Palladio, and Scamozzi. In their productions the different elements of the classic style are happily introduced. The application of these elements to ecclesiastical, and more especially to secular, structures, accounts for the liberties taken with them, among which are the following: the great variety given to the intercolumniation of columns; the superposition of different orders, with and without broken entablatures; the frequent use of engaged columns and pilasters; the various forms given to the pediments; the substitution of columns for piers supporting arcades; the decoration of blank walls with medallions, foliage, and scrolls of various sorts, together with designs of animals arranged in imitation of ancient arabesques. These and many other so-called liberties originated a style peculiarly adapted to the wants of modern civilization. Michael Angelo made many innovations. Instead of superimposing several orders, distinguishing as many stories, he employed one, comprising the whole height of the edifice.

The spirit of scientific inquiry of the last hundred years, having enlarged our knowledge of architectural forms and promoted a more exhaustive study of the principles of the art, has given rise to two movements directed either to improving the so-called classical style, or to supplanting it altogether. These movements are known as the Greek and the Gothic revival. Both took their origin in England. The Greek revival dates from 1762, when Messrs. Stuart and Revett published the results of their researches among the antiquities of Attica. The Gothic revival may be said to date from Horace Walpole's works at Strawberry Hill about 1768 to 1797, but its modern development did not begin till about 1820. In England and the United States the Greek revival was merely a reproduction of the Greek buildings or parts of buildings; but in France it showed enough vigor to throw aside the methods of the ancients, and to create a new style, which has been called the *néo-grecque*, or, to distinguish it from the Romanesque, founded upon Roman methods, the *romantique*. The column of July in Paris, parts of the Palais de Justice, the Bibliothèque Ste. Geneviève, and the Palais des Beaux-Arts, by MM. Duc, Labrouste, and Duban, are the typical monuments of this style. Meanwhile, in England, the Greek movement having failed, the ascendancy of the Gothic style was finally established, when in 1840 it was decided to adopt it for the new houses of parliament. This great undertaking gave an immense impulse to the Gothic movement. Subsequent works show not only greater knowledge and skill, but more freedom of mind, both in secular and ecclesiastical work; and the "Victorian Gothic," as it has been called, differs as much from the various Gothic styles of the Middle Ages as they differ from each other. A similar movement has meanwhile been going on in France and Germany, but less successfully. In Germany the proper pointed Gothic has been taken up, stimulated by the great works for the completion of the Cologne cathedral. The Votive Church at Vienna is perhaps the most noteworthy example of this movement. The adherents of the Gothic revival in this country are as numerous and devoted as those of the Greek revival; but there is less partisanship here than abroad, and it is more common for architects to practice in both ways at once.

America can hardly claim to have produced a special school of architecture, but there are many public edifices that deserve to be mentioned as specimens of architectural beauty. Many of our best architects are now designing in what is termed the "colonial" style, which is an adaptation of the Dutch style so much in vogue in this country during the last two centuries. Comparatively little attention was paid to architecture before the Civil War, but the growing taste and prosperity of the country have enabled architects to erect many handsome dwelling-houses, which will in no way suffer by comparison with those of European cities. Brick, stone, and iron are now much used in this country, and the Gothic style has been widely adopted for church edifices. Trinity Church in New York, completed in 1846, one of the first great Gothic edifices of stone in the United States, Grace Church, and St. Patrick's Cathedral, in the same city, are fine specimens of that style. The Temple Emmanuel is a reproduction of Saracenic forms. The Roman Catholic Cathedral in Philadelphia is modeled after the Italian edifices of the time of Michael Angelo. Trinity Church, of Boston, is the best example of the Romanesque, influenced by the Byzantine, copied from edifices erected in France during the Twelfth Century. The new "Old South Church" in Boston, is a building of strong form and decoration. The museum of art in the same city inclines to the classical style, and among the more prominent of the later renaissance buildings are the Boston and New York post-offices, built of granite, brick, and iron. The lofty Woolworth building is a noticeable feature of the lower part of New York. The new railway station at Washington, D. C., the Grand Central and Pennsylvania stations, New York, and the Lowell and Providence depots in Boston, are magnificent and well-appointed structures. The capitol at Washington, the corner stone of which was laid in 1793, is in the style of renaissance. Extensive additions have been made to both wings since 1850. The material used is a handsome marble, the original building being of sandstone. The treasury building and the patent office are in the Greek style, as are the sub-treasury and custom-house at New York, Girard College, Philadelphia, and the Alabama State capitol. Of public buildings in Gothic form, a high rank must be given to the Connecticut State capitol at Hartford, the fine capitol at Albany, N. Y., and the Ohio capitol at Columbus. In Florida

and California many examples of the Spanish type are to be found. Many fine buildings have been erected for commercial purposes in various cities of the United States which justly deserve the title of "business palaces," and are well suited to accommodate our merchant princes. Although architects are somewhat fettered by the small lots of twenty-five feet in width, prevailing in most of our cities, many dwelling-houses present remarkably handsome exteriors and interiors. Fifth Avenue, in New York, is in this respect one of the finest thoroughfares in the world. The apartment houses, which came into fashion after the Civil War, covering more than one lot, have fared better in an artistic point of view, of which the Stevens house of New York is one of the notable examples. Many beautiful country residences are to be found at Newport, in the Berkshires, and scattered throughout the country.

Arctic Exploration. Frobisher, Davis, Hudson, Bylot, and Baffin successively, were the first to engage in an effort to reach the North Pole. Then after a lapse of nearly two centuries the record of Arctic research was taken up by such men as Ross and Parry (1818), who were followed by Sir John Franklin. Franklin set sail in command of the "Erebus" and "Terror," in May, 1845, and by the month of July reached Whalefish Islands in Davis' Strait. On the 26th of that month the ships were seen in latitude 74° 48′ north; longitude 66° 13′ west; after which no further intelligence concerning them was received. It was not, however, till the beginning of 1847 that serious apprehensions were entertained regarding the expedition. The most strenuous efforts were then made by both the English and the Americans to obtain tidings of Franklin. Among the numerous expeditions sent out by sea and land in search of the missing navigator and his company were those of Richardson and Rae (by land, 1847), of Moore (1848–52), of Kellet (1848–50), of Shedden (1848–50), of Sir James Ross (1848-49), of Saunders (1849-50), of Austin and Ommaney (1850-51), and of Penny (1850-51). In 1850, MacClure set out by Behring's Strait on a search expedition, and to him is due the honor of having ascertained the existence of the long-sought-for northwest passage. Other expeditions between 1850 and 1855 were: Collinson's, Rae's, Kennedy's, Maguire's, Belcher's, MacClintock's, and Inglefield's. In 1853, Rae, proceeding to the east side of King William Sound, obtained the first tidings of the destruction of Franklin's ships. In 1855, Anderson, proceeding up the Great Fish River, also discovered relics of the "Erebus" and "Terror." At length MacClintock (1857–59) set all doubts at rest regarding the fate of Sir John Franklin and his companions, by establishing the fact that they had died in 1847. Dr. Kane made some important observations during the progress of his Arctic explorations, 1853–55. Then followed the expeditions of Dr. Isaac Hayes in 1860 and 1869, and those of Captain Charles Hall in 1860 and 1864. Finally, Lieutenant Schwatka headed an overland expedition in 1879-80 in search of the journals of the Franklin expedition. Of later expeditions may be mentioned that of the unfortunate and ill-advised "Jeannette" (1879), sent out under the command of Lieutenant DeLong, to explore the Arctic Sea through Behring's Strait; those of Mr. Leigh Smith in 1880 and 1881, in the latter of which he lost his vessel; and that of Sir C. Young for the relief of the former. An expedition sent out by the United States under Greely (1881–84), reached 83° 24′ north. In 1888, South Greenland was crossed by Nansen, and March 14, 1895, he attained 83° 59′. In 1892, Peary traced Greenland to 82° north.

In 1896, Dr. Fridtjof Nansen, of Norway, returned from an Arctic expedition, after an absence of more than three years. The most northerly point reached by him was 86° 14′ north latitude, or 200 miles nearer the Pole than ever reached before. He found no indications of land north of 82° north latitude, and in the higher latitudes no open sea, only narrow cracks in the ice.

In 1906, Lieutenant Peary attained the farthest north in the western hemisphere, latitude 87° 6′. In 1902, he had pushed the advance on the American side beyond his own best record established in 1901, and sixty miles beyond the point reached by Lockwood and Brainerd of the Greely expedition in 1882, which had stood as the American record for nineteen years. He encountered the greatest dangers in his efforts to reach the Pole, and showed ability and endurance which place him high in the rank of explorers.

In September, 1909, Dr. Frederick A. Cook startled the world by his announcement of his discovery of the Pole on April 21, 1908, and five days later Peary announced that he too, a year after Cook, had reached the long sought goal.

The best records of Arctic exploration previous to the announcements of Cook and Peary are as follows:

Year	Explorers	North Latitude		
1607.	Hudson,	80°	23′	0″
1773.	Phipps,	80°	48′	0″
1806.	Scoresby,	81°	12′	42″
1827.	Parry,	82°	50′	0″
1874.	Meyer (on land),	82°	0′	0″
1875.	Markham and Parr (Nares' expedition),	83°	20′	26″
1876.	Payer,	83°	07′	0″
1882.	Lockwood (Greely's party),	83°	24′	0″
1896.	Nansen,	86°	14′	0″
1900.	Abruzzi,	86°	33′	0″
1906.	Peary,	87°	6′	0″

Arctic Ocean, or Northern Icy Sea, is that part of the ocean which extends from the Arctic circle, latitude 66° 30′ north, to the North Pole; it washes the whole of the northern coasts of Europe, Asia, and America, and communicates on the northwest of Europe with the Atlantic; and on the northeast of Asia with the Pacific by Behring Strait. It forms the White Sea in Europe, and the gulfs of Kara, Obi, and Yenesei, in Siberia; in North America, where it takes the name of the "Polar Sea," it forms Baffin Bay. During winter ice extends in every direction round the Pole, covering a space of from 3,000 to 4,000 miles in diameter; and even during the four months of summer the surface of this sea is at the freezing-point. Icebergs and fields of ice are continually drifting

south into the Atlantic,—the former sometimes extending to 100 miles in length, and from twenty-five to thirty miles in diameter.

Argentina, Republic of, a large country of South America, with an extreme length of 2,200 miles and an average breadth of 500 miles. It is bounded on the north by Bolivia; on the east by Uruguay, Paraguay, Brazil, and the Atlantic; on the south by the Antarctic ocean, and on the west by Chile. It is mountainous in the Andean region of the extreme west, contains the great plains, or Pampas, in the center, the Patagonian plateau to the south, and the Gran Chaco, partly wooded, to the north. The volcanic peak of Aconcagua, 23,393 feet, in the central Andes, is the loftiest summit in South America. The chief river system is that of the Rio de la Plata. The principal products are wheat, maize, flax, linseed, sugar, Paraguay tea, and live stock. The inhabitants are chiefly Argentines of Spanish descent, with numerous immigrants from Latin Europe, together with a small number of native Indians. Buenos Ayres, the capital and the metropolis of all South America, is one of the finest cities of the New World. The area of Argentina is 1,138,996 square miles, and its population given as of December 31, 1919, was 8,533,332.

Armenia, Republic of. As constituted by the Treaty of Sèvres, 1920, this new republic occupies a table-land, some 80,000 square miles in extent, embracing the northwest corner of Asiatic Turkey, together with adjoining portions of European Russia. In 1917 the population of this area was given as 2,159,000, of which about two-thirds were Christians and the remainer mostly Mohammedans. Important towns in Turkish Armenia are Trebizond, Erzerum, Mush, Bitlis, and Van; in Russian Armenia, Erivan, Alexandropol, and Kars. In 1920 the port of Batum was made a common outlet for Armenia, Azerbaijan, and Georgia.

Asia, the largest of the continents, with an area of 17,250,000 square miles, occupies more than a third of the land surface of the globe. Its extreme length from east to west is 6,820 miles, and its greatest breadth from north to south is 5,270 miles. With the exception of Europe on the northwest and the narrow isthmus of Suez, Asia is surrounded by the great oceans, the Arctic on the north, the Indian on the south, and the Pacific on the east, being separated from North America by Bering strait, only 40 miles wide. Its coast line aggregates about 33,000 miles.

The continent contains the largest and highest mountains in the world, culminating in Mt. Everest in the Himalayas, with an altitude of 29,000 feet. The average elevation of the entire continent above the level of the sea is over 3,000 feet. With the exception of the Mississippi, Nile, Congo, and Amazon, the great rivers of Asia surpass all others in the world. The chief of these are the Tigris and Euphrates; the Indus; the Brahmaputra and Ganges; the Irawadi and Mekong; the Si-kiang, Yang-tzi-kiang, Hoang Ho, and Amur; the Obi, Yenesei, and Lena, and the Ural. Asia is deficient in lakes, although in Siberia Baikal, Balkash, and Issyk-kul are freshwater bodies of magnitude. The Aral and Caspian seas have no outlet, and a large part of Asia, comprising Tibet, Mongolia, Turkestan, and much of Baluchistan, Persia, and Arabia, where the rainfall is deficient, possesses no drainage to the sea.

Owing to its range of latitude, altitude, and relations to surrounding oceans, Asia possesses a great variety of climate. The mean annual temperature ranges from about 90° in the tropical south to about 0° in the arctic north. The temperature average for January decreases from about 80° at the south to about −60°, at Verkhoyansk in Siberia, the center of continental cold, where temperatures of 92° below zero have been recorded. The mean temperature for July is highest on the Arabian and Persian plateau, averaging 93° with a maximum of 120°, and dropping northward to 39° at the arctic circle.

While a limited region southeast of the Himalaya mountains is the wettest in the world, the rainfall of Asia as a whole is scanty. On the arctic coasts of Siberia, in the immense deserts of Gobi, in the Caspian and Aral sea regions in Persia, and in most of Arabia the annual precipitation is less than 10 inches. On the south, the Malay peninsula, the immediate coasts of India, and other districts between the Himalayas and the Pacific have an excessive rainfall, ranging from 100 to 200 inches and upwards annually. The greatest yearly rainfall in the world occurs in Assam where certain localities have recorded 800 inches, with as high as 40 inches for a single day. In China the annual rainfall ranges from 30 to 70 inches; in Japan it is 80 inches.

The geology of Asia is but little known, and only a minute fraction of its vast mineral and other natural resources has been revealed. Owing to the great range of climate, the variety of plants and animals found in Asia is enormous. Besides being unquestionably the cradle of the human race, and now containing half of the total population of the globe, Asia has contributed by far the greater portion of the world's most valuable domestic animals and economic plants. It is regarded as the primeval home of the parent species of the horse, ox, sheep, pig, goat, camel, humped ox, water buffalo, yak, chicken, goose, and other domestic animals. Included in the long list of cultivated plants originating in Asia are wheat, barley, sugar cane, alfalfa, cotton, flax, jute, hemp, and tea. The list comprises also such fruits as the apple, cherry, peach, prune, apricot, banana, olive, orange, lemon, grape-fruit, date-palm, and pomegranate, and such vegetables as the radish, cucumber, muskmelon, onion, parsnip, rhubarb, spinach, and egg plant.

Asia nurtured the earliest civilizations, and from these have sprung all of the world's great religions. The history of Asia, however, like its present-day civilizations, is most complex and but imperfectly understood, just as much of its geography, particularly that of its vast interior, remains even now but little known. The population of Asia is about 900,000,000.

Athens, the capital of Greece, is situated on a peninsula, about four miles from the eastern shore of the Gulf of Egina. It is built at the base of the hill on which stands the Acropolis. Athens is said to have been founded about 1550 B. C. In the time of Pericles (460–429 B.C.), it contained 10,000 houses, with a population estimated at from

120,000 to 180,000; and even after its occupation by the Romans it continued to be a great and flourishing city, and one of the chief seats of learning, till it was ravaged by the Goths, in the Fourth Century, falling ultimately, after many changes, into the hands of the Turks, under whose influence it remained from A. D. 1456 to 1832. Of the ancient city, the principal remains are the Parthenon, or Temple of Athena, and a Temple of Theseus, both built also in the Fifth Century before Christ. There are also the remains of a grand temple to Zeus (Jupiter), to the southeast of the Acropolis, and a short distance to the west is the Areopagus. As the capital of the modern kingdom of Greece, the trade of Athens has considerably revived, and a railway now connects the city with the port of the Piræus, or Porto Leone. Population, 167,479.

Athos, a mountain on the coast of Macedonia, at the extremity of the long peninsula which projects into the Ægean Sea, between the Gulfs of Contessa and Monte Santo. The mountain is now known as "Monte Santo," or Holy Mountain, from the large number of monasteries, convents, chapels, and other sacred spots, belonging to the Greek Church, that are scattered over its sides. These foundations are traced to the reign of the Emperor Constantine. The name "Athos" was, however, properly applied to the whole mountainous peninsula, which is joined to the mainland by a low flat isthmus, not more than a mile and a half across, and only about fifteen feet above the sea level. When Xerxes invaded Greece (480 B. C.) he cut a channel across this isthmus, traces of which are still visible.

Atlantic Ocean, one of the five great hydrographical divisions of the globe, occupies an immense longitudinal valley, and extends from the Arctic Circle on the north to the Antarctic Circle on the south; bounded west by the coast of America to Cape Horn, and thence by a line continued on the same meridian to the Antarctic Circle; and east by the shores of Europe and Africa to the Cape of Good Hope, and thence prolonged on the meridian of Cape Agulhas till it meets the Antarctic Circle. Its extreme breadth is about 5,000 miles, and its area nearly 30,000,000 square miles. The North Sea, or German Ocean, the Caribbean Sea, and the Irish Sea, form portions of the Atlantic; but the Baltic and Mediterranean, which communicate with it by narrow channels, are properly considered separate seas. The chief islands are, in Europe, the British Isles and Iceland; in Africa, the Azores, Madeira, and Canary Islands, and the archipelago of the Gulf of Guinea; in America, the Antilles, Newfoundland, and the islands of the Gulf of St. Lawrence. The chief affluents are, in Europe, the Rhine, Loire, and Tagus; in Africa, the Senegal, Niger, and Congo; and in America, the St. Lawrence, Mississippi, Orinoco, Amazons, and La Plata. The bed of the Atlantic Ocean is very unequal in elevation, in some places rising in immense sand-banks to within a few fathoms of the surface, and in others sinking to unfathomable depths. The trade winds blow regularly in the intertropical portion of the Atlantic; beyond these limits the winds are variable. Enormous numbers of fish are found in the Atlantic Ocean, and herring and cod fishing are important branches of industry in Northern Europe and America. Since the beginning of the sixteenth century the Atlantic has been the chief commercial highway of the world. Great progress has been made in its navigation, the voyage from New York to Southampton being made in about five days. In the higher latitudes of the North and South Atlantic, navigation is impeded by immense icebergs, which are floated from the polar regions; and, although these are generally melted before reaching the frequented parts of the ocean, they have occasionally been met with as far south as latitude 40° 45′ in the North Atlantic, and in the vicinity of the Cape of Good Hope in the South Atlantic Ocean.

Australasia, a division of the globe usually regarded as comprehending the islands of Australia, Tasmania, New Zealand, New Caledonia, the New Hebrides, the Solomon Islands, New Ireland, New Britain, the Admiralty Islands, New Guinea, and the Arru Islands, besides numerous other islands and island groups; area, 3,203,522 square miles, population about six millions. It forms one of three portions into which some geographers have divided Oceania, the other two being Malaysia and Polynesia.

Australia (older name, New Holland), the largest island in the world, a sea-girt continent, lying between the Indian and Pacific oceans, southeast of Asia; greatest length, from west to east, 2,400 miles; greatest breadth from north to south, 1,700 to 1,900 miles. It is separated from New Guinea on the north by Torres Strait, from Tasmania on the south by Bass Strait. It is divided into two unequal parts by the Tropic of Capricorn, and is occupied by what are known as the states and territories of the Commonwealth of Australia.

The area and the population (exclusive of aborigines) of the different states and territories composing the Commonwealth of Australia in 1921 were as follows:

States and Capitals	Area Sq. Miles	Pop.
New South Wales (Sydney), . .	309,432	2,099,763
Victoria (Melbourne), ...	87,884	1,531,529
South Australia (Adelaide), . .	380,070	495,336
Queensland (Brisbane), ...	670,500	757,634
Tasmania (Hobart), ...	26,215	213,877
Western Australia (Perth), . .	975,920	332,213
Northern Territory (Darwin), .	523,620	3,870
Federal District (Canberra), . .	940	2,572
Total, ...	2,974,581	5,436,794

Sydney, the capital of New South Wales, Melbourne, the capital of Victoria, Adelaide, the capital of South Australia, Perth, the capital of Western Australia, and Brisbane, the capital of Queensland, are the chief towns. Australia is a region containing a vast quantity of mineral wealth. Foremost come its rich and extensive deposits of gold, which, since the precious metal was first discovered, in 1851, have produced a total of more than $1,350,000,000. The greatest quantity has been obtained in Victoria, but New South Wales and Queensland have also yielded a considerable amount. Probably there are rich stores of gold as yet un-

discovered. Australia also possesses silver, copper, tin, lead, zinc, antimony, mercury, plumbago, etc., in abundance, besides coal (in New South Wales) and iron. Various precious stones are found, as the garnet, ruby, topaz, sapphire, and even the diamond. Of building stone there are granite, limestone, marble, and sandstone. The Australian flora presents peculiarities which mark it off by itself in a very decided manner. Many of its most striking features have an unmistakable relation to the general dryness of the climate. The trees and bushes have, for the most part, a scanty foliage, presenting little surface for evaporation, or thick leathery leaves well fitted to retain moisture. The Australian fauna is almost unique in its character. Its great feature is the nearly total absence of all the forms of mammalia which abound in the rest of the world.

Austria, Republic of, a country of southeastern Europe, bounded on the north by Germany and Czecho-Slovakia, on the east by Hungary, on the south by Switzerland, Italy, and Jugoslavia, and on the west by Switzerland and Germany. As now constituted, the republic embraces only a small part of the former Kingdom of Austria. It includes the minor portion remaining after the dismemberment of the Austro-Hungarian Empire at the close of the World War.

By the terms of the peace treaty of St. Germain, 1919, the Austrian republic consists of the provinces of Upper Austria, Lower Austria, Salzburg, Styria, Carinthia, Tyrol, and Vorarlberg. These comprise an area of 30,716 square miles. The population of these provinces, which, in 1920, showed a total of 6,139,137, is essentially Germanic. With the exception of Vienna the capital and a metropolis of nearly two million inhabitants, there are no great cities. Among the cities of lesser size, Graz, with a population of 157,000, is the largest.

Northern Austria contains the rich agricultural valley of the Danube, a navigable river of great commercial importance which traverses the entire country from west to east. Southern Austria is mountainous throughout, reaching at its borders the high Tyrolean, Swiss, and Carnic Alps. Various ranges cover Vorarlberg, Tyrol, Salzburg, Carinthia, Styria, and parts of Upper and Lower Austria south of the Danube. With the exception of Switzerland, Austria is the most mountainous country in Europe.

While less lofty than the Swiss Alps, the Austrian mountains often rise above the snow-line and some of the highest ranges bear glaciers. The Tyrolese Alps are famous for their charming scenery. The mountains of Styria contain much mineral wealth, especially lignite coal and metallic ores. In Carinthia, which is ruggedly mountainous, there are attractive lakes and valuable mineral springs. Salzburg contains a number of isolated peaks, some of which exceed an altitude of 9000 feet. Vorarlberg, in the extreme west, borders on Lake Constance and the picturesque valley of the upper Rhine.

The fertile soil of the valleys is well adapted for crop-growing, while the hilly districts lend themselves to stock raising. Agriculture is the chief occupation of the country. The leading crops are rye, wheat, oats, barley, potatoes, and turnips. However, the foodstuffs produced are not sufficient for the total population. Forests abound and timber constitutes an important asset. There are more than 70 lignite and anthracite coal mines. Upwards of two million tons of iron ore, together with some copper, zinc, silver, and gold ore, and also some lead and salt, are produced annually. Among the most important industries are the manufacture of textiles, pianos, and motor cars. In 1919 there was a total of 3882 miles of railway.

The educational system consists of elementary schools, middle schools, high schools, special schools, colleges, and universities. Attendance at elementary schools is compulsory. In 1920 there were four universities maintained by the state: Vienna, Graz, Innsbruck, and Salzburg.

Religious liberty is one of the fundamental laws of the republic. In 1920 about 94 per cent of the population was Roman Catholic; the remainder was about equally divided between Protestants and Jews.

Baltic Sea is the great gulf or shut sea bordered by Denmark, Germany, Russia, and Sweden, communicating with the Kattegat and North Sea by the Sound and Great and Little Belts. Its length is from 850 to 900 miles, width from 100 to 200, and area, including Gulfs of Bothnia and Finland, 160,000 square miles. Its depth is, on an average, fifteen to twenty fathoms.

Baltimore, the eighth city of the United States, on the Patapsco river, in Maryland, thirty-seven miles northeast of Washington, and 100 miles southwest of Philadelphia. It was founded in 1729, and has been named the "monumental city," from its fine public monuments. Among its many public buildings is the Peabody Institute, endowed by the late George Peabody, containing a library, art-gallery, etc., with a dome 115 feet high. The city is the seat of Johns Hopkins University. It has also a city hall, built of white Maryland marble, with a dome 227 feet high. The manufactures and commerce of Baltimore are very various. In its vicinity is found the finest brick-clay in the world; more than 100,000,000 bricks are made annually. It has some of the largest iron-works in the United States. Oysters, taken in the Chesapeake Bay, are largely exported. The city is also one of the largest flour-markets in the United States, and tobacco is a principal export. The harbor is very extensive. From east to west the city is nearly five miles long, and four miles broad from north to south. It was visited by a destructive fire in 1904, entailing a loss of $90,000,000. Population, 733,826.

Bangkok, the capital city of Siam, situated on both banks of the Menam, about twenty miles from its mouth. The population is about 630,000, one-third of whom are Chinese. The foreign trade of Siam centers in Bangkok, and is mainly in the hands of the Europeans and Chinese. The approach to Bangkok by the Menam, which can be navigated by ships of 350 tons burden (large sea-going ships anchor at Paknam, below the bar at the mouth of the

river), is exceedingly beautiful. The internal traffic of Bangkok is chiefly carried on by means of canals, there being only a few passable streets in the whole city, though in recent years steel bridges, tramways and electric lights have been introduced. Horses and carriages are rarely seen, except in the neighborhood of the palaces. The native houses on land — of bamboo or other wood, like the floating houses — are raised upon piles, six or eight feet from the ground, and are reached by ladders. The circumference of the walls of Bangkok, which are fifteen to thirty feet high, and twelve broad, is about six miles.

Barcelona is the most important manufacturing city in Spain. The streets of the old town, forming the northwest division, are crooked, narrow, and ill-paved. Those of the new are much more spacious and regular. There is a large suburb east of the town where the seafaring portion of the population chiefly reside. It possesses the finest theater in Spain, and numerous ancient and elegant churches, with a cathedral which was begun in 1298. Barcelona manufactures silk, woolens, cottons, lace, hats, fire-arms, etc., which form its principal exports. It imports raw cotton, coffee, cocoa, sugar, and other colonial produce; also Baltic timber, salt-fish, hides, iron, wax, etc. The University of Barcelona has about 2,000 students. Population, 1918 est., 618,766.

Bastille, formerly a general name for a fortress, or prison, in France; but applied more particularly to an old castle, originally the castle of Paris, which was built between A. D. 1369 and 1383, and was used as a state prison in the Seventeenth and Eighteenth Centuries. It was demolished by the enraged populace at the breaking-out of the French Revolution, July 15, 1789.

Belfast, a city and seaport of Ireland, principal town of Ulster, and county town of Antrim, is built on low, alluvial land on the left bank of the Lagan, at the head of Belfast Lough. Previous to about 1830 the cotton manufacture was the leading industry of Belfast, but nearly all the mills have been converted to flax spinning. The iron ship-building trade is also of importance, and there are breweries, distilleries, flour mills, oil mills, foundries, print works, tan yards, chemical works, rope works, etc. The commerce is large. An extensive direct trade is carried on with British North America, the Mediterranean, France, Belgium, Holland, and the Baltic, besides ports of the British Islands. Belfast is comparatively a modern town. Population, 1911 census, 386,947; 1919 est., 393,000.

Belgium, a kingdom of Europe, bounded north by Holland, northwest by the North Sea, west and south by France, and east by the duchy of Luxemburg, Rhenish Prussia, and Dutch Limburg; greatest length, 165 miles; greatest breadth, 120 miles. For administrative purposes it is divided into nine provinces — Antwerp, Brabant, East Flanders, West Flanders, Hainaut, Liege, Limburg, Luxemburg, and Namur. The greater part of the country is only fairly adapted for agricultural operations, but the inhabitants have so happily availed themselves of their natural advantages that they early began, and in some respects still deserve, to be regarded as the model farmers of Europe. The mineral riches of Belgium are great, and, after agriculture, form the most important of her national interests. They are almost entirely confined to the four provinces of Hainaut, Liege, Namur, and Luxemburg, and consist of lead, manganese, calamine or zinc, iron, and coal. All these minerals, however, are insignificant compared with those of iron and coal. The coal field has an area of above 500 square miles. The export is about 5,000,000 tons, forming one of the largest and most valuable of all the Belgium exports. Nearly the whole of the coal thus exported is taken by France. The industrial products of Belgium are very numerous, and the superiority of many of them to those of most other countries is confessed. The fine linens of Flanders, and lace of Brabant are of European reputation. Scarcely less celebrated are the carpets and porcelain of Tournay, the cloth of Verviers, the extensive foundries, machine works, and other iron and steel establishments of Liege, Seraing, and other places. The cotton and woolen manufacturers, confined chiefly to Flanders and the province of Antwerp, have advanced greatly. Other manufactures include silks, beet sugar, beer. Principal cities: Brussels, Antwerp, Liege, Ghent, Bruges, and Louvain.

Bering Strait, the channel which separates Asia and America at their nearest approach to each other, and connects the Arctic with the Pacific Ocean (Bering Sea). It is thirty-six miles across. Shores are rocky, bare, and greatly indented. It was traversed in 1728, by Vitus Bering, a Russian navigator, who perished during a second expedition, 1741, on Bering's Island, which was named for him.

Berlin, the capital of Prussia, and seat of government of the republic of Germany, one of the most important cities of Europe, is situated on the Spree. Notwithstanding the natural disadvantages of its situation, the advance of the city, especially just preceding the World War, was remarkable. The center of the city is now devoted almost exclusively to commerce, and round this part, extending considerably beyond the city boundaries, are congregated the residences of the citizens. Berlin possesses a large number of fine buildings. Of these may be mentioned the former royal palaces, including those of the emperor and the crown prince; the library, which contains about 1,200,000 volumes and 15,000 MSS.; the museums, the arsenal, and the guard-house. The Berlin Museum of Fine Arts is rapidly becoming one of great importance. Its collection of casts from the antique and the renaissance is not surpassed by any in Europe. The city is adorned throughout with numerous statues of military heroes, the equestrian statue of Frederick the Great, by Rauch, being the most remarkable. The university established in 1810 possesses a very high reputation. Population, in 1919, 1,902,500.

Birmingham, the chief town in Britain for metallic manufactures, and supplying much of the world with hardwares, stands near the center of England, in the northwest of Warwickshire. It is one of the best drained towns

in England, while the means which have been adopted for the prevention of smoke-contamination of the atmosphere are so far effectual that the air is unusually clear and salubrious. The older part of Birmingham is crowded with workshops and warehouses; but the modern city is well built and possesses some architectural beauty. Its commercial importance dates from the Seventeenth Century, when the restoration of Charles II. brought from France a taste for metal ornaments, which Birmingham supplied. Population in 1921, 919,438.

Bombay City occupies the entire breadth of the southern end of the island of Bombay, bordering at once on the harbor inside and on Back Bay outside. Parsees or Persians, descendants of fire-worshipers, driven from their homes by Mohammedan bigotry, rank next to the English in progressiveness and influence. Besides the dock-yard, which covers 200 acres, at the southeast of the European town, the objects most worthy of note are the townhall, the library of the Asiatic Society, the mint, cathedral, and custom-house, the post-office and public works office, the Rajabai Tower, the Elphinstone College, the Grant Medical College, the University, the Sassoon High School, the Secretariat, the High Court, St. George's Hospital, and Victoria Terminus. Population in 1921, 1,172,953.

Boston, capital of the State of Massachusetts; the commercial metropolis of New England; and, according to the census of 1920, the seventh city in population in the United States. It is built at the west end of Massachusetts Bay, and comprises Boston proper, East Boston, South Boston, Roxbury, Dorchester, Charlestown, Brighton, West Roxbury, and adjoining territory, giving it in 1900 an area of forty-three square miles. Old Boston, or Boston proper, occupied a peninsula of about 700 acres, of uneven surface, and originally containing three hills, known as Beacon, Copp, and Fort. These hills caused the early settlers to call the place Trimountain, since changed to Tremont. Boston, East Boston, Charlestown, and South Boston contain the slips of the ocean steamers. Extending about two miles along the harbor, and separated from Boston proper by an arm of it, is South Boston, containing large railroad docks and warehouses. Several bridges across Charles River connect the city with Charlestown and Cambridge. The harbor is an indentation of Massachusetts Bay, embracing about seventy-five square miles, with numerous arms, and containing many islands presenting picturesque views. Boston is especially noted for its magnificent park system. Among the attractions of the system are the Common, a park of forty-eight acres in the heart of the city; the Public Garden, separated from it by Charles Street, and comprising twenty-four acres; the Back Bay Fens; the Jamaica Pond, Bussey Park, the Arnold Arboretum; Marine Park at City Point; and the Charles River Embankment. In the Common is a Soldiers' and Sailors' Monument, erected near the site of the famous Old Elm, which was destroyed in a gale in 1876. In the Public Garden are an equestrian statue of Washington, a bronze statue of Edward Everett, a statue of Charles Sumner, one representing "Venus Rising from the Sea," and a monument commemorating the discovery of ether as an anesthetic. The State House stands on Beacon Hill, and is a structure 490 feet long and 211 feet wide, with a colonnade in front and an imposing gilded dome. Statues of Daniel Webster and Horace Mann ornament the terrace in front of the building, and within it are statues and busts of a number of the eminent men of Boston and Massachusetts, a collection of battle flags, and a variety of interesting historical articles. The fine Public Library building, first occupied in 1895, is surpassed in this country only by that of New York city and the Library of Congress. The Old State-house, erected in 1748, at the head of State Street, contains a historical museum in its upper floors, and business establishments in its lower. The City Hall, one of the most striking buildings of the city, on School Street, is built of white Concord granite in the Italian Renaissance style, and is surmounted by a dome over 100 feet high. What is considered the most interesting building, historically, in the United States, next to Independence Hall in Philadelphia, is Faneuil Hall, known as "The Cradle of Liberty." It was erected in 1742, destroyed by fire in 1761, rebuilt in 1768, and remodeled to its present size in 1805. The basement of the building is used as a market; the second floor for large public gatherings. Occupying the site of the Old Redoubt on Breed's Hill, in the Charlestown district, is the famous Bunker Hill monument. In the Charlestown district also is located the United States Navy Yard, which, among other objects of interest, contains the largest rope walk in the country, and an immense dry dock. Boston is widely noted for the number and high character of its educational institutions. The institutions for higher education include Boston College, Massachusetts Institute of Technology, Boston Normal School, Massachusetts Normal Art School, Kindergarten Training School, and Training Schools for Nurses. Among the chief hospitals are: City Hospital, Children's Hospital, Massachusetts General Hospital, Massachusetts Homeopathic Hospital, New England Baptist Hospital, New England Deaconesses' Home and Hospital, New England Hospital for Women and Children, St. Elizabeth's Hospital, Somerville Hospital, and Women's Charity Club Hospital. Boston was settled in 1630 by a party of Puritans from Salem. It was named after a town in Lincolnshire, England, from which most of the colonists had come. In 1632 the first meeting house was erected, and in 1635 a public school was built. In the same year, the first grand jury in the country met here. A memorable massacre occurred here in 1770, and in 1773 several cargoes of English tea were thrown overboard in the harbor, by citizens exasperated by the imposition of taxes. During the early part of the Revolution the British were quartered in the town. The battle of Bunker Hill was fought on Breed's Hill, within the present city limits, June 17, 1775. Washington forced the British to evacuate in 1776. The city charter was granted in 1822, and, in 1872, a great

fire broke out in the business portion of the city and destroyed about sixty-five acres of buildings. This part of the city was soon rebuilt, and, since then, Boston has been one of the most prosperous cities in the United States. Population, 748,060.

Brazil (*brȧ-zĭl'*), republic of South America, lying to the northeast of that continent, and bounded north and east by the Atlantic Ocean. It constitutes nearly one-half of South America, and occupies an area nearly equal to the whole of Europe. It is remarkable for its rivers and its forests, the former being unsurpassed both in number and in size in any other part of the globe, and the latter being of vast extent, some of them covering many thousands of miles of surface. Towards the coast line, and near the banks of the rivers, the land is low, but in the interior it rises, by gentle gradations, to the height of from two to three thousand feet above the level of the sea, and is crossed by hill ranges, which rise to a considerably greater elevation. In these regions, European fruits and grains are produced in large quantities, while the intermediate valleys are found extremely favorable for the raising of sugar, coffee, cotton, cocoa, india rubber, and tropical plants. The forests abound in the greatest variety of useful and beautiful woods, as mahogany, logwood, rosewood, and brazil wood. Minerals are exceedingly abundant, comprising gold, silver, iron, and topazes, and most of the diamonds of commerce come from Brazil. These, with hides, agricultural produce, and the other products above mentioned, are the chief exports. The population of Brazil is 30,645,296, of whom about one-seventh are negroes, less than one-tenth native Indians, and the remainder descendants of the Portuguese, or of mixed races. Slavery formerly prevailed largely in Brazil, but in 1871, a law was passed for its gradual abolition. Its greatest river is the Amazon, and the chief cities are Rio de Janeiro, Bahia, and Pernambuco.

British Museum, the great national museum in London, owes its foundation to Sir Hans Sloane, who, in 1753, bequeathed his various collections, including 50,000 books and manuscripts, to the nation, on the condition of $100,000 being paid to his heirs. This offer was agreed to by parliament. The British Museum is under the management of forty-eight trustees, among the chief being the archbishop of Canterbury, the lord-chancellor, and the speaker of the House of Commons. In all, the staff of the institution numbers over 320 persons. The museum is open daily, free of charge. Admission to the reading-room as a regular reader is by ticket, procurable on application to the chief librarian, there being certain simple conditions attached. The institution contains something like 2,000,000 volumes in the department of printed books. A copy of every book, pamphlet, newspaper, piece of music, etc., registered at Stationers' Hall, London, must be conveyed, free of charge, to the British Museum.

Brussels, the capital of the kingdom of Belgium, and of the province of Brabant in that kingdom. It is a large and important city, often described as a miniature Paris. It is built partly on the slope of a hill, and partly on the plain at the foot. The upper town, on the hillside, is the newer and the more fashionable, and there the royal palace and the mansions of the foreign ministers are situated. The lower town is less healthful, but it contains most of the older buildings, and many churches and public edifices of architectural and historical interest. The town has extensive suburbs, and squares and promenades of great beauty and elegance. Its Church of St. Gudule dates from the Twelfth Century; and the Palace of Fine Arts, which was formerly the residence of the governors of Brabant, includes a picture gallery which contains many fine specimens of the Flemish school of painting, and a library with 240,000 volumes, and upwards of 20,000 manuscripts. There is also an observatory, one of the finest in Europe, and the imposing Palace of Justice. In the great market place is the Hotel de Ville, a splendid Gothic edifice of the Fourteenth Century, with a lofty turret, surmounted by a huge figure of St. Michael, in copper. Brussels is remarkable for its statues and fountains. Its most important manufactures are lace and carpets. Ten miles to the south of the city is the Field of Waterloo, and a few miles beyond lie Quatre Bras and Ligny. Population, including suburbs, 1919, 685,268.

Budapest (*bōō'-dȧ-pĕst*), the capital of Hungary, and one of finest of great modern cities. It is situated on both sides of the River Danube, 130 miles southeast of Vienna. Buda, on the west side of the Danube, is built at the extremity of a spur from the Bakony forest range. It is an old-fashioned place, and carries on a considerable trade, chiefly in wines. A fine suspension bridge connects it with Pest, one of the handsomest cities in Europe. Pest is the seat of a university, and has manufactures of silk, woolen, leather, tobacco, and meerschaum pipes. Four great fairs are held in the city annually. The Diet assembles in a handsome modern building, and new boulevards and squares have been added. During the Hungarian wars of the Nineteenth Century, Buda played a distinguished part. In January, 1849, the fortress was seized by the Austrian General Windischgrätz; but in the following May it was taken by storm by the Hungarians under Görgey. On their departure, the Russians took possession, but shortly afterwards handed the place over to the forces of the Austrians. Population, 1921, 1,184,616.

Buenos Ayres, the capital of Argentine Republic, South America, stands on the west bank of the estuary of the Plata, about 150 miles from the open sea. It is compactly and substantially built, having been greatly improved since its independence. It has a large number of public and private buildings that would honor any city, notably the cathedral, the provincial bank, the post office, the national penitentiary, several of the theaters, etc. Four lines of railroads connect it with the interior. Telegraphic cables extend to Montevideo, the Brazilian ports, and Europe, and overland wires cross the Andes to Chile, and so connect with the northern hemisphere by the Pacific coast lines. Buenos Ayres has a university, a national

college, a normal school for ladies, with numerous other literary and scientific institutions, a museum of natural history, a public library, and many newspapers. Pop., 1920 est., 1,674,000.

Buffalo, a city of New York, county seat of Erie County, is at the east end of Lake Erie, and at the head of Niagara River, and 410 miles by shortest railroad line northwest of New York. It has a capacious harbor, protected by an outer breakwater, besides other breakwaters, piers, basins, and canals. The city is guarded by Fort Porter, which stands on a bluff overlooking the river. The International iron railway bridge spans Niagara River at Black Rock. The commercial importance of Buffalo dates from the completion of the Erie Canal, in 1825. The chief marine business is the receiving, storing, and transferring of grain. The livestock trade is enormous, and the lumber trade (including the suburb of Tonawanda) is the largest in the world. Manufactories are numerous, embracing extensive machine shops, automobile shops, car shops, stove foundries, breweries, flour mills, printing and lithographic establishments, etc. Seventeen railroads enter the city, with 700 miles of trackage in the city limits. Buffalo has wide streets, well paved and lighted, and generally lined with shade trees. Natural gas, piped from Pennsylvania and Canada, is much used. It has excellent sewerage, and extensive water-works, the supply coming from Niagara River. Its healthfulness is attested by a low death rate. A magnificent park system consists of three sections connected by boulevards which encircle the city. There are churches of all denominations, numerous public schools, high schools, and a State Normal School; various hospitals, dispensaries, orphan asylums, and the State Hospital for the Insane. Buffalo was founded in 1801, by the Holland Land Company. It was burned in 1813, by the British and the Indians. It was incorporated as a city in 1832. A commission form of government was adopted in 1914. Population in 1920, 506,775.

Cairo, the modern capital of Egypt, and the largest town in Africa, situated on the eastern bank of the Nile, twelve miles above the apex of the Delta. On the opposite bank of the river is the small town of Ghizeh, in the neighborhood of which are the three largest of the Egyptian pyramids. To the south of the city is the site of the ancient city of Memphis. It is the official residence of the Khedive. Its inhabitants are Turks, Arabs, Copts, Jews, Armenians, Syrians, etc., the ruling class being almost all Turks. Population, 790,939.

Calcutta, the metropolis of British India, and chief commercial center of Asia, was founded by Governor Charnock in the year 1686. In 1707, it had acquired some importance as a town, and was made the seat of a presidency. In 1756, however, a great misfortune befell the rising town; it was unexpectedly attacked by Surajah Dowlah, the nawab of Bengal, and, being abandoned by a number of those whose duty it was to defend the place, it was compelled to yield after undergoing a two days' siege. Only 146 men, however, fell into the enemy's hands; but these were treated with the most heartless cruelty. Cast at night into a confined cell, twenty feet square—the notorious "Black Hole" —they endured the most unheard-of sufferings, and in the morning it was found that only twenty-three out of 146 had survived the horrors of that night. The city remained in the hands of the enemy until eight months afterward, when Clive arrived from England. In conjunction with Admiral Watson, Clive succeeded in recapturing Calcutta, and afterward concluded a peace with the nawab. During the last century the city has grown greatly in importance, and in its public institutions and architecture it now rivals the leading capitals of Europe. It is the seat of numerous learned societies. Calcutta became the capital and general seat of government of British India in 1773. In 1911 the capital was removed to Delhi. Population, 1921, 1,263,292.

Campanile (*kăm-pă-nē'lē*), a tower for the reception of bells, principally used for church purposes, but now sometimes for domestic edifices. The most remarkable of the campaniles is that at Pisa, commonly called the "Leaning Tower." It is cylindrical in form, and surrounded by eight stories of columns, placed over one another, each having its entablature. The height is about 150 feet to the platform, whence a plumb-line lowered falls on the leaning side nearly thirteen feet outside the base of the building.

The campanile of St. Mark, dominating all the surrounding buildings of St. Mark's Square, Venice, was the most conspicuous landmark of the city for over 1,000 years. The tower was 325 feet high and forty-two feet square at the base. On the morning of July 14, 1902, it fell with a great crash into the square. The church of St. Mark and the palace of the Doges were not hurt, but the campanile in falling carried away the Sansovino Loggetta and the library of the Royal Palace. It has since been splendidly rebuilt.

Canada, Dominion of. The Dominion of Canada includes the various Provinces of North America formerly known as Upper and Lower Canada (now Ontario and Quebec respectively), New Brunswick, Nova Scotia, Prince Edward Island, British Columbia, and the territories of the Hudson Bay Company, now styled Manitoba, Saskatchewan, Alberta, the Northwest Territories, and the Yukon Territories; in fact, the whole of British North America except Newfoundland and Labrador. This territory, nearly as large as Europe,stretches from the Atlantic to the Pacific Ocean, and is estimated to contain a total land area of 3,603,910 square miles, and a combined land and water surface of 3,729,655 square miles. Physically, the entire region may be divided into an eastern and a western division, the Red River Valley forming the separating line. The eastern division comprises three areas, presenting radically distinct aspects:—(1) The southeastern area, bounded by the line of the Gulf and River St. Lawrence, from Belle Isle to Quebec, thence by a line running directly south to Lake Champlain, which is generally hilly, and sometimes mountainous, with many fine stretches of agricultural and pastoral lands. (2) The southern and western area, presenting, in the main, a broad,

level, and slightly undulating expanse of generally fertile country, with occasional step-like ridges or rocky escarpments. The main hydrographical feature is the chain of lakes, with an area of 150,000 square miles, contributing to the great river system of the St. Lawrence. (3) The northern area, embracing nearly two-thirds of the Dominion, with an average elevation of 1,000 feet above the level of the sea, preëminently a region of waterways, and including the great Laurentian mountain range. In this area are found the other great river systems, the Nelson and the Mackenzie. From the western edge of the Prairie to the Pacific coast is a distance of 400 miles, and within this area are contained the Rocky Mountains and the Gold and Cascade Ranges, whose summits are from 4,000 to 16,000 feet high, the country being on the whole densely wooded. The climate in the eastern and central portions of the Dominion presents greater extremes of cold and heat than in corresponding latitudes in Europe, but in the southwestern portion of the Prairie Region and the southern portions of the Pacific slope the climate is milder. Spring, summer, and autumn are of about seven to eight months' duration, and the winter four to five months. The country possesses great mineral wealth, and coal, gold, silver, copper, nickel, lead, petroleum, and asbestos are produced, while iron, phosphates, salt, and graphite occur.

Among leading cities are Ottawa, the capital of Canada; Montreal, the metropolis and chief seaport of the Dominion; Quebec, the capital of the province of Quebec; Toronto, the capital of Ontario and second city of the country; Hamilton, the "Birmingham of Canada"; Halifax, the chief city and seaport of Nova Scotia; St. Johns, the largest trade center of New Brunswick; Winnipeg, the capital of Manitoba, and emporium of the Red River valley; Regina, the capital, and Saskatoon, Moose Jaw, and Prince Albert, thriving centers of the prairie province of Saskatchewan; Edmonton, the capital, and Calgary, the largest city, of Alberta; Victoria, the capital of British Columbia, and Vancouver its largest city, and chief Pacific seaport of Canada.

In facilities for communication, Canada is unrivaled. The St. Lawrence, with its lakes, puts a great part of it in connection at once with the most commercial portion of the United States and with the open ocean. The navigation of this great water-system has been greatly assisted by numerous and extensive canals, of which the Cornwall, Rideau, and the Welland are the most important. There is, besides, an immense network of railroads embracing several trans-continental lines. The Victoria Bridge, by which the Grand Trunk crosses the St. Lawrence at Montreal, is one of the wonders of the world. The completion of the Canadian Pacific Railroad, in 1885, gave railroad communication between Montreal, its eastern terminus, and Vancouver, in British Columbia, a distance of 2,893 miles.

Canossa (*kä-nos' sä*), a town northwest of Bologna, in the courtyard of the castle of which the Emperor Henry IV. stood three days in the cold, in January, 1077, bareheaded and barefooted, waiting for Pope Gregory VII. to remove from him the sentence of excommunication.

Canton, a large commercial city and port in the south of China, and capital of the maritime province of Kwang-tung, forms an irregular square, and is divided by a wall into the North and South, or Old and New City. The former is inhabited by the Tartar population, the latter by Chinese; and between the two communication is maintained by four gates in the separating wall. Many of the streets are devoted to distinct trades; thus there is "Carpenter" Street, "Apothecary" Street, etc. The Joss-houses, Buddhist Temples, are said to be about 124 in number. The largest of these, on Honam Island, covers seven acres, and has 175 priests attached. It is called "Hae Chwang Sze," or "The Temple of the Ocean Banner." Another famous structure is "The Temple of the Five Hundred Gods," situated in the western suburbs. Until 1843 all the legitimate foreign trade of China centered at Canton, and its amount at one time exceeded $100,000,000 annually; but since other ports in China have been opened to foreigners this amount has decreased by nearly one half. Tea and silks are the staple articles of export to Europe, etc., after which come the precious metals, cassia, sugar, and many minor articles; population, 1,250,000.

Cape of Good Hope, a British province formerly Cape Colony, lies at the southern extremity of Africa, and is washed on the west, south and east by the ocean. The colony extends about 450 miles from north to south and 600 miles from east to west; the coast line is about 1300 miles. The area is 276,995 square miles; the population in 1921 was 2,781,185.

The climate is temperate, dry and salubrious. The province is better adapted for pasturage than for agriculture. Many kinds of vegetables and most fruits of temperate climates thrive excellently. The grapes are among the finest in the world while the fruit is produced in almost unrivaled abundance. Some excellent wines are made. The principal cereal crops are wheat, oats, barley, rye, mealies, and Kaffir corn. Sheep rearing is one of the chief industries. Cattle breeding is carried on to some extent, especially along the coasts and in the east and north districts. Manufactures are few. The mineral wealth of the country is very great, the most valuable of the minerals being the diamond. The chief exports are diamonds, gold, wool, copper ore, ostrich feathers, mohair, hides and skins.

The European inhabitants consist in part of English, Scotch and Irish settlers and their descendants; the majority are of Dutch origin, while there are also many of German origin. The colored people are chiefly Hottentots, Kaffirs, Bechuanas, Basutos, Griquas, Malays, and a mixed race, the offspring of black women and white fathers.

The Dutch, who had early fixed upon the Cape as a watering place for their ships, first colonized it under Van Riebeek in 1652. It was captured by the British in 1795, restored at the peace of Amiens, 1802, and again taken in 1806. From this time it has remained in the possession of Great Britain, to whom it was formally assigned in 1815, along with Dutch Guiana.

Subsequently the area of the colony was gradually enlarged by the annexation of the surrounding districts. The constitution which was formed under the acts passed in the years 1853, 1865 and 1872, by which the colony enjoyed self-government, was annulled by the South Africa act of 1909, and in 1910 the colony became an original province of the Union of South Africa.

Capitol (Lat. *Capitolium*), the great temple dedicated to Jupiter on the Tarpeian or Capitoline Hill at Rome. It is said to have been called the Capitolium, because a human head (*caput*) was found in digging the foundations. It was commenced by Tarquinius Priscus, and finished by Tarquinius Superbus, 507 B. C.; but it was three times burnt down, and, after its third destruction in the reign of Titus, it was again rebuilt by Domitian. The capitol included not only a temple to Jupiter, but one to each of his attendant deities, Juno and Minerva. It was one of the most imposing buildings in Rome. The consuls, on entering upon their office, offered sacrifices and took their vows in the capitol; and it was to the capitol that the victorious general on his return to the city, was carried, in his triumphal car, to return thanks for his victories. From that portion of the hill called the Tarpeian Rock, state criminals were thrown down. The modern building on the site, and partly on the foundations, of the ancient capitol, was erected from the designs of Michael Angelo.

Capri (*kä'prē.*) (Anc. *Capræe.*) A beautiful island in the Mediterranean, lying near the south entrance to the Neapolitan Gulf, about twenty miles from the city of Naples. It produces a good light wine. The island is covered with remains of antiquity, including the ruins of the villa of Tiberius, the Roman Emperor.

Caracas, the capital of the Republic of Venezuela, in South America. It stands a few miles from the northern coast of Venezuela, at an elevation of nearly 3,000 feet above the sea. Its climate is healthy, but earthquakes are frequent in the vicinity. In 1812, nearly the whole of the city was destroyed by an earthquake, and 12,000 persons are said to have perished. The population of the city is about 90,000.

Carisbrooke, a village in the Isle of Wight, about one mile south of Newport, and celebrated for its castle, which dates originally from the Sixth Century. In this castle (now in ruins) Charles I. was confined, and, after his execution, his two youngest children were also confined in the castle, and the Princess Elizabeth died there. The population of the parish is about 8,000.

Carlsbad (*kärlz'băd.*) [Ger., "Charles's Bath."] A town and fashionable spa of Bohemia, in Czecho-Slovakia, one hundred sixteen miles west-northwest of Prague. It is finely built and romantically situated; its principal spring, the *Sprudel*, is the hottest in Europe, having a temperature of 165° Fahrenheit. Population, 12,000.

Carmel, Mount, a mountain ridge of Palestine, which runs out into the Mediterranean, to the south of the Bay of Acre. Its name means, "The Garden of God." On the summit of the ridge are oaks and pines, and, lower down laurels and olives. Near the top there is a monastery called *Elias*, after the prophet Elijah, the monks of which bear the name of *Carmelites*. The order was probably founded in the Twelfth Century, but legend ascribes its foundation to Elijah, and the Virgin Mary is said to have been a Carmelite nun. One of the distinctions of the order is that they walk bare-footed.

Caspian Sea, a great inland sea or lake, the largest in the world, forming a portion of the boundary between Europe and Asia. It is 730 miles long by from 150 to 270 miles broad. The surface of the Caspian is ninety-seven feet lower than the level of the Black Sea, which lies to the west, while the Sea of Aral, which lies to the east, is about forty feet above sea-level. Hence it is believed that at no distant period the Sea of Aral, the Caspian, and the Black Sea, formed one mass of water, which covered the intervening land. The water of the Caspian is salt, though less so than that of the ocean. The depth of its central portion is nearly 3,000 feet, but it is shallow round the shores. The Caspian has no tides, but its navigation is perilous because of violent storms. The Volga, the Ural, and many other rivers, fall into the Caspian; and by a canal, which unites the head waters of the Volga with the rivers Tvertza and Schlina, the Caspian is connected with the Baltic. The shallow northern basin, however, is frozen over during the entire winter. The sea abounds in fish, and seals and tortoises are found on its upper coasts. Its area is 170,000 square miles, or 20,000 square miles more than that of the British Isles. It was known to the Greeks and Romans under its present name (*Caspium Mare*), which was given to it from the Caspii, a people who inhabited its western shores.

Castile (*kăs-tēl'*), a central district of Spain, divided by the mountains of Castile into Old Castile in the north, and New Castile in the south: the former consisting of a high bare plateau, bounded by mountains on the north, and on the south, with a variable climate, yields wheat and good pasturage, and is rich in minerals; the latter, also table-land, has a richer soil, and yields richer produce, breeds horses and cattle, and contains besides the quicksilver mines of Almaden. Both were at one time occupied by the Moors. They were created into a kingdom in the Eleventh Century, and united to the crown of Spain in 1469 by the marriage of Ferdinand and Isabella.

Caucasus (The) (*kô'-kȧ-sŭs*), a great mountain range, stretching between the Caspian and the Black Seas, separating the two Russian provinces of Ciscaucasia and Transcaucasia, and forming part of the boundary between Europe and Asia. It has a continuous extent of about 700 miles, throwing off spurs, or lateral ridges, towards both Russia and Turkey in Asia. Its highest elevation is estimated at 18,500 feet, and its snow-limit at 11,000 feet. The Caucasus is generally remarkable for the picturesqueness of its scenery, and the wild independence of the tribes dwelling among its gorges.

Cenis (*sĕ-nē'*), a mountain belonging to the Graian Alps, between Savoy and Piedmont, 11,755 feet high. It is famous for the winding road constructed by Napoleon I., which leads over it from France to Italy, and for an immense

railway tunnel, which, after nearly fourteen years' labor, was finished in 1871. The Mount Cenis Pass is 6,765 feet above the level of the sea, whereas the elevation of the entrance to the tunnel on the side of Savoy is only 3,801 feet, and that on the side of Piedmont 4,246 feet. The total length of the tunnel is nearly eight miles. The total cost amounted to about $15,000,000.

Cevennes (*sā-vĕn'*), a mountain chain in the south of France, running northward between the basins of the Rhone and the Loire, as far as the Plateau of Langres, in the department of Haute Marne. The height of the Cevennes averages from 2,000 to 3,000 feet, but Mont Mézenc, near the source of the Loire, reaches a height of 5,753 feet. The mountains are rich in minerals. The Cevennes are famous as the retreats of the Albigenses, Waldenses, and Camisards, during the religious wars of France.

Ceylon (*sē-lŏn'*), an island belonging to Great Britain in the Indian Ocean, about sixty miles southeast of the southern extremity of Hindustan, from which it is separated by the Gulf of Manaar and Palk's Strait. Length, about 270 miles, north to south; average breadth 100 miles; area, 25,332 square miles.

Where the jungle has been cleared away and the land drained and cultivated, the country is perfectly healthy; where low wooded tracts, and flat marshy lands abound, covered with a rank, luxuriant vegetation, the climate is eminently insalubrious.

Most of the animals found on the opposite continent are native to this island, excepting the royal tiger, which does not exist here. Elephants are numerous and are esteemed for their superior strength and docility. Bears, buffaloes, leopards, jackals, monkeys, and wild hogs are numerous. Crocodiles, serpents, and reptiles of all sorts abound. Of the snake tribe, consisting of about twenty-six different species, six only are venomous. Among the insects are the leaf and stick insects, the ant-lion, the white ant, etc.

In the luxuriance of its vegetable productions, Ceylon rivals the islands of the Indian Archipelago, and in some respects bears a strong resemblance to them; its most valuable products are tea, rice, coffee, cinnamon, and the cocoanut. Tea is being widely cultivated. Tobacco is raised principally in the north district, and is of excellent quality. Indigo grows wild, but is not sought after.

Ceylon is one of the British crown colonies, its government being conducted by a governor and two councils, executive and legislative, of both of which the governor is president. The first is composed of five members, the other of seventeen members. The powers of the councils are limited, being wholly subservient to the governor, who can carry into effect any law without their concurrence. All laws must be approved by the Secretary of State for the Colonies before they can take effect. Any individual properly qualified may be appointed to the most responsible situation, without reference to service, nation, or religion, and native Singhalese have occupied some of the highest posts.

Chartreuse, La Grande, a famous monastery of France, in the department of Isere, fourteen miles north of Grenoble among lofty mountains, at an elevation of 3,281 feet. The access is very difficult. It was built in 1084, but several times burnt down; the present building was erected after 1676. The monastery was suppressed in 1903 and the order expelled.

Cherbourg, (*shair'boorg*), a fortified seaport and naval arsenal of France, department Manche, at the head of a bay of same name, 185 miles west-northwest of Paris. The fortifications here are of the most formidable character, and as a naval stronghold it may almost be considered impregnable. Cherbourg possesses a magnificent harbor for ships of war, constructed by Napoleon I., at an immense cost, besides dockyards, dry-docks, etc. The roads afford secure anchorage to 400 sail at a time, and are protected by a magnificent breakwater began in 1784, and completed by Napoleon III., in 1864. Population, 43,837.

Chicago, second largest city of the United States, embraces 191 square miles, on the southwest shore of Lake Michigan, and on both sides of Chicago River. It stands on a level plain, and is surrounded by a beautiful and fertile country. The Chicago River and its two branches separate the city into three unequal divisions, known as the North, the South, and the West, connected by numerous bridges and two tunnels under the river. The streets are wide and are laid out at right angles, many of them being adorned by rows of fine forest trees. The site of the city was originally unhealthy from its lowness, but a large portion of it has been artificially heightened (even while occupied by buildings), by eight or ten feet. The public parks have an area of nearly 3,000 acres. Among the chief buildings are the new city hall, and court-house, the custom-house and post-office, and the chamber of commerce. There is a university and a large number of higher-class colleges and seminaries. To supply the town with water two tunnels have been constructed under Lake Michigan, and convey the pure water of that lake into the town, where it is pumped up to a height of 160 feet and distributed. There are also a number of artesian wells. From its position at the head of the great chain of the American lakes, and at the center of a net-work of railroads communicating with all parts of the Union, Chicago has always been more a commercial than a manufacturing city. There are extensive docks, basins, and other accommodation for shipping. The industries embrace iron-founding, brewing, distilling, leather, hats, sugar, tobacco, agricultural implements, steam-engines, boots and shoes. In commerce Chicago is only second to New York. It has an enormous trade in pork-packing, and is the greatest market for grain and timber in America. Other articles for which it is a center of trade are flour, provisions, wool, hides, soft goods, and clothing. Before 1831 Chicago was a mere trading station. Its charter is dated March 4, 1837, its population being then 4,170, but since then it has advanced at an altogether extraordinary rate. On October 9, 1871, a great fire occurred which burned down a vast number of houses and rendered about 100,000 persons homeless and destitute.

But the energy of its inhabitants and its favorable situation enabled it to recover in a surprisingly short time. The World's Columbian Exhibition was held in Chicago in 1893. It celebrated Columbus' discovery of America. In 1900, a ship and drainage canal, forty miles long, was completed at a cost exceeding $33,000,000. Population, 2,701,705.

Chile (sometimes, Chili). A southwestern republic of South America, forming a long, narrow strip of country lying between the Andes and the Pacific Ocean; mean breadth, from 80 to 100 miles; area, 292,580 square miles. Chile is bounded north by Peru, east by Bolivia and Argentina, south and west by the Pacific. The climate is healthful, as a whole; a scarcity of rain is, however, often felt. Earthquakes are of common occurrence. The soil is of varying fertility, most fertile toward the south and the foothills of the Andes, where luxuriant vegetation flourishes. Valuable hard woods abound; tropical fruits thrive excellently. Chile is rich in metals, especially copper, which is mined on an immense scale; silver, gold, cobalt and manganese are also obtained. The principal source of national wealth, however, is the abundant beds of nitrate of soda. This is mined and exported in large quantities for use as a fertilizer. Coal, borate of lime, salt, sulphur and guano are also found. Commerce is chiefly with Great Britain, Germany, and the United States. The chief cities and towns are: Santiago, the capital; Valparaiso, the chief port; Concepcion, Iquique, Talca, Chillan, and Antofagasta. The population in 1919 was 4,038,050; chiefly of European extraction. In 1910 the trans-Andean railway from Valparaiso to Buenos Ayres was opened for traffic; in 1912 the notable Arica to La Paz railway was completed. These great engineering feats of scaling or tunneling mountain passes from 12,000 to 14,000 feet in altitude not only stand as monuments to the commercial possibilities of Chile, but signalize a new era in her relations with Bolivia, Argentina, and the world at large.

China. A country of Asia, occupying the vast elevated plateau known as Eastern High Asia. China has an area of about 3,913,560 square miles, about one-fourth of the whole of Asia. It embraces China proper, Manchuria, Mongolia, and Tibet. China proper is bounded on the north by Mongolia; on the west by Mongolia, Tibet, and Burmah; on the south by Burmah, Tongking and the South China Sea; and on the east by the East China Sea, the Yellow Sea, and Manchuria. It contains several mountain ranges, from which proceed the Hoang-ho, the Yang-tse-kiang, the Peiho, and the Canton rivers. The climate of China is very varied, and in some parts of the country there is excessively cold winter, followed by excessively hot summer; but the soil is generally productive, the mountains are clothed with timber, and the hillsides and the plains are laid out in rice fields and gardens. Agriculture is the chief occupation of the people, and it is conducted by them with great skill and assiduity. Besides rice, which is grown most extensively in the south, wheat and barley are cultivated in the north, and the tea plant in the maritime provinces, the exports of tea alone amounting in value to $25,000,000 a year. Cotton is also grown in the neighborhood of Shanghai. In some of their manufactures, the Chinese have never been surpassed. Their silks and porcelains have always been famous, and in certain arts requiring patience and ingenuity, such as the making of cardcases, snuffboxes, and fans, they are equaled only by the Japanese. There is a great caravan trade carried on with Russia and Farther India, and a large traffic by sea with British India, North and South America, Great Britain, and the other countries of Europe. From India opium is imported, and its effects upon the people are most deleterious. Internal communication is carried on chiefly by means of rivers, and of a Grand Canal which, commencing at the city of Hang-chow, runs northward for a distance of seven hundred miles. Railways and telegraphs, however, are being generally introduced; in 1920, 6800 miles of railway were open for traffic, and over 2000 miles under construction. The provinces of China are: Chihli, Shantung, Kiangsu, Chehkiang, Fukien, Kwangtung, Shensi, Anhwei, Honan, Shansi, Kansu, Szechuen, Hupeh, Kwang-si, Hunan, Kiangsi, Kweichow, and Yünnan. The capital of China proper and of the entire republic is Peking. Other towns of importance are Nanking, Canton, Chungking, Shanghai, Ning-po, Tientsin, Fuchau, Amoy, Hankow, King-te-chen, and Chefoo. The population is 320,650,000.

Cincinnati, the "Queen City of the West," is situated in the southwest part of Ohio, on the northern shore of the Ohio River. The location is fine, and the suburbs are not surpassed for beauty. This great emporium of the Central States is an aggregation of towns that have merged into one. It is composite also as to population, which is derived from many nations. The German element is very large. Here are established a famous college of music and a richly endowed art school. Five bridges connect Cincinnati with the cities of Covington, Newport, and Ludlow on the Kentucky shore. The architectural achievements of the city are striking for splendor and variety. Among its other leading industries are pork packing, brewing, distilling, and manufactures of iron, stone, wood, clothing, food products, tobacco, soap, jewelry, and drugs. Among its interesting institutions are the university, public library, art museum, historical society, society of natural history, zoölogical garden, industrial exposition, May musical festival, city armory, medical colleges, hospitals, and crematory. Cincinnati is the site of one of the earliest astronomical observatories in the United States, founded about the same time as that of Harvard College and the Naval Observatory. Population, 401,247.

Circassia, a country of Asia, comprehending the northwestern division of the Caucasus, between the shores of the Black and Caspian seas. The whole country is mountainous. For nearly forty years the Circassians maintained a brave struggle against the encroachments of the Russians, but were finally defeated, with the rest of the inhabitants of the Caucasus, in 1864, a defeat which lead practically to their extinction as a nation. After the close of the war, large numbers of them emigrated to Asia

Minor and other provinces of Turkey. The women of Circassia have long been famous for their beauty.

Cleveland, the first city in Ohio and the fifth largest in the United States in population, is situated on the south shore of Lake Erie, at the mouth of the Cuyahoga River. Its situation is central to great deposits of coal, iron ore, petroleum, and limestone. The city has a harbor at the mouth of the river giving safe anchorage for a large number of ships. Great breakwaters run out on each side of the river, forming commodious eastern and western harbors. The abundance of trees gives it the name of "The Forest City." The Cuyahoga is spanned by several bridges, and in particular by the Viaduct, an elevated street and bridge erected at great expense. Among the buildings are the United States building, city hall, Case Hall, medical college, and railway depôt. Cleveland is an important railway center, has an extensive lake traffic, and large manufactures, especially in iron and steel; petroleum-refining and pork-packing are also important industries. There is a harbor of refuge constructed by government. Population, 796,841.

Cologne (*ko-lōn'*) [Ger. *Köln*]. An ancient city of Prussia, formerly capital of an independent electorate of same name, and now of the Rhine provinces. It connects by a magnificent iron bridge with Deutz on the opposite bank of the Rhine, is strongly fortified, and presents architecturally a fine *coup d'œil* of mediæval quaintness. Its cathedral, begun about 1248, finished in 1880, at a cost of $10,000,000, is the most imposing structure in Germany and the most imposing Gothic edifice in the world. Cologne has an extensive commerce, and is the chief entrepôt between the Netherlands and the cities of Germany. Cologne was founded by the Romans, and reached the height of its prosperity during the Middle Ages, and the subsequent zenith of the Hanseatic League. Population, 1919, 633,904.

Colombia, a Republic of South America. The total population, according to the 1918 census, was 5,847,491; capital and largest city, Bogotá. The surface of the country is extremely varied, with lofty mountains in the west, and vast plains in the east scarcely above the level of the sea.

Colombia possesses all the climates of the world; perpetual snows cover the summits of the Cordilleras, while the valleys abound in the rich vegetation of the tropics. In the north departments and in the immense llanos of the east great herds of cattle, descended from those imported by the Spaniards, are reared; in the central districts shorthorns and other English, Dutch, and Norman cattle and horses have been introduced, and are largely raised throughout the temperate zone. Among the natural mineral products are gold, silver, iron, copper, lead, coal, sulphur, zinc, antimony, arsenic, cinnabar, rock-salt, crystal, granite, marble, lime, gypsum, jet, amethysts, rubies, porphyry, and jasper; much of the world's platinum is obtained from the upper San Juan, and the principal source of the finest emeralds is at Muzo in Boyaca.

Columbia, or **Oregon,** one of the largest of the North American rivers, rising in the Rocky Mountains of British Columbia, and emptying into the Pacific Ocean. It flows first northwest, then, doubling on itself, turns south through Washington, where it is joined by the Spokane and Snake rivers. For a considerable part of its course it forms the boundary between Washington and Oregon, being joined by the Willamette and other tributaries. The total length is about 1,400 miles. It is broken by rapids, but navigable to Vancouver, and up the Willamette to Portland. It is a famous salmon stream, Columbia River salmon giving rise to a great industry on the coast. It was explored by Lewis and Clark in 1804-5.

Constantinople, called by the Turks *Stamboul,* the capital of the Turkish Empire. It is said to have been founded in the Seventh Century before Christ, and it retained its name of *Byzantium,* derived from its founder, till its conquest (A. D. 330) by Constantine the Great, who built a new city on the site, and gave to it its present name. It came into the hands of the Turks in 1453. Situated on an arm of the sea called the Golden Horn, on the European side of the Bosphorus or Strait of Constantinople, the city holds a splendid position, and its appearance from the sea is very striking; but the streets are for the most part narrow and dirty, and the houses are mostly low, being built of wood and earth. It contains, however, some fine public buildings, such as the Seraglio, or Imperial Palace, and the Cathedral of St. Sophia, now converted into a mosque. Many of the mosques are very beautiful, and are generally surrounded with trees and gardens. The Golden Horn, on the north side of the city, forms one of the finest harbors in the world. On the northeast side of the harbor are the suburbs of Galata and Pera, where the English, the French, and other Europeans reside. Galata is the seat of the commercial establishments, Pera that of the diplomatic bodies. The inhabitants of Stamboul itself are Turks, Armenians, Greeks, and Jews, who have each particular quarters allotted to them. The objects of greatest attraction in Stamboul are the bazaars, or market-places, the fountains, and the baths. The Seraglio stands on the eastern side of the city, and is surrounded by public offices and government buildings, being altogether three miles in circumference. The principal entrance to the palace is called "the Porte." There are upwards of 350 mosques in Constantinople, and about thirty-six Greek, Roman Catholic, and Protestant churches. There are more than 130 public baths in the city, and 180 khans or lodging houses of great size, chiefly occupied by foreigners. Omnibuses and tramways have been introduced, and on the Pera side of the city many of the streets are well lighted. The old walls of the city are thirteen miles in circumference. Population about 1,125,000.

Corinth, a city of ancient Greece, the capital of a small, but wealthy and powerful district in the Peloponnesus. It lay on the southeast of the Gulf of Corinth, which stretches along the northern shore of the Peloponnesus; and its position on the Isthmus of Corinth, which connects the Peloponnesus with the more northerly part of Greece, made it a place

of great importance, and the emporium of the trade between Europe and Asia. The city was taken and destroyed by the Romans, about the middle of the Second Century before Christ. It was afterwards, in the First Century of our era, made into a Roman colony, and regained much of its former wealth, which led to its population becoming once more famed for their luxuriousness and licentiousness. Little now remains of the city except the ruins of a Doric temple, believed to be one of the earliest existing specimens of that style of architecture. The modern town is of no importance.

Cossacks, a people inhabiting those parts of the Russian Empire which border on the northern dominions of Turkey, Poland, and the southern confines of Siberia. Both the name and the origin of this people are involved in great uncertainty, but they are believed to be of a mixed Caucasian and Tartar race. The country of the Don Cossacks, or Cossacks of the Don, to the north of the Sea of Azov and Caucasia, has an area of about 62,000 square miles, with a population of about 1,500,000. They pay no taxes to the government, but, in lieu of this, every Cossack of the Don, from 15 to 60 years of age, is bound to render military service. Every Cossack is obliged to equip, clothe, and arm himself at his own expense, and to keep his horse. The number of Don Cossacks in military service is computed at 66,000; and there are, besides, the Cossacks on the Black Sea, the Great Russian Cossacks on the Caucasian Line, the Ural Cossacks, the Orenburg Cossacks, the Siberian Cossacks, and the Bashkir Cossacks, the total number of Cossacks in military service being estimated at about 330,000, all of whom are fully organized, and are supposed to be prepared to enter the field, on being summoned, in the course of ten days. They are thus the most important part of the irregular troops of Russia, but otherwise they maintain considerable independence.

Cotopaxi (*kō-tō-păx'ī*), the most remarkable volcanic mountain of the Andes, in Ecuador, about sixty miles northeast of Chimborazo; latitude 0° 43′ south; longitude 78° 40′ west; altitude 19,613 feet. It is the most beautiful of the colossal summits of the Andes, being a perfectly symmetrical, truncated cone, presenting a uniform, almost unfurrowed field of snow of resplendent brightness. Several terrific eruptions of it occurred in the course of the Eighteenth and the beginning of the Nineteenth Century.

Coventry (*kŭv'-ĕn-trĭ*), a city in England, county of Warwick, eighty-five miles northwest of London. It was formerly surrounded with lofty walls and had twelve gates, and was the see of a bishop early conjoined with Lichfield. Parliaments were convened here by the earlier monarchs of England. Pageants and processions were celebrated in old times, and a remnant of these still exists in the processional show in honor of Lady Godiva. Population, 1921, 128,205.

Cracow (*krā'kō*), the old capital of Poland, in 1815–1846 capital of a republic of the same name now forming part of the new Polish republic. It stands on the left bank of the Vistula, where it becomes navigable, and consists of Cracow proper or the old city, and several suburbs. It is the see of a bishop, is well built and regularly fortified. The cathedral, a fine old Gothic edifice, contains monuments of many Polish kings, of Kosciusko, etc. The university was founded in 1364, but gradually fell into decay, and was reorganized in 1817. It has a library of 300,000 volumes. On a hill near the town stands the monument of Kosciusko, 120 feet high. Population, 176,463.

Crécy (*krĕs'-ĭ*), or **Cressy,** a small town of France, in the department of Somme, about twelve miles northeast of Abbeville, celebrated on account of the Battle of Crécy, won by Edward III., of England, over the French, under the Count of Alençon, August 26, 1346. This battle was won by the prowess of the Black Prince under command of Edward III.; and the crest now used by the Princes of Wales (three ostrich feathers, with the motto, "Ich dien," I serve) is commonly said to have been adopted by the Black Prince after this victory, in which the King of Bohemia, to whom the crest belonged, was slain. Population about 1,500.

Cronstadt (*krōn'stät*), a maritime fortress of Russia, about twenty miles west of Petrograd, in the narrowest part of the Gulf of Finland, opposite to the mouth of the Neva, on a long, narrow, rocky island, forming, both by its position and the strength of its fortifications, the bulwark of the capital, and being the most important naval station of the Empire. It was founded by Peter the Great, in 1710, and used to be the commercial port of Petrograd, but since the construction of a canal, giving large vessels direct access to the capital, it has lost this position.

Cuba, the largest and most westerly of the West Indies. It stretches in the west, with a breadth varying from thirty miles to 100 miles, a coast line of 1,976 miles, and an area of about 44,000 square miles, including adjacent islands (of which the Isle of Pines is the largest) and bays. Only about one-third of the coast line is accessible to vessels, the remainder being beset by reefs and banks. The shores, low and flat, are liable to inundations, but there are numerous excellent havens. A watershed running lengthwise through the islands, rises into mountainous heights only in the southeast, where are the Sierra Maestra, shooting up in the Pico de Tarquino to 8,320 feet, and the Sierra del Cobre (copper). The mountains, composed of granite overlaid with calcareous rocks, and containing minerals, especially copper and iron, are clothed in almost perennial verdure, wooded to the summits. The limestone rocks abound in caverns, with magnificent stalactites. Mineral waters are plentiful. The rivers, running north and south, are navigable for only a few miles by small boats, but are very serviceable for irrigation of the plantations, and supply excellent drinking water. The climate, more temperate than in the other West Indian Islands, is salubrious in the elevated interior, but the coasts are the haunt of fever and ague. No month of the year is free from rain, the greatest rainfall being in May, June, and July. Earthquakes are frequent in the east. Hurricanes, less frequent

than in Jamaica, sometimes cause widespread desolation.

The soil of Cuba is a marvel of richness, and a large part is still covered with virgin forest. The vegetation of Cuba also includes tamarinds, palms, ferns, lianas, etc. Among the cultivated products are sugar, tobacco, coffee, cacao, rice, maize, cotton, esculent roots, and tropical fruits. Among the animals there is a species of tailless rat peculiar to Cuba, and an abundance of birds. Of noxious animals and insects there are the crocodile, scorpion, and mosquitoes. The rivers and seas are well stocked with fish, the turtle abounding in the shallows and sandy places of the beach. The staple crop of the island is sugar; in 1919–20, 3,735,425 tons were produced.

Tobacco ranks next to sugar as a staple. Cuba produces the standard quality of cigar leaf, owing to the exquisite adaptation of the soil and climate to the development of the plant. The normal production is 6,000,000 pounds of leaf, and over 350,000,000 cigars. The mineral wealth of Cuba is largely in the copper mines. Cuba has asphalt deposits rivaling those of Trinidad, for street paving. Iron ores abound. In the neighborhood of Santiago there are mountains of metal. Oranges of exquisite flavor grow spontaneously, though no attention is paid to their culture or exportation. There are cocoanuts, pineapples, bananas, and such fruits as guavas, zapotes, anonas, guanabanas, and tamarinds. There are thirty-two species of the palm tree, but so far only two have been utilized, the "yarey" palm, whose leaves are used in the United States for the manufacture of hats and baskets, and the "palma real" (royal palm), from which durable boards are made.

There are many railway companies in Cuba, which operate some 3200 miles of main line, and there are also private branch lines to all the important sugar estates. There are about 6000 miles of telegraph line in operation, all the property of the government, which also owns the telephones, leasing both systems to private corporations. Population in 1919, 2,898,945.

Czecho-Slovakia (*chĕk'-ō-slō-văk'-ĭ-a*). A republic of east central Europe, composed of the former Austrian states of Bohemia and Moravia, a part of Silesia, Ruthenia, and the district of Hungary known as Slovakia. The area of the new state is about 56,000 square miles, with a population of about 14,000,000, chiefly Czecho-Slovaks. The republic comprises 16 districts, subdivided into counties, and has a democratic form of government with universal suffrage. Prague and Brünn are leading cities. The chief navigable river is the Elbe. There are about 15,000 primary and intermediate schools and more than 200 secondary schools. There is a university at Prague, and new universities are being established in Moravia and Slovakia. Separation of church and state has been decreed. The republic issued its declaration of independence at Paris October 18, 1918, and its establishment was immediately proclaimed at Prague. During 1918 the republic maintained armies in France, Italy and Russia.

Danube, a celebrated river of Europe, originates in two small streams rising in the Schwarzwald, or Black Forest, in Baden, and uniting at Donaueschen. The direct distance from source to mouth of the Danube is about 1,000 miles, and its total length, including windings, about 1,800 miles. The Danube is navigable for steamers up the Regensburg (Ratisbon) nearly 1,500 miles from its mouth.

Danzig. An important seaport at the mouth of the Vistula on the Baltic Sea. By the Treaty of Versailles, 1919, the town of Danzig with a small surrounding territory was constituted a Free City under the protection of the League of Nations. For many centuries Danzig has been a well-known grain market and shipping point. Its nearness to the great German, Polish, and Russian grain districts, together with its foreign shipping connections, have given it great commercial advantage. In the trade of the port, sugar and lumber rank next to grain in importance. The total area of the Free City of Danzig is about 579 square miles and the population about 200,000. In 1919 the population of the city proper was 182,468.

Dardanelles (the ancient Hellespont), the narrow strait between Europe and Asia, connecting the Grecian Archipelago with the Sea of Marmora. The strait is about forty miles in length. Its western entrance is two miles wide, but at its narrowest part it is only three-quarters of a mile wide; and here stood the castles of the Dardanelles (*Dardanus*), from which the strait derived its name.

Date Line, an arbitrary line drawn on a map from north to south, on the one side of which it is to-day and on the other to-morrow, even in places not a mile apart. When ships cross this line they drop or repeat a day. The international date line describes the following course: starting at the North Pole it passes through Bering Strait, then slants to the west to clear the long horn formed by the Aleutian chain of islands and give them the same day as the United States, to which they belong. This accomplished, it returns to the 180th meridian and drops south into the tropics, keeping far to the east of the Japanese group and the Philippines till it approaches the latitude of the Fiji Islands. The date line here makes a sudden swerve to the east, so as not to embarrass the local commerce with a change of day.

Dead Sea, The, a lake of Palestine, about twenty miles southeast of Jerusalem. It is called by the Arabs "Bahr Loot," or "Sea of Lot"; is about forty-seven miles long, and from ten to twelve broad, with a depth of 220 fathoms, and its surface about 1300 feet below the level of the Mediterranean. The waters of the Dead Sea are intensely salt, of great specific gravity, and have no perceptible outlet; in the north it receives the waters of the Jordan.

Denmark, a kingdom of Northern Europe, is composed of a peninsular portion, and an extensive archipelago, lying east of it, with a few scattered islands on its west side. The peninsular portion is composed of Jutland, and measures, north to south, 185 miles, with a breadth varying from 40 miles to 108 miles. Denmark possesses also the Faroe Islands and Iceland, in the North Atlantic Ocean, and Greenland in the Arctic regions. Denmark has no large rivers. Intercourse between the various

islands and parts of the kingdom separated from each other by water is necessarily kept up by means of water communication, regular ferries being established at numerous points. Denmark is well supplied with excellent seaports, the most important being Copenhagen, Aalborg, Aarhuus, and Randers. Horses and cattle are reared in great numbers, and both are excellent. Large flocks of sheep are kept; but rather for the flesh than the wool, which is coarse and short. Swine are also reared to a great extent. Although not particularly favored by nature, Denmark is yet preëminently an agricultural country. The land is greatly subdivided, as the law interdicts the union of small farms into larger, and encourages the division of landed property. The kinds of grain most largely cultivated are barley, oats, rye, and wheat, the greatest area being occupied by oats, the second by barley. The fisheries were formerly a more important branch of national industry than now.

Denver, the capital and largest city of Colorado, is magnificently situated at an altitude of 5,275 feet, within fifteen miles of the base of the Rocky Mountains. It is one of the most important railroad centers in the West, and lies in the midst of a rich mining district. Owing to the remarkable clearness of the atmosphere, a stretch of 200 miles of the mountains is discernible almost every day of the year. The climate is peculiarly mild and well adapted to sufferers from pulmonary complaints. Denver is the leading industrial city of the western mountain region. It possesses a number of fine buildings, including the capitol, the United States mint and the University of Denver, besides the state and the public libraries. Population, 1920 census, 256,491.

Detroit, metropolis of Michigan, and fourth largest city of the United States, is situated on the Detroit River, about eighteen miles from Lake Erie, and seven miles from Lake St. Clair. It has a water front of nine miles, steamship communication with the principal ports on the Great Lakes, and ferries to Windsor on the Canadian side. The river at this point is known as the "Dardanelles of the New World," leading from one great lake to another and affording an excellent harbor. Detroit has many magnificent public parks. Of these, by far the largest and most beautiful is Belle Isle, an island of 700 acres at the entrance to Lake St. Clair. This park is an immense pleasure ground and offers all sorts of amusements. No city of its size in the country surpasses Detroit in the number, beauty, and substantial quality of its public and business buildings. Among the most noteworthy are the Chamber of Commerce, Majestic, Union Trust, Hammond, municipal buildings, county court-house, city hall, the post-office, built at a cost of $2,000,000, Light Guard Armory, art museum, Central High School, and Masonic Temple. Near the Campus Martius is the public library, with 150,000 volumes. In front of the city hall stands a magnificent soldiers' and sailors' monument. Other points of interest are Fort Wayne, the Bagley Fountain, the old home of General Grant, and relics of Perry's victory on Lake Erie. Detroit is an extensive manufacturing and commercial city. Population, 1920 census, 993,678.

Dresden, the capital of the republic of Saxony, is situated in a beautiful valley on both sides of the River Elbe. Among the chief edifices, besides several of the churches, are the museum (joined to an older range of buildings called the Zwinger), a beautiful building containing a famous picture gallery and other treasures; and the Japanese Palace (Augusteum) containing the royal library of from 500,000 to 600,000 volumes. The city is distinguished for its excellent educational, literary, and artistic institutions, among which are the Polytechnic School, the Conservatory and School of Music, and the Academy of Fine Arts. The manufactures are important and various in character; the china, however, for which the city is famed, is made chiefly at Meissen, fourteen miles distant. The commerce is considerable, and has greatly increased since the development of the railway system. The chief glory of Dresden is the gallery of pictures, one of the finest in the world. The pictures number about 25,000, and comprise many fine specimens of the Italian, Dutch, and Flemish schools. The city suffered severely in the Thirty Years' War, and also in 1813, when it was the headquarters of Napoleon's army. It was occupied by the Prussians in 1866. Population, 1919 census, 529,326.

Dublin (Irish, *Dubh-linn*, "black pool"), the capital of Ireland, is situated at the mouth of the river Liffey, on Dublin Bay. The river, running from east to west, divides the city into two almost equal portions. Much of Dublin is built on land reclaimed from the sea and the ground is generally flat with few undulations. The harbor and docks are protected by large breakwaters. In the north portion of Dublin the streets run at right angles and are remarkable for their breadth. The most imposing is Sackville street on which are the post-office, Nelson's monument, and the Rotunda. The center and the northwestern quarter are the great emporiums of trade and the residence of the middle classes. The southwestern division, part of which is called the "Liberties," formerly the seat of the silk trade, is the poorer district. The city is surrounded by the Circular Road, nearly 9 miles in length, forming a favorite drive and promenade. The chief educational institutions are Trinity College, Catholic University, and University College. Dublin has a large import but a small export trade. Population about 415,000.

Edinburgh, capital of Scotland, and chief town of Mid-Lothian, occupies a picturesque situation on a cluster of eminences at a distance of about one and one-half miles from the Firth of Forth. Its admirable position has induced the comparison with Athens, from which, as well as from its literary fame, it takes the title "Modern Athens." The Gaelic name of the city is "Dunedin." A picturesque castle crowns the highest point in the city. Holyrood Abbey and palace in the low ground east of the city have great historic interest. Edinburgh is the residence of considerable numbers of the Scottish landed gentry, and its society is regarded as unusually polished, from the predominance

of the professional and literary elements in its composition. Its medical practitioners — surgeons and physicians — have a high reputation. Its university and medical schools, its high school, and its various other educational institutes have a high repute. Population, 1921, 420, 221.

Egypt is a country in the northeast of Africa, whose territory extends up the valley of the Nile as far as the Equator, embracing Nubia, Ethiopia, Darfur, etc. Egypt proper extends from the mouth of the Nile to the first cataract at Assouan, and is usually distinguished into Upper, Middle, and Lower Egypt, which last comprehends the Delta. The Delta begins just below Cairo, about ninety miles from the sea, and its greatest breadth is about eighty miles. It is this part of the country which is chiefly cultivated, its fertility being derived from the annual inundations caused by the overflow of the Nile. The rest of the country is mainly sandy desert, with some remarkable oases on the west of the Nile. The climate of Egypt is hot and dry, but not unhealthy. The date-palm, the acacia, and the sycamore are scattered throughout the country; large plantations of roses are found in the province of Feiyoom; and the soil and climate are well suited for cotton, sugar, rice, indigo, cucumbers, melons, and onions, as well as for maize, wheat, and millet. There are no metals in Egypt, but salt, nitre, marble, red granite, oriental alabaster, and limestone are found. The commerce of the country is very considerable, and centers chiefly in Alexandria, which suffered severely, however, in the war of 1882. The capital is Cairo, which is the largest city in Africa.

Eiffel Tower, a structure erected on the banks of the Seine in Paris, the loftiest in the world, being 984 feet in height, and visible from all parts of the city. It consists of three platforms, of which the first is 189 feet above the ground, the second is 380 feet and the third, 906 feet high, far above the Strasburg Cathedral spire. It was designed by Gustave Eiffel, and erected in 1887–89. There are cafés and restaurants on the first landing.

England the most southern and richest portion of the island of Great Britain, is bounded north by Scotland, east by the North Sea, south by the English Channel, and west by the Atlantic Ocean, the principality of Wales, and the Irish Sea. Maximum length, 425 miles; breadth, fluctuating between sixty-two and 280 miles; coast line, about 2,000 miles. Area, including Wales, 58,340 square miles. The principal islands belonging to it are those of Man, Lundy, Scilly, Walney, Sheppey, Wight, Lindisfarne, and the Channel Islands. Chief rivers: Severn, Thames, Trent, Mersey, Ouse, Humber, Medway, Tyne, Dee, Tees, Wear, Derwent, and Eden. Lakes: Derwentwater, Ulleswater, and Windermere. Estuaries: those of the Thames, Mersey, Humber, Severn, Dee, Southampton Water, and the Wash. It has numerous capes and headlands. Mountains: The principal mountains are those of Cumberland, Westmoreland, and Yorkshire, with the Cheviots on the Scottish border, the Derbyshire "Peak," and the Cotswolds in Gloucestershire. Numerous forests are spread over the country. Soil: The major part of the land is fertile and highly productive, owing to an admirable system of tillage; while well-furnished farm houses and comfortable cottages everywhere meet the eye, and evince that taste for neatness and rural beauty which is so characteristic of the nation. The same features, too, on a larger and grander scale, are found in the country-seats of the nobility and squirarchy. The climate is generally moist, but mild and healthful. Chief towns: London (capital of the British Empire), Liverpool, Manchester, Leeds, Birmingham, Hull, Bristol, Newcastle-on-Tyne, Sheffield, Bath, Oxford, Carlisle, etc.

English Channel, the arm of sea which separates England from France, extending, on the English side, from Dover to Land's End; and on the French, from Calais to the island of Ushant. On the east it communicates with the German Ocean by the Strait of Dover, twenty-one miles wide; and on the west it opens into the Atlantic by an entrance about 100 miles wide. At its greatest breadth it is about 150 miles.

Erie, Lake, one of the great chain of North American lakes, between Lakes Huron and Ontario, about 240 miles long, 58 miles broad at its center, from 200 to 210 feet deep at the deepest part; area, 9,600 square miles. The whole of its south shore is within the territory of the United States, and its north within that of Canada. It receives the waters of the upper lakes by Detroit River at its northwest extremity, and discharges its waters into Lake Ontario by the Niagara River at its northeast end. The Welland Canal enables vessels to pass from it to Lake Ontario.

Esthonia, Republic of. A country of northern Europe, formerly a Russian province. It is bounded on the north by the Gulf of Finland, on the south by Latvia, on the west by the Baltic Sea, and on the east by soviet Russia. The surface, which is low and partly swampy, consists of forests, moors, and small lakes. Agriculture is the chief industry, rye, oats, barley, potatoes, and flax being the chief crops. Dairying is carried on and there are some manufactures. Esthonia embraces an area of about 23,160 square miles, with a population, 1920, of about 1,800,000. Reval is the capital and chief seaport. Other important towns are Narva, Hapsa, Pernau, and Dorpat.

Etna, or Ætna, Mount, the greatest volcano in Europe, a mountain in the province of Catania, Sicily; height, 10,738 feet. It rises immediately from the sea, has a circumference of more than 100 miles, and dominates the whole northeast of Sicily, having a number of towns and villages on its lower slopes. The top is covered with perpetual snow; midway down is the woody or forest region; at the foot is a region of orchards, vineyards, olive groves, etc. The eruptions of Etna have been numerous, and many of them destructive. That of 1169 overwhelmed Catania and buried 15,000 persons in the ruins. In 1669, the lava spread over the country for forty days, and 20,000 persons are estimated to have perished. In 1693, there was an earthquake during the eruption, when over 100,000 lives were lost. One eruption was in 1755, the year of the Lisbon earthquake. Among

more recent eruptions are those of 1874, 1879, 1886, 1892, 1899, 1906–07, 1910, 1911.

Euphrates, or **El Frat,** a celebrated river of Western Asia, in Asiatic Turkey, rising in the Anti-Taurus Range. Its total length is about 1,750 miles, and the area of its basin, 260,000 square miles. It flows mainly in a southeast course through the great alluvial plains of Babylonia and Chaldea, until it falls into the Persian Gulf. About 100 miles from its mouth it is joined by the Tigris. It is navigable for about 1,200 miles.

Europe. The most northwesterly division of the Old World and, excepting Australia, the smallest of the continents. Its area is about 3,796,000 square miles. On the east its frontier joins that of Asia. On the north, west, and south it is surrounded by the Arctic ocean, the Atlantic ocean, and the Mediterranean sea, respectively. Its westernmost point at Cape Roca, near Lisbon, is nearly 75° longitude west of its easternmost point on the Tobol river; its southernmost point is Cape Tarifa, Spain, lat. 36° N., and its northernmost point is North Cape, 71° N.

Europe is noteworthy for its extremely long coast line, about 20,000 miles, contributing largely to its commercial importance; for the predominance of low plains constituting two-thirds of its area; and for the absence of deserts, being the only continent without such regions. It possesses some of the richest islands in the world, and its islands and peninsulas combined comprise about one-third of the total area. Of all land masses in the same latitude, Europe possesses the mildest and most genial climate.

On the continent are three conspicuous mountain groups,—the Caucasus and the mountains of the Crimea in the southeast; the mountains of Scandinavia, and the great central Alps culminating in Mont Blanc, 15,781 feet. Coursing chiefly through low-lying plains, the rivers of Europe offer extraordinary advantages for commerce, the largest being the Volga and the Danube. Other important rivers are the Vistula, Oder, Elbe, Weser, Rhine, Seine, Loire, and Rhone.

The geology of Europe reveals mineral resources of immense value. Coal deposits have been found in Russia, Austria, Hungary, Czecho-Slovakia, Germany, Belgium, France, Spain, and Great Britain. Those of England and Wales are of great importance. Great Britain produces about one-half the iron of Europe. The remainder is chiefly produced in the mines of Alsace-Lorraine, Luxemburg, and the Saar valley in Germany. Coal and iron occur together around Namur and Liége, Belgium. Germany and Belgium produce the world's chief supply of zinc, as England does of tin, Russia of platinum, and Spain of quicksilver.

There are three chief plant regions in Europe:—the arctic, possessing scanty vegetation; the intermediate, comprising forest areas, largely coniferous, and level steppes largely resembling the North American plains; and the Mediterranean in the south. The latter is noted for the great variety and economic importance of its flora. Next to Asia, Europe has contributed more cultivated plants than any other continent. The list includes the grains, oats and rye; the vegetables, asparagus, beet, cabbage, carrot, endive, horse radish, lettuce, pea, and turnip, and the forage plants, clover and timothy; the fruits, currant, gooseberry, and fig. Owing to favorable climatic conditions, Europe possesses a remarkably rich and varied fauna and has contributed the cat, goose, pigeon, rabbit, reindeer, and swan to the world's domestic animals.

Europe is the most densely inhabited and most highly developed region in the world, and its history is substantially identical with that of western civilization. Population, about 475,000,000.

Faneuil Hall, a public hall in Boston, presented to the town by Peter Faneuil, in 1740, comprising a market place on the first floor, and a town hall and other rooms above. In 1761, it was destroyed by fire. In 1763, it was rebuilt by the town; and, in 1775, during the British occupation of Boston, it was used for a theater. During the Revolutionary War it was used as a meeting place by the patriots.

Fiume (*fyōōm'mĕ*). An independent "buffer state," created by the Treaty of Rapallo, ratified in 1921, between Italy and Jugoslavia. It consists of the former Austrian city and seaport of Fiume, picturesquely situated on an inlet of the Adriatic, about 40 miles southeast of Triest. With environs, Fiume embraces an area of 8 square miles; population about 50,000.

Florence. A famous Italian city, situated in a beautiful valley on the banks of the Arno. In architectural pretensions Florence is one of the finest cities in Italy. Its celebrated cathedral is of great extent and magnificence, and its collections of paintings and sculpture rank among the most excellent in Europe. The city has produced many celebrated men, including Dante, Petrarch, Boccaccio, Michael Angelo, Leonardo da Vinci, and Galileo. Pop. 1915, 242,147.

France. A country of western Europe, bounded on the north by the English channel, the strait of Dover, and the North sea; on the northeast by Belgium and Luxemburg; on the east by Germany, Switzerland, and Italy; on the south by the Mediterranean sea and Spain; on the west by the Bay of Biscay and the Atlantic. Its coast line of nearly 2,000 miles gives it access to the great ocean and Mediterranean thoroughfares. There are four important mountain chains:—the Pyrenees, separating France from Spain; the internal Cevenno-Vosgian range; the Alps on the Swiss frontier; and the Sardo-Corsican range in the islands of Sardinia and Corsica. The principal rivers are the Seine, Loire, Garonne, and Rhone. The chief plains are those of Burgundy and the lower basins of the large rivers. The extreme length from the North sea to the Pyrenees is about 600 miles; the greatest breadth from the extremity of Brittany to the Vosges is about 550 miles. Notwithstanding considerable diversity of temperature and rainfall, France possesses one of the healthiest climates in Europe. The chief agricultural products are wheat and wine, with many valuable minor products.

The important mineral products of France are coal and iron, in the excavation of which about 250,000 men are now employed. France presents a great variety of geological formations,

but although we meet with an almost complete succession of all the stratified and non-stratified formations they are distributed with great inequality. The best carpets are made in Aubusson, Abbeyville, and Amiens. Paris is the seat of industry for some of the most costly fabrics, as Gobelins, tapestry, shawls of great value, watches, clocks, articles of "vertu," carriages, philosophical instruments, etc. Sèvres stands unrivaled for its china and glass. St. Gobain and St. Quirin manufacture plate glass. Limoges is famous for its porcelain. The World War destroyed many industries in northern France. In consequence many factories, using electricity developed from water power, have been built in the Vosges and Alpine districts. The great emporiums of trade are Paris, Lyons, St. Etienne, Lille, Rheims, Nîmes, Toulouse, and Strasbourg; and the most attractive maritime ports are Marseilles, Cette, Havre, and Bordeaux.

Ganges, a river of Hindustan, one of the greatest rivers of Asia, rising in the Himalaya Mountains, in Garhwal State, and formed by the junction of two head streams, the Bhagirathi and the Alakananda, which unite at Deoprag, ten miles below Srinagar, 1,500 feet above sea level. The Ganges is navigable for boats of a large size nearly 1,500 miles from its mouth. It is an imperative duty of the Hindus to bathe in the Ganges, or at least to wash themselves with its water, and to distribute alms, on certain days. The Hindus believe that whoever dies on its banks and drinks of its water before death is exempted from the necessity of returning into this world. Its water is a considerable article of commerce in the remoter parts of India.

Genoa, a city of Italy, is beautifully situated on the Gulf of Genoa, which lies to the south of Piedmont, and it stands at the foot and on the slope of the Ligurian Alps. In the old part of the city the streets are narrow and steep, but in the newer parts there are several spacious promenades; though generally the irregular rising ground on which the city is built has prevented any comprehensive plan of improvement, and it still retains much of that quaintness of architectural character for which it has long been celebrated. There are many magnificent churches in Genoa, of which the principal is the Cathedral of St. Lorenzo. It is one of the chief ports of the Mediterranean, and there are local manufactures of cotton, silk, and jewelry. Genoa was the birthplace of Christopher Columbus, and of other famous men. Population 1915 est., 300,139.

Germany, Republic of, a large and populous country of Europe, containing, with the exception of Russia, a greater number of inhabitants than any other European nation. On the north, Germany is bounded by the North Sea, Denmark, and the Baltic Sea; on the east, by Lithuania, Poland, Czecho-Slovakia, and Austria; on the south, by Austria and Switzerland; and on the west, by France, Luxemburg, Belgium, and the Netherlands.

The northern part of Germany forms part of the great European plain, and is for the most part flat. Its soil is not very fertile, and extensive forests alternate with heaths, morasses, and small, shallow lakes. Central Germany may be described as hilly; its soil is fertile, and its scenery is often very picturesque. The greater part of Southern Germany is occupied by the plateau of Bavaria, which rises about 1,600 feet above the sea level, and increases in elevation towards the west, where it forms the Schwarz Wald, or Black Forest Range. Some of the mountain chains of Germany, especially the Harz Mountains and the Erzgebirge, are very rich in minerals.

The chief rivers are the Rhine, Elbe, Oder, Vistula, and Upper Danube; others of less note are the Ems, Weser, Pregel, and Niemen. The climate of Germany is, on the whole, temperate and salubrious, though the winters are somewhat severe, and the Rhine is occasionally frozen as far south as Mannheim. Germany is rich in mineral products; cobalt, arsenic, sulphur, saltpeter, alum, gypsum, bismuth, pumicestone, slate, ocher, emery, vitriol, are among the exports. Its vegetable products comprise a large portion of the European flora. All the ordinary cereals are extensively cultivated in the north. Its best wine-producing districts are the valleys of the Danube, Rhine, Main, Necker, and Moselle, which are also noted for the excellence of their fruits and vegetables.

Among the Germans themselves their country is known as *Deutschland;* to the French it is *Allemagne;* while the Latin name is *Germania,* whence the English name. The German Republic consists of a federation of states (*Länder*) which vary greatly in size and relative importance. The following table shows the component states arranged in the order of their size:

States of the Republic	Area English Sq. Miles	Population (1919)	Pop. per Sq. Mile
Prussia	114,739	37,726,018	327
Bavaria (with Coburg)	29,501	7,140,333	242
Württemberg	7,629	2,518,773	330
Baden	5,817	2,208,503	379
Saxony	5,789	4,663,298	805
Mecklenburg-Schw.	5,068	658,943	130
Thuringia	4,546	1,508,025	331
Hesse	2,966	1,290,988	435
Oldenburg	2,482	517,765	209
Brunswick	1,418	480,599	338
Mecklenburg-Str.	1,131	106,394	94
Anhalt	888	331,258	374
Lippe	469	154,318	329
Waldeck	433	66,432	153
Schaumburg-Lippe	131	46,357	354
Hamburg	160	1,050,359	6,564
Lübeck	115	120,568	1,048
Bremen	99	311,266	3,143
Total	183,381	60,900,197	332

According to the census of 1919, there were 46 cities in Germany with a population of 100,000 and upwards. Berlin, the capital and metropolis, contained 1,902,509 inhabitants. Hamburg, the chief seaport, had a population of 985,779. Among other important seaports were Königsberg, 260,895; Bremen, 257,923; Stettin, 232,726; Kiel, 205,330; Altona, 168,729; and Lübeck, 113,071. Leading inland commercial cities were Cologne, 633,904; Munich, 630,711; Leipzig, 604,380; Dresden, 529,326; Breslau, 528,260; Essen, 439,257; Frankfort-on-Main, 433,002; Düsseldorf, 407,338; Nuremberg, 352,675; Charlottenburg, 322,766; Hanover, 310,431; Stuttgart, 309,197; and Chemnitz, 303,775.

Giant's Causeway (deriving its name from a legend that it was the commencement of a road to be constructed by giants across the channel to Scotland) is a natural pier or mole of columnar basalt, projecting from the north coast of Antrim, Ireland, into the North Channel, seven miles northeast of Portrush. It is part of an overlying mass of basalt from 300 to 500 feet in thickness, which covers almost the whole county of Antrim, and the east part of Londonderry.

Gibraltar, a seaport belonging to England, and one of the strongest fortresses in Europe, is situated in the south of Spain at the narrowest part of the Straits of Gibraltar, sixty-one miles southeast of Cadiz. The number and strength of the military works, and the vast galleries opened in the calcareous rock, excite admiration. The fortress, though taken by surprise by the British, in 1704, is considered impregnable. The sea-passage, extending from Cape Spartel, Spain, to Cape Ceuta, Africa, connects the Atlantic with the Mediterranean Sea; length about thirty-six miles; narrowest width, between Europa Point and Ceuta, fifteen miles, broadening westward to twenty-four miles. A strong current sets in from the Atlantic through these straits, and it is supposed that a counter current passes underneath.

Glaciers are masses of consolidated snow, which by their own weight move slowly down the mountain side. Their pace is seldom more than one inch per hour. Along their sides or over their surface are scattered accumulations of stone and detritus, which are called moraines. The Alpine Glaciers give birth to the five great rivers of Central Europe — the Rhine, Rhone, Po, Inn, and Adige. Glaciers move like rivers, faster in the middle and above than at the sides and along the bottom. The torrent of icy water that issues from the lower end of them is simply the result of melting. The largest glacier in the world is the Muir, in Alaska; the largest in Europe is the Justeldals Brae, in Norway.

Glasgow, the industrial metropolis of Scotland, is one of the largest and most important cities in the United Kingdom. It is situated on the Clyde, which affords great facilities for steamboat traffic and shipping. Glasgow is celebrated as the great Scottish emporium of trade and manufactures. The annual tonnage of the port is some 5,000,000 tons. The trade of Glasgow rose about the middle of the last century, and consisted chiefly of American and West Indian commerce. Since then the manufacture of cotton goods has risen to a great extent, as also woolens, silks, glass, iron, stoneware, and chemicals. Population, 1921 census, 1,034,069.

Grand Canyon, a gorge through which the Colorado River flows in Arizona; sixty-five miles from Flagstaff. It is one of the natural wonders with which that country abounds. The canyon is a gorge 217 miles long, or with the addition of Marble Canyon, connected with it, 286 miles. It is from nine to thirteen miles wide and 6,300 feet below the level of the plateau. This depth is maintained for about fifty miles and surpasses that of any other canyon in the world.

Grand Central Terminal. The greatest railway terminal in the world, begun in August, 1903, was opened in New York city February 2, 1913, at a cost of approximately $200,000,000.

The station itself is 680 feet long, 300 feet wide, and 115 feet above the street level; below the street surface it is 745 feet long, 480 feet wide, and 45 feet deep. Seventy acres are covered by 32 miles of tracks with a capacity of 1,149 cars. Eight hundred trains, carrying daily about 75,000 passengers, are automatically handled by electrical switches. The electrical zone extends 30 miles. Paddington station, London, heretofore handling the largest passenger traffic in the world, has less than half the capacity.

In point of construction this enormous gateway is an achievement in engineering in many respects unparalleled.

Great Britain, or **The British Empire.** Britain, or Britannia, was the name given by the Romans to modern England and Scotland. The name Great Britain was applied to England and Scotland after James I. ascended the English throne in 1603. These with Ireland, the Isle of Man, and the Channel Islands, constitute the British Isles, or the United Kingdom of Great Britain and Ireland; with the colonial and other foreign possessions they form the British Empire. This empire is the greatest the world has ever known. It covers an area five times the size of the Persian Empire under Darius, and four times that of the Roman Empire under Augustus.

Great Britain proper is bounded, north by the Atlantic, east by the North Sea, south by the English Channel, and west by the Atlantic, the Irish Sea, and St. George's Channel. The most northerly point is Dummet Head in Caithness; the most southerly Lizard Point in Cornwall; the most easterly, Lowestoft Ness in Suffolk; and the most westerly, Ardnamurchan Point in Argyleshire. Its greatest length is about 608 miles, its greatest width — from Land's End to the east coast of Kent — about 320 miles; its surface contains 88,094 square miles. As the rocks of Great Britain form the typical series of the earth's strata, the geology of that country becomes of great importance as a key to the universal composition of the crust of the globe.

The physical features of the country are intimately connected with its geological structure. The older Paleozoic rocks produce mountainous regions intersected with deep, narrow valleys. The newer strata seldom rise to a great height. The highlands are rounded undulations of strata, except where igneous rocks intrude; the valleys are broad and shallow. The climate of Great Britain derives its peculiar character from the insular situation of the country, taken in connection with the prevailing direction of the winds. It is remarkably mild and equable; the winters are considerably warmer and the summers cooler than at other places in the same latitude. The natural history of Great Britain corresponds generally with that of continental Europe. The flora of the greater part of the island resembles that of Germany.

The British colonies and foreign possessions include:

THE BRITISH

Countries	Character of Possession	Form of Government	Executive
The United Kingdom: ENGLAND, WALES, SCOTLAND, IRELAND (Ulster and Irish Free State)*	Constitute the United Kingdom of Great Britain and Ireland.	Constitutional Monarchy.	The King through the Ministry

COLONIES AND

Countries	Character of Possession	Form of Government	Executive
EUROPE—			
Gibraltar,	Colony,	Responsible,	Governor,
Malta, etc.,	Colony,	Representative,	Governor,
ASIA—			
Brunei,	Protectorate,		Sultan,
Ceylon,	Colony,		Governor,
Cyprus,	Colony,		High Commissioner,
Federated Malay States,	Protectorate,		High Commissioner,
Hong Kong,	Colony,	Responsible,	Governor,
Indian Empire,	Vice-Royalty,	Responsible,	Governor-General,
Mesopotamia and Palestine,	Mandate,		British High Commissioners
North Borneo,	Protectorate,		Governor,
Other Malay States,	Protectorate,		British Advisers,
Sarawak,	Protectorate,		Rajah,
Straits Settlement,	Crown Colony,	Responsible,	Governor,
Weihaiwei,	Leased Province,		Commissioner,
AFRICA—			
Ascension Island,	Naval Station,		British Admiralty.
Anglo-Egyptian Sudan,	Protectorate,		Governor-General,
East Africa,	Protectorates,		Governors and Commissioner,
Mauritius,	Colony,		Governor,
Nyasaland,	Protectorate,		Governor,
St. Helena,	Colony,		Governor,
Seychelles,	Colony,		Governor,
Somaliland,	Protectorate,		Governor,
South Africa,	Protectorates, Colonies,		Commissioners,
Southwest Africa,	Protectorate,		Administrator,
Union of South Africa,	Self-Governing Colony,	Commonwealth,	Governor-General,
West Africa,	Protectorates, Colonies.		Governors,
AMERICA—			
Dominion of Canada,	Self-Governing Dominion,	Representative,	Governor-General,
Alberta,	Province,	Representative,	Lieutenant-Governor,
British Columbia,	Province,	Representative,	Lieutenant-Governor,
Manitoba,	Province,	Representative,	Lieutenant-Governor,
New Brunswick,	Province,	Representative,	Lieutenant-Governor,
Northwest Territory,	Territory,		Commissioner,
Nova Scotia,	Province,	Representative,	Lieutenant-Governor,
Ontario,	Province,	Representative,	Lieutenant-Governor,
Prince Edward Island,	Province,	Representative,	Lieutenant-Governor,
Quebec,	Province,	Representative,	Lieutenant-Governor,
Saskatchewan,	Province,	Representative,	Lieutenant-Governor,
Yukon,	Territory,		Gold Commissioner,
Falkland Islands,	Crown Colony,		Governor,
Guiana, British,	Colony,		Governor,
Honduras, British,	Crown Colony,		Governor,
Newfoundland and Labrador,	Colony,	Responsible,	Governor,
West Indies,	Colonies,	Representative,	Governors,
Bahama Islands,	Colony,	Representative,	Governor,
Jamaica Islands,	Colony,	Representative,	Governor,
Other Islands,	Colonies,	Representative.	
AUSTRALASIA—			
Australia,	Federal Commonwealth,	Representative,	Governor-General,
Fiji,	Crown Colony,	Representative,	Governor,
New Zealand,	Self-Governing Dominion,	Representative,	Governor-General,
Pacific Islands,			
Papua,	Territory,	Responsible,	Lieutenant-Governor,

*By the terms of the agreement ratified by the British Parliament and the Dail Eireann, 1921-22, the Irish Free State, when

EMPIRE (area and population from latest statistics available March 1, 1922).

Area in Square Miles	How Acquired by England	Date	Population
} 58,340	. . . . .	. . . . .	35,678,530
	Conquest, ...	1282	2,206,712
30,405	Union, ...	1603	4,882,288
32,586	. . . . .	. . . . .	4,390,219

DEPENDENCIES

Area in Square Miles	How Acquired by England	Date	Population
1¾	Conquest, ...	1704	20,000
118	Treaty of Paris, ...	1814	211,000
4,000	Treaty cession, ...	1888	30,000
25,500	Treaty cession, ...	1801	4,100,000
3,600	Annexation, ...	1914	275,000
27,500	Treaty cession, ...	1874-1888	1,000,000
390	Treaty cession, ...	1842-1906	622,000
1,900,000	Conquest and cession, ...	1757-1897	320,000,000
159,000	Conquest and mandate, ...	1914-1918	2,650,000
31,100	Cession, ...	1877	204,000
24,800	Treaty cession, ...	1909	800,000
50,000	Protectorate, ...	1888	650,000
1,660	Treaty cession, ...	1785-1909	700,000
300	Treaty cession, ...	1898	160,000
34	Occupation, ...	1815	250
1,014,000	Conquest, ...	1898	3,400,000
741,942	Conquest and cession, ...	1888-1918	9,821,733
720	Conquest and cession, ...	1810-1814	364,493
39,573	Conquest and cession, ...	1891	1,203,738
47	Conquest, ...	1673	3,500
156	Treaty cession, ...	1814	24,653
68,000	Treaty cession.	1884	300,000
733,394	Annexation and cession, ...	1868, 1885, 1888, 1903	2,329,365
322,400	Conquest, ...	1915	227,853
473,096	Cession and conquest, ...	1814, 1843, 1900	6,922,813
462,630	Settlement, treaty and cession, . . .	1787-1916	20,018,958
3,729,665	Settlement, conquest, cession, . . .	.....	8,769,489
255,300	Settlement, ...	1670	581,995
355,900	Settlement, ...	1670	523,363
251,900	Settlement, ...	1813	613,008
28,000	Treaty cession, ...	1763	387,839
1,250,000	Settlement, ...	1670	6,684
21,500	Conquest and cession, ...	1627-1713	523,837
407,250	Conquest and cession, ...	1759-1763	2,929,054
2,200	Conquest, ...	1745-1763	88,615
706,850	Conquest and cession, ...	1759-1763	2,349,067
251,700	Settlement, ...	1670	761,390
207,076	Settlement, ...	1670	4,162
6,500	Treaty cession, ...	1771	3,240
89,480	Conquest and cession, ...	1803-1814	310,000
8,592	Conquest, ...	1798	40,500
162,734	Treaty cession, ...	1583	264,569
10,210	Settlement, conquest and cession, . .	1605-1797	1,791,000
4,400	Settlement, ...	1629	56,000
4,200	Conquest, ...	1655	850,000
1,610	Settlement, conquest and cession, . .	1605-1797	885,000
2,974,581	Settlement, ...	1788-1828	5,436,794
7,083	Cession from natives, ...	1874	130,000
105,000	Settlement and conquest, ...	1845	1,250,000
12,500	Cession and conquest, ...	1893-1914	200,000
90,540	Annexation, ...	1884	360,000

tablished, will have essentially the same status within the Empire as Canada or Australia.

125°
120°
115°
110°
105°
100°
45°
40°
35°
BRITISH COLUMBIA
ALBERTA
SASKATCHEWAN
MANITOBA
DOMINION
WASHINGTON
OREGON
CALIFORNIA
NEVADA
IDAHO
MONTANA
WYOMING
UTAH
COLORADO
ARIZONA
NEW MEXICO
NORTH DAKOTA
SOUTH DAKOTA
NEBRASKA
KANSAS
OKLAHOMA
TEXAS
MEXICO
Vancouver
Victoria
Seattle
Portland
Spokane
Tacoma
Olympia
Mt. Rainier
Mt. Hood
Mt. Thielsen
Mt. Shasta
Mt. Mendocino
Sacramento
San Francisco
Los Angeles
San Diego
Santa Barbara
Pacific Ocean
Gulf of California
Lower California
Calgary
Edmonton
Regina
Winnipeg
Helena
Butte
Great Falls
Missoula
Billings
Bismarck
Fargo
Minneapolis
Boise
Salt Lake City
Ogden
Provo
Reno
Carson
Virginia City
Denver
Colorado Springs
Pueblo
Cheyenne
Omaha
Lincoln
Kansas City
Topeka
Wichita
Oklahoma City
Dallas
Fort Worth
Houston
San Antonio
El Paso
Albuquerque
Santa Fe
Phoenix
Tucson
Yuma
Los Angeles
San Diego
Grand Canyon
Colorado R.
Rio Grande
Columbia R.
Snake R.
Missouri R.
Mississippi R.
Yellowstone R.
Yellowstone Park
Great Salt Lake
Salton Sea
Death Valley
Mojave Desert
Colorado Desert
Sierra Nevada Mts.
Rocky Mts.
Cascade Range
Black Hills
Pikes Peak
Mt. Whitney
Mt. McKinley
Mt. St. Elias
Romanzof Mts.
Yukon R.
Kotzebue Sd.
Bering Sea
Bering Strait
Arctic Ocean
Alaska
Gulf of Alaska
Aleutian Islands
Alaska Peninsula
Kadiak Island
Nome
Fairbanks
Dawson
Juneau
Skagway
Sitka
Seward
Valdez
Cordova
White Horse
Selkirk
Fort Yukon
Rampart House
Barrow
Point Barrow
Cape Prince of Wales
St. Lawrence Island
St. Michael
Nunivak I.
Unalaska
Dutch Harbor
Ugashik
Scale of Statute Miles
0 100 200 400
Western portion of
ALEUTIAN ISLANDS
Longitude

UNITED STATES
Prepared especially for this Volume
by The Matthews-Northrup Works
0 50 100 200 300 400
SCALE OF STATUTE MILES
COPYRIGHT, 1922, BY THE J.N. MATTHEWS CO., BUFFALO, N.Y.
West from 90° Greenwich 85° 80° 75°
CANADA
ATLANTIC OCEAN
GULF OF MEXICO
LAKE SUPERIOR
LAKE MICHIGAN
LAKE HURON
LAKE ERIE
LAKE ONTARIO
Albany R.
Lake Superior
Lake of the Woods
Rainy Lake
Nipigon
Michipicoten
Pangassan R.
Sault Ste. Marie
Cobalt
Lake Temiskaming
Ottawa R.
Mattawa
North Bay
Pembroke
Sudbury
Three Rivers
Montreal
Quebec
Chicoutimi
Riviere du Loup
Edmundston
Houlton
Calais
Eastport
Portland
Augusta
Bangor
Portsmouth
Concord
Manchester
Boston
Providence
Fall River
Newport
New London
New Haven
New York
Trenton
Philadelphia
Atlantic City
Cape May
Baltimore
Washington
Annapolis
Dover
Norfolk
Richmond
Charlottesville
Cape Charles
Newport News
Petersburg
Lynchburg
Roanoke
Bristol
Abingdon
Kingsport
Johnson City
Greeneboro
Durham
Raleigh
Wilmington
Goldsboro
New Bern
Jacksonville
C. Hatteras
C. Lookout
C. Fear
Charleston
Beaufort
Savannah
Brunswick
Jacksonville
St. Augustine
Daytona
Ormond
Titusville
C. Canaveral
Melbourne
Palm Beach
Eau Gallie
Fernandina
Amelia I.
Key West
Florida Bay
Cape San Blas
New Orleans
Galveston
Havana
Matanzas
Cardenas
Caibarien
S. Clara
Cienfuegos
Santo Espiritu
Trinidad
Isle of Pines
San Juan
Pinar del Rio
Manzanillo
Santiago
Gibara
Nassau
Eleuthera I.
Great Bahama I.
Great Abaco I.
Bahama Is.
Andros Islands
Long Island
Acklin I.
Grand Bahama
Chicago
Milwaukee
Detroit
Cleveland
Buffalo
Toronto
Hamilton
Niagara Falls
Rochester
Syracuse
Albany
Utica
Schenectady
Troy
Binghamton
Scranton
Wilkesbarre
Harrisburg
Pittsburgh
Allentown
Reading
Lancaster
Altoona
Williamsport
Erie
Youngstown
Akron
Canton
Columbus
Cincinnati
Dayton
Springfield
Zanesville
Wheeling
Parkersburg
Huntington
Charleston
Ashland
Portsmouth
Indianapolis
Terre Haute
Evansville
Fort Wayne
South Bend
Gary
Lafayette
Kokomo
Muncie
Richmond
New Albany
Louisville
Frankfort
Lexington
Pikeville
Bowling Green
Hopkinsville
Paducah
Cairo
Nashville
Knoxville
Asheville
Chattanooga
Memphis
Jackson
Vicksburg
Meridian
Birmingham
Montgomery
Mobile
Pensacola
Tallahassee
Atlanta
Augusta
Macon
Columbus
Athens
Rome
Dalton
Greenville
Spartanburg
Columbia
Charlotte
Salisbury
Winston-Salem
Hamlet
Florence
Sumter
Lanes
Barnwell
Millen
Griffin
Americus
Albany
Waycross
Thomasville
Valdosta
Live Oak
Jesup
Brunswick
Palatka
Okala
Cedar Key
Sanford
Kissimmee
Tampa
St. Petersburg
Bartow
Lakeland
Okeechobee
West Palm Beach
Punta Gorda
Punta Rassa
Fort Myers
Naples
Key West
Duluth
Superior
Minneapolis
St. Paul
Rochester
Mankato
Winona
La Crosse
Madison
Milwaukee
Racine
Kenosha
Green Bay
Appleton
Oshkosh
Fond du Lac
Sheboygan
Manitowoc
Marinette
Menominee
Escanaba
Marquette
Houghton
Hancock
Calumet
Ishpeming
Negaunee
Munising
Ironwood
Ashland
Rice Lake
Eau Claire
Chippewa Falls
Stillwater
Hinckley
Brainerd
Little Falls
St. Cloud
Grand Rapids
Virginia
Two Harbors
Grand Marais
Port Arthur
Fort William
Ely
Tower
Red L.
Lake Winnipeg
Lake of the Woods
Rainy Lake
Nipigon
Michipicoten
Pangassan R.
Sault Ste. Marie
Cobalt
Lake Temiskaming
Ottawa R.
Mattawa
North Bay
Pembroke
Sudbury
Three Rivers
Montreal
Quebec
Chicoutimi
Riviere du Loup
Edmundston
Houlton
Calais
Eastport
Portland
Augusta
Bangor
Portsmouth
Concord
Manchester
Boston
Providence
Fall River
Newport
New London
New Haven
New York
Trenton
Philadelphia
Atlantic City
Cape May
Baltimore
Washington
Annapolis
Dover
Norfolk
Richmond
Charlottesville
Cape Charles
Newport News
Petersburg
Lynchburg
Roanoke
Bristol
Abingdon
Kingsport
Johnson City
Greeneboro
Durham
Raleigh
Wilmington
Goldsboro
New Bern
Jacksonville
C. Hatteras
C. Lookout
C. Fear
Charleston
Beaufort
Savannah
Brunswick
Jacksonville
St. Augustine
Daytona
Ormond
Titusville
C. Canaveral
Melbourne
Palm Beach
Eau Gallie
Fernandina
Amelia I.
Key West
Florida Bay
Cape San Blas
New Orleans
Galveston
Havana
Matanzas
Cardenas
Caibarien
S. Clara
Cienfuegos
Santo Espiritu
Trinidad
Isle of Pines
San Juan
Pinar del Rio
Manzanillo
Santiago
Gibara
Nassau
Eleuthera I.
Great Bahama I.
Great Abaco I.
Bahama Is.
Andros Islands
Long Island
Acklin I.
Grand Bahama
Chicago
Milwaukee
Detroit
Cleveland
Buffalo
Toronto
Hamilton
Niagara Falls
Rochester
Syracuse
Albany
Utica
Schenectady
Troy
Binghamton
Scranton
Wilkesbarre
Harrisburg
Pittsburgh
Allentown
Reading
Lancaster
Altoona
Williamsport
Erie
Youngstown
Akron
Canton
Columbus
Cincinnati
Dayton
Springfield
Zanesville
Wheeling
Parkersburg
Huntington
Charleston
Ashland
Portsmouth
Indianapolis
Terre Haute
Evansville
Fort Wayne
South Bend
Gary
Lafayette
Kokomo
Muncie
Richmond
New Albany
Louisville
Frankfort
Lexington
Pikeville
Bowling Green
Hopkinsville
Paducah
Cairo
Nashville
Knoxville
Asheville
Chattanooga
Memphis
Jackson
Vicksburg
Meridian
Birmingham
Montgomery
Mobile
Pensacola
Tallahassee
Atlanta
Augusta
Macon
Columbus
Athens
Rome
Dalton
Greenville
Spartanburg
Columbia
Charlotte
Salisbury
Winston-Salem
Hamlet
Florence
Sumter
Lanes
Barnwell
Millen
Griffin
Americus
Albany
Waycross
Thomasville
Valdosta
Live Oak
Jesup
Brunswick
Palatka
Okala
Cedar Key
Sanford
Kissimmee
Tampa
St. Petersburg
Bartow
Lakeland
Okeechobee
West Palm Beach
Punta Gorda
Punta Rassa
Fort Myers
Naples
Key West
Duluth
Superior
Minneapolis
St. Paul
Rochester
Mankato
Winona
La Crosse
Madison
Milwaukee
Racine
Kenosha
Green Bay
Appleton
Oshkosh
Fond du Lac
Sheboygan
Manitowoc
Marinette
Menominee
Escanaba
Marquette
Houghton
Hancock
Calumet
Ishpeming
Negaunee
Munising
Ironwood
Ashland
Rice Lake
Eau Claire
Chippewa Falls
Stillwater
Hinckley
Brainerd
Little Falls
St. Cloud
Grand Rapids
Virginia
Two Harbors
Grand Marais
Port Arthur
Fort William
Ely
Tower
Red L.
Lake Winnipeg

Greece is a maritime kingdom in the southeast of Europe. It consists of three portions—the mainland, the Archipelago, and the Ionian Islands, the mainland being almost separated into two parts by the gulfs of Patras and Lepanto on the west and the Gulf of Ægina on the east, but united by the Isthmus of Corinth. The surface of the country is nearly all mountainous, and its shores are bold and rocky. About one-half of the country is capable of cultivation; the soil of the rest is naturally fertile, and vegetation is singularly rich and varied, though agriculture is in a backward state. The olive is cultivated everywhere; the currant-grape is found on the west coast and in the Ionian Islands; and the mulberry, the vine, the orange, the lemon, etc., with cotton and tobacco, are also cultivated. Currants, olive oil, and lead are the principal exports. By the Treaty of Sèvres, 1920, Greece received from Albania a part of Epirus, from Bulgaria and Turkey parts of Thrace, and from Turkey the Dodecanese Islands and administrative rights to an area around Smyrna in Asia Minor. Pop., est., 9,000,000.

Gulf Stream, a well-defined current in the Atlantic Ocean. It is due to the reflux of the equatorial current. The condensation and superheating of the last-named current takes place mainly in the Caribbean Sea and the Gulf of Mexico, whence arises the name Gulf Stream. Its temperature there is about 50°. It emerges as a defined hot current through the Straits of Florida, and courses northeast at a little distance from the coast of the United States, so affecting the Bermudas as to make their climate semi-tropical. Between these islands and Halifax the stream is about sixty miles broad, 2,000 feet deep, and moves at the rate of three knots an hour. It is of a deep blue color, in marked contrast to the dull green of the Arctic reflux. The Gulf Stream moves in a northeast direction toward Europe. The mild climate of western Europe, as compared with the same latitudes in the United States, formerly erroneously attributed to the Gulf Stream, is now known to be due to the warm southeast winds.

Hague, The (*hāg*). (French *La Haye;* Dutch's *Gravenhage,* "the count's mead.") The capital city of the Kingdom of the Netherlands, province South Holland, ten miles southwest of Leyden. It is a finely-built and commodious place, after the characteristic Dutch fashion, and contains the royal palace, and numerous fine public edifices. It is the seat of government and of the Supreme Court of Justice of the Netherlands. Iron-founding and copper and lead-smelting are among the principal industries of the city. It was the birthplace of William III. of England, and Charles II. embarked from this port prior to the Restoration. Population, 1919, 359,610.

Halifax, the capital of Nova Scotia, Dominion of Canada, and the principal naval station of the dominion, is situated on the southeast coast of the peninsula, on a declivity overlooking the harbor, which is one of the finest in the world. Its pure air and beautiful surrounding scenery have brought it into high repute as a watering-place. It has also a thriving trade; its exports, especially of dried fish, timber, cattle, and whale and seal oil are very considerable. The city is the seat of an Anglican bishopric and of a Roman Catholic archbishopric. It was founded by Governor Cornwallis in 1749. Population, 1921, 57,674.

Hamburg, one of the free cities of Germany, a member of the German Empire, is the greatest commercial port on the continent of Europe. It is situated about eighty miles from the North Sea, on the north branch of the Elbe. The town of Altona adjoins it on the west. From the Elbe proceed canals which intersect the east and lower part of the city in all directions, and it is also intersected by the Alster, which here forms two streams, the Binnenalster and Aussenalster. The quays and harbor accommodation are very extensive. After the destructive fire of 1842 whole streets were rebuilt in a magnificent and expensive style. Hamburg is of most importance on account of its great shipping trade and the business of banking, exchange, marine assurance, etc., carried on in connection with it. Its manufactures, including shipbuilding, tobacco and cigar making, iron-founding, brewing, etc., though large are less important. The city owes its foundation to the Emperor Charlemagne. Population, 1919 census, 985,779.

Havana, or, in English, "The Harbor," by far the most important city in the West Indies, is the capital of Cuba, and stands on the west side of the entrance to a magnificent harbor capable of holding 1,000 vessels. This entrance is defended by the Morro and Punta castles. The principal buildings, which are built entirely of stone, are the cathedral, the government house, the admiralty, general post office, the royal tobacco factory, etc., and a university and law school. There are also theaters, daily newspapers, a fine dockyard, a botanic garden, and some fine promenades. The principal manufacture is cigars, which have a world-wide reputation. The trade is chiefly with Spain, the United States, and Great Britain. Population, 1919, 697,583.

Hell Gate, New York, is a narrow channel of the East River, about seven miles north-northeast of New York City, being the nearest passage into the Sound. Its navigation was formerly dangerous on account of the eddies produced under certain conditions of the tides—whence its old Dutch name of *Horll-gatt,* or "whirlpool pass," whereof the present term is a corruption. The rocks facing its entrance into the East River were removed by submarine blasting in 1876 and 1885.

Himalayas, The (*hĭ-mä'-là-yàs*), or Himalaya Mountains. The loftiest system of mountains in the world, lying between the Indian peninsula and the Tibetan table-land in South Central Asia. Its length is estimated at 1,900 miles; its mean breadth at 150 miles; and its surface covers an area of 160,000 square miles, or thereabouts. Its chief summits are those of Mount Everest, 29,141 feet (the highest point of land known); Godwin-Austen (K^2), 28,278 feet; Kanchanjanga, 28,156; and Dhawalaghiri, 26,826 feet. On the southern slope, vegetation exists at an altitude of 13,000 feet above the sea, and the highest human habi-

tation is found at 9,000 feet; on the northern, vegetation is met with at 17,500 feet; and villages at 13,000 feet. It is rich in minerals, and possesses its own distinctive flora and fauna.

Hong-Kong, or **Hiang Kiang** (The Fragrant or Flowing Streams), a small island off the southeast coast of China, in the province of Quang-Tong, now belonging to the British. It is situated at the mouth of the estuary that leads to Canton, from which it is distant southeast seventy-five miles. It is about ten miles in length and seven and one-half miles in breadth. A strip of the mainland was recently added. On the north side of the island, and situated on a magnificent bay is the thriving town of Victoria, where the bulk of the population is centered. The town stretches for about four miles along the shore and also ascends the hillside and the faces of the ravines above. It is generally well-built, with wide streets and handsome terraces, and there is a massive sea wall along the sea front. Hong-Kong is a free port and there are no returns of its total trade, the chief articles of which consist of cottons and opium as imports, tea and silk as exports. The foreign commerce is chiefly carried on with the United States, Singapore, Japan, Great Britain, Australia, and Germany. Population, 622,000.

Honolulu, a city and capital of Hawaii, on the island of Oahu, on Oahu Bay. It is the most important city in the Pacific islands and is an important entrepôt for vessels, between the United States and Asiatic countries. The city is situated amid beautiful tropical surroundings and has an equable and healthful climate. Among the chief points of interest are the palace, the government buildings, Roman Catholic cathedral, post office, and the Bishop Museum. There are numerous churches, public schools, public library, theater, daily and weekly newspapers, telephone and telegraph, banks, electric lights and street railways, and many commercial establishments. Population, 1920, 83,327.

Hoosac Mountain, a part of the Green Mountain range in western Massachusetts, through which is pierced the most notable railway tunnel in America. The Hoosac tunnel, which has a length of nearly five miles, was commenced in 1855, for the line between Boston and Albany, was twice abandoned, and was finally opened in 1875, having cost the State of Massachusetts about $18,000,000.

Hudson River, or **North River.** A river of New York, which rises in the hills to the west of Lake Champlain, and after a southerly course of upwards of 300 miles, falls into the Atlantic Ocean below the city of New York. It is navigable as far as Troy, 166 miles above New York, and is connected by canals with Lakes Champlain and Erie.

Hungary, Kingdom of. A country of East Central Europe, formerly constituting an important part of the Austro-Hungarian Empire but, since the World War, having an independent government, though reduced to about one-third of its former area. Hungary is bounded on the north by Czecho-Slovakia and Poland, on the east by Rumania, on the south by Rumania and Jugoslavia, and on the west by Austria. The total area is about 35,000 square miles, the most of which lies in the Alföld or Great Plain of Hungary. Parts of this remarkably level area rank among the most fertile agricultural districts of the world, producing cereals and other crops of excellent quality, and supporting a large number of horses, cattle, and swine. Agriculture is the chief occupation of the country, though there are various industries in the larger towns. No part of Hungary touches the sea but there are rivers having a total navigable length of 687 miles, the chief of which is the Danube. Budapest, the capital and metropolis, beautifully situated on the Danube, is one of the great cities of Europe. Leading towns are Szeged, Debreczen, Kecskemet, Hodmezo-Vasarhely, Ujpest, Miskolcz, Pecs, Györ, and Bekescsaba. The population of Hungary, which, according to the census of 1921, was 7,840,832, consists almost entirely of Magyars, or Hungarians proper, the greater part of whom are Roman Catholics.

Huron. One of the five great lakes of North America, about 800 miles in circuit, bounded west and southwest by the State of Michigan; on other sides by Upper Canada. Its surface is 581 feet above the level of the sea; its depth is about 700 feet. Its waters are remarkable for their clearness and purity. This vast body of water is said to contain 3,000 islands.

India, or **Hindustan.** The greatest of the three great peninsulas which constitute the south of Asia is bounded on the north by the Himalaya Mountains, on the east by Burmah and the Bay of Bengal, and on the west by the Sulieman and Hala Mountains and the Arabian Sea. The surface of the peninsula is highly diversified, but consists mainly of three parts —namely, first, the table-land of the Deccan, in the south, between the Vindhya Hills and Cape Comorin, and flanked on either side by the Eastern and the Western Ghauts; second, a vast lowland plain in the center, embracing the entire basin of the Ganges and the lower basins of the Indus and the Brahmaputra; third, a lofty plateau, in the north, forming the southern margin of eastern high Asia, and traversed by the Himalaya Mountains, the loftiest mountains on the earth's surface. In the plains of India generally the heat is very great, but the elevated regions in the north enjoy a temperate climate. The year is divided into three seasons —the hot, the rainy, and the temperate. The hot season commences in March, the rainy in June, and the temperate in October. As almost the whole of India lies within the tropics, the vegetation, wherever there is a sufficient amount of moisture, is abundant and luxuriant. Rice and grain are grown in immense quantities; all the fruits of the tropics are found in the utmost perfection; pepper, spices, and almost every kind of garden vegetable, are produced; and the forests are of vast extent, producing immense quantities of valuable timber. In December, 1915, the largest irrigation canal in the world was opened in India; it will irrigate 2,200,000 acres of arid land, which will yield crops worth about $12,000,000 a year. Many parts of India are still infested with wild animals. The principal cities are: Calcutta, Bombay, Madras, Lucknow, Rangoon, Benares, Delhi, Lahore, and Cawnpore.

ALASKA
Beaufort Sea
Mackenzie Bay
Melville Sound
Prince Albert Land
Victoria Land
Banks Land
Parry Islands
NORTHWEST TERRITORIES
MACKENZIE
KEE
YUKON
Mts.
Rocky
PACIFIC OCEAN
BRITISH COLUMBIA
ALBERTA
SASKATCHEWAN
MANITOBA
Great Slave Lake
Lake Athabaska
Lake Winnipeg
Fort Simpson
Fort Providence
Fort Smith
Fort Resolution
Fort Chipewyan
Fort Liard
Fort Nelson
Fort Norman
Fort Franklin
Fort McPherson
Dawson
Ft. Reliance
Fort Selkirk
Fort Yukon
Circle City
Eagle City
Tanana R.
Yukon R.
Mackenzie R.
Peace R.
Athabaska R.
Slave R.
Liard R.
Nelson R.
Hay R.
Great Bear L.
Great Slave L.
Lake Athabaska
Lake Winnipeg
Lake Manitoba
Lake of the Woods
Hudson Bay
Prince George
Fort Simpson
Edmonton
Calgary
Saskatoon
Regina
Winnipeg
Kinnipeg
Prince Rupert
Victoria
Vancouver
Seattle
Portland
Tacoma
Spokane
Great Falls
Helena
Missouri R.
Yellowstone
Yellowstone National Park
Bismarck
Grand Forks
Fargo
Duluth
Minneapolis
St. Paul
Pierre
Deadwood
Boise
Salt Lake City
Carson City
Sacramento
San Francisco
Cheyenne
Omaha
Longitude

DOMINION OF
CANADA
and NEWFOUNDLAND
Prepared especially for this Volume
by The Matthews-Northrup Works
SCALE OF STATUTE MILES.
0 100 200 300
KILOMETERS.
0 100 200 300 400
The Northwest Territories are divided into the districts of Mackenzie, Keewatin and Franklin to take effect January 1st, 1920.
Country Capital thus: .....
Province Capital thus. .....
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BAFFIN BAY
DAVIS STRAIT
GREENLAND
(To Denmark)
Egedes Land
ICELAND
Denmark Str.
HUDSON BAY
HUDSON STRAIT
LABRADOR
ATLANTIC OCEAN
Gulf of St. Lawrence
Baffin Island
Ellesmere Island
Cockburn Island
Melville Pen.
Southampton Island
Prince of Wales Island
North Devon
Fox Channel
Fox Land
Hall Peninsula
Foxe Basin
Foxe Channel
Nettilling L.
Amadjuak L.
Meta Incognita
Frobisher Bay
Resolution I.
Cumberland Sound
Exeter Sound
Mt. Raleigh
Mt. Kinnuk
Frederikshaab
Godthaab
Sukkertoppen
Julianehaab
Lichtenau
Fredericksdal
C. Desolation
C. Farewell
Disko I.
Disko Bay
Disko Fjord
Umanak Fjord
Nugsuak Pen.
Svartenhuk Peninsula
Karajak Glacier
Jakobshavn
Christianshaab
Upernivik
Upernivik Is.
King Frederick VI Land
Umanak
Nunarssuak L.
C. Alexander
C. Discord
Lindenow Fjord
C. Bille
C. Hatherton
C. Hammer
C. Hildebrandt
C. Dan
Kloge B.
Scoresby Sd.
Jones Sound
Lancaster Strait
Possession Bay
Brlot I.
C. Bowen
R. Clyde
Home Bay
Exploits Bay
Bay of God's Mercy
Wager Bay
Repulse Bay
Southampton Island
Sings Cape
Salisbury I.
Nottingham I.
Charles I.
C. Kendall
C. Wolstenholme
Tom I.
Marble I.
Fisher Strait
Lyon Channel
Mansel I.
Smith I.
C. Smith
Mosquito Bay
C. Southampton
Akpatok I.
Eclipse Harbor
C. Chidley
Mt. Blow-me-down
C. Mugford
Ozamuk (Seal L.)
Atsuktok (Swarm I.)
C. Harrigan
Nain (Mission)
Zoar (Mission)
Hopedale (Mission)
Makkovik
Indian House
Okak (Mission)
Hebron (Mission)
Port Burwell
White Bear Is.
Hamilton Inlet
Sandwich Bay
Ungava Bay
Payne L.
Ottawa Is.
Portland Promontory
Cape Dufferin
Two Brothers
King George Islands
Baker's Dozen Is.
N. Belcher Is.
S. Belcher Is.
Fort Severn
C. Henrietta Maria
C. Lookout
Long I.
C. Jones
Bear Is.
Sutton Mill L.
Rolt L.
Ekwan R.
Attawapiskat R.
Wapisco
Fort Albany
Charlton I.
Hannah Bay
Mimmininska L.
Moose Factory
Albany R.
L. St. Joseph
Lake Nipigon
Hearst
Obe
Cochrane
Heron Bay
Port Arthur
Isle Royal
Michipicoten I.
Michipicoten
Biscotasing
Franz
Lake Superior
Sault Ste. Marie
Sudbury
Marquette
Mackinac
Green Bay
Lake Michigan
Huron
Owen Sound
Goderich
Toronto
Hamilton
Kingston
Lake Ontario
Rochester
Syracuse
Albany
Buffalo
Bay City
Port Huron
Lansing
Detroit
St. Clair
Lake Erie
Toledo
Cleveland
Chicago
Milwaukee
Ottawa
Oglensburg
Montreal
Three Rivers
Quebec
Lake St. John
Chicoutimi
Lake Abitibi
Matagami L.
Waswanipi L.
Mistassini L.
Rupert R.
Big L.
East Main R.
Eye L.
L. Nichicun
Big R.
Height of Land
Ashuanipi L.
Ichimaniscuagan L.
L. Riviere St. John
Romaine R.
Mingan
Attikonak L.
Watshishou R.
Hamilton R.
Grand Falls
Melville L.
L. Michikamau
Michikamats
Dyke L.
Menihek L.
Sandy L.
Upper Seal L.
Lower Seal L.
Larch R.
Kanaaupscow R.
Manuan L.
Kaniapiskau R.
Payne L.
Unguava Bay
Fort Chimo
Koksoak R.
Whale R.
Great Whale R.
Apistigamish L.
Richmond Gulf
Moisie
Moisie R.
Seven Islands
Pentecost R.
Pentecost River
Anticosti I.
Bay of Islands
East Cape
West Point
Mont Louis
Gaspe
Gaspe Basin
Perce
Perce Rock
Bonaventure I.
Percé
Percé Rock
Bonaventure
Paspebiac
Carleton
Port Daniel
Cape Chatte
Chatham
Dalhousie
Campbellton
Restigouche
Metapedia
Matapedia
Rimouski
Riviere du Loup
Trois Pistoles
Kamouraska
Rivière-du-Loup
Cape Rosier
Gaspe Peninsula
Cape Gaspe
Magdalen Is.
North Cape
Pr. Edward Is.
Cape Breton I.
Sydney
C. Breton
Louisburg
C. Canso
Port au Basques
Cape Ray
Fortune Bay
Miquelon
Grand Miquelon
North East Harbour
St. Pierre I.
(To France)
Cape Race
NEWFOUNDLAND
St. John's
Trepassey
Placentia
Placentia Bay
Argentia
Bay de Verde
Trinity
Trinity Bay
Bonavista
Bonavista Bay
Twillingate
Fogo
White Bay
C. St. John
Bay of Exploits
Notre Dame Bay
C. Bald
Hare Bay
C. Whittle
Straits of Belle Isle
Michael Bay
Charles Belle Isle
Fredericton
St. John
St. Andrews
Bangor
Portland
Boston
Cape Cod
Long Island
New York
Albany
Syracuse
Rochester
Lake Ontario
Kingston
Toronto
Hamilton
Buffalo
Cleveland
Detroit
Chicago
Milwaukee
Lansing
Bay City
Port Huron
Goderich
Owen Sound
Georgian Bay
Lake Simcoe
Lake Nipissing
Sturgeon Bay
Escanaba
Marquette
Mackinac
Green Bay
Wisconsin
Michigan
Huron
Superior
Ontario
Erie
Lake Erie
Lake Ontario
Lake Michigan
Lake Huron
Lake Superior
Lake Nipigon
Lake Abitibi
Lake St. John
Lake Simcoe
Lake Nipissing
Lake Mistassini
Lake Waswanipi
Lake Matagami
Lake Chibougamoo
Lake Albany
Lake Attawapiskat
Lake Mimmininska
Lake Sutton Mill
Lake James
Bay
Hudson Bay
James Bay
Ungava Bay
Hudson Strait
Foxe Basin
Foxe Channel
Baffin Bay
Davis Strait
Labrador Sea
Atlantic Ocean
Gulf of St. Lawrence
Bay of Fundy
Nova Scotia
New Brunswick
Prince Edward Island
Quebec
Ontario
Manitoba
Saskatchewan
Alberta
British Columbia
Yukon
Northwest Territories
Halifax
Sable I.
Lunenburg
Liverpool
C. Sable
Yarmouth
Digby
Annapolis
Bay of Fundy
Moncton
Sackville
Shediac
Chatham
Newcastle
Dalhousie
Campbellton
Restigouche
Bathurst
Caraquet
Tracadie
Miramichi
Gloucester
Northumberland Strait
Prince Edward Island
Charlottetown
Summerside
Pictou
New Glasgow
Truro
Windsor
Kentville
Wolfville
Digby
Annapolis
Yarmouth
Shelburne
Lunenburg
Halifax
Sydney
C. Breton
Louisburg
C. Canso
Antigonish
Pictou
New Glasgow
Truro
Amherst
Moncton
Sackville
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Fredericton
St. John
St. Andrews
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New York
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Lake Chibougamoo
Lake Albany
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Hudson Strait
Foxe Basin
Foxe Channel
Baffin Bay
Davis Strait
Labrador Sea
Atlantic Ocean
Gulf of St. Lawrence
Bay of Fundy
Nova Scotia
New Brunswick
Prince Edward Island
Quebec
Ontario
Manitoba
Saskatchewan
Alberta
British Columbia
Yukon
Northwest Territories
90° from Greenwich
85°
80°
75°
70°
65°
60°
55°
50°
45°
40°
35°
30°
25°
20°
15°
10°
5°
0°

Indian Ocean, one of the five grand divisions of the universal ocean, is bounded on the south by a line drawn from the Cape of Good Hope to the most southern extremity of Tasmania or Van Dieman's Land. Its other limits, reckoned from the last-mentioned point, are Van Dieman's Land, Australia, the Indian Archipelago, Farther India, Hindustan, Persia, Arabia, and Africa. Gradually narrowing from south to north, the Indian Ocean forks at Cape Comorin into the Bay of Bengal on the east and the Arabian Sea on the west, the latter again branching off into two arms, the Persian Gulf and the Red Sea, which reach respectively the mouth of the Euphrates and the neighborhood of the Mediterranean. These details exclude the waters of the Indian Archipelago, as belonging rather to the Pacific Ocean. It contains thousands of islands or rather tens of thousands. Of these, Madagascar is the largest, and, at about the same distance from it to the east as the continent of Africa is to the west, lie Bourbon or Reunion toward the south, and Mauritius toward the north. Next in size to Madagascar, and, in fact, the only other island of any considerable magnitude, is Ceylon.

Indianapolis, capital of the State of Indiana, is the geographical center of the State, and on the edge of a great natural gas region. The most prominent public building is the State House, completed in 1887, occupying two squares, and costing $2,000,000. The courthouse, erected in 1876 at a cost of $1,200,000, is another imposing structure. The principal manufactures include steam engines, machinery, foundry supplies, and products, steel, glass, flour, tin plate, tile, bicycles, chain, paper, and pumps. There are eight grain elevators with a capacity of 1,000,000 bushels. The stockyard interests are important, and the city ranks high as a railroad and distributing center. Population, 1920 census, 314,194.

Ireland, a large island lying immediately to the west of Great Britain, and comprising an area of about 32,500 square miles. It is separated from Great Britain by St. George's Channel, the Irish Sea, and the North Channel, the last being only about fourteen miles broad at its narrowest part, which is between the north coast of the county of Antrim, in Ireland, and the Mull of Cantire, in Scotland. The extreme length of the island, from Fair Head, in Antrim, to Mizen Head, in Cork, is about 300 miles; and its greatest breadth, from Howth Head, near Dublin, to Slyne Head, in Galway, is about 180 miles. The country is for the most part flat, but it has mountains of considerable elevation in the north, west, and south. A great portion of the central plain is covered with bog-land, which occupies no less than two-fifths of the whole surface of Ireland; but much of the remaining soil is fertile, and the humidity of the climate, and the equability of the temperature — much greater than those of England — have given to the island its verdant appearance, which has earned for it the name of the "Emerald Isle." By the terms of the agreement ratified by the British Parliament and the Dail Eireann (Irish Parliament), 1921-22, the Irish Free State, when established, will occupy all of southern and central Ireland, together with parts of Ulster in Northern Ireland.

Italy (Italian, *Italia*), a kingdom of Southern Europe, embracing the entire peninsula, boot-like in shape, extending between the Adriatic Sea on the east and the Ligurian and Tyrrhenian Seas on the west, together with the rich and considerable region which is bounded north by Switzerland and Austria, east by the western provinces of Jugoslavia, and west by France. Length, northwest to southeast (or from Mont Blanc to Cape Portio di Palo, Sicily), 780 miles; average width, 100 miles. This kingdom has a coast line of about 3,350 miles, one-third of which is insulated, the principal indentations of the sea being the gulfs of Venice, Manfredonia, Taranto, Squillace, Policastro, Gaeta, Spezia, and Genoa; besides those of Asinara and Cagliari, in the island of Sardinia, and Castellamare in that of Sicily. The latter island is divided from the continent by the Strait of Messina. Besides the islands just named, there are those of the Lipari group, Elba, Monte Cristo, Stromboli, Ischia, Capri, Giglia, and the cluster upon which stands the city of Venice. Throughout its entire length, or rather from the Gulf of Genoa to the extremity of Calabria, Italy is intersected by the chain of the Apennines. Its western and northern frontiers are guarded by the Alps, ramifications of which mountain system extend over a great part of Piedmont, Lombardy, and Venetia; Sicily is also generally mountainous in regard to surface, Mount Etna forming the culminating point of altitude. The plains of Italy are extensive, and proverbial for their fertility and productiveness; notably so that of Lombardy, which has been termed the "Garden of Italy." The Tuscan Maremma, the Pontine Marshes, and a large portion of the Roman Campagna, are also level tracts, highly prolific and generally well cultivated. The principal rivers are the Po, with its numerous feeders; the Adige, Brenta, Piave, Tiber, Arno, Tagliamento, and Volturno; the lakes comprise those of Como, Maggiore, Garda, Bolseno, and Bracciano; salt lagoons, too, fringe the coasts of Venetia and Tuscany. A great part of the lower peninsula is almost exclusively of volcanic formation, Mount Vesuvius, for example, manifesting periodical instances of subterranean activity. Iron is largely found in Elba, borax in Tuscany, and fine varieties of marble, with salt, nitre, alum, alabaster, gypsum, etc., in other parts. Mineral and thermal springs are almost innumerable. In point of climate, Italy may be said to possess four distinct zones — ranging from the almost arctic cold of her mountain belts to an almost tropical degree of heat in the southern lowlands and valleys. On the whole, it is a healthful country. The staple products of the soil are: wines, fruits, olive oil, silk, and cotton, which, with fish, marble, sulphur, and various manufactures, constitute the bulk of its exports abroad. The principal articles fabricated in the industrial centers are textile fabrics, lace, straw hats, leather goods, glass, pottery, perfumes, chemicals, and paper. The chief cities are Naples, Rome, Milan, Genoa, Turin, Florence, Palermo, etc.

Japan, an ancient empire of Eastern Asia, to the northeast of China, consists of four principal islands, and of a large number of smaller ones. Niphon, or Nipon (the country of the rising sun), is the name given by the Japanese to the whole empire; the four principal islands are Hondo, or Honshiu, Kiushiu, Shikoku, and Yezo. The largest island, Niphon, or Hondo, is upward of 700 miles long northeast and southwest, breadth varying from fifty to 100 miles. The coasts of the larger islands are extremely irregular, being deeply indented with gulfs, bays, and inlets, which form magnificent harbors. The surface also is generally uneven, and in many instances rises into mountains of great elevation. Volcanic vents are numerous, and earthquakes, often causing great devastation, are of frequent occurrence; it is calculated that every seven years a Japanese city is destroyed by their agency. In Yezo some dreadful eruptions have occurred. The metallic wealth of the empire is known to be very great, comprising gold, silver, copper, tin, lead, and iron. The island of Sado is particularly rich in gold. Both the tin and the copper of Japan are considered to be of very superior quality. Coal is found in various parts, and the output is rapidly increasing. Petroleum is becoming a product of some consequence. Streams are numerous in Japan, but have very short courses and are for the most part rather torrents than rivers. The climate of Japan, though extremely varied, is on the whole much milder than its latitude would indicate, owing chiefly to the influence of the surrounding ocean. Vegetation of the Japanese Islands is exceedingly varied, the products of the tropics being intermingled with those of the temperate and frigid zones. The palm, banana, bamboo, bignonia, and myrtle flourish in the south, while in the north, more especially in the island of Yezo, oaks and pines abound. Sweet oranges, pomegranates, pears, apricots, peaches, and over 500 of the principal ornamental and useful plants are of foreign origin. The camphor and varnish trees are indigenous. The chrysanthemum is a common and favorite plant and has become an emblem of Japan. The flora as a whole resembles that of a great part of North America. In the south the sugar cane is cultivated with success; rice yields two harvests and constitutes the chief article of food. Wheat and barley, maize and millet are grown to an important extent, and buckwheat, potatoes, melons, pumpkins, and cucumbers in great abundance. Ginger, pepper, cotton, hemp, and tobacco are cultivated in considerable quantities. There are extensive plantations of the tea plant, yielding, however, a product inferior to that of China. Silk is also a Japanese product. The principal cities are Tokyo, Osaka, Kioto, Yokohama, Nagoya, Kobe, and Nagasaki.

Jerusalem, a famous city of Western Asia, and anciently the capital of Judea, as it was later of Christendom. It is situated in the modern district of El Kuds, Syria, thirty-seven miles east of the Mediterranean, twenty-four west of the River Jordan, and 126 southeast of Damascus, and stands at an elevation of some 2,500 feet above sea level. Its most imposing modern structures are the mosque of the Sultan Omar, occupying the site of the Holy Temple of the Jews, and the Church of the Holy Sepulchre, containing the tombs of Godfrey of Bouillon, and of Baldwin, King of Jerusalem. Except for brief periods during the Crusades, Jerusalem remained under Mohammedan rule from 631 until captured from the Turks by British forces, 1917.

Jugoslavia (*yōō'-go-slăv'-ĭ-ă*). A newly formed Kingdom of southeastern Europe, known also as the Serb, Croat, and Slovene State. On the north its boundaries are Austria and Hungary, on the east Rumania and Bulgaria, on the south Albania and Greece, and on the west Italy and the Adriatic Sea. The important former states or provinces now comprised in Jugoslavia are Serbia, Montenegro, Bosnia-Herzegovina, Croatia, Slovenia, and Dalmatia. The Kingdom embraces an area of approximately 100,000 square miles, with a population of about 11,500,000, of whom 90 per cent are Slavs. Belgrade, with some 120,000 inhabitants, is the capital and largest city. Other important cities are Zagreb, Ljubliana, and Serajevo.

Lakes, Largest in the World

Name	Area in Sq. Miles	Elevation in Feet*	Depth in Feet
Aral Sea (Asia),	26,000	48	...
Baikal (Siberia),	12,500	1,600	4,500
Caspian Sea (Asia),	170,000	—97	700
Chapala (Mexico),	1,300	7,000	...
Dead Sea (Palestine),	320	—1,312	700
Erie (N. Am.),	9,600	573	210
Great Salt (U. S.),	2,600	4,200	60
Huron (N. Am.),	22,322	581	700
Ladoga (Russia),	7,000	55	730
Michigan (U. S.),	22,450	581	870
Nicaragua (Cen. Am.),	3,650	130	240
Ontario (N. Am.),	7,250	247	738
Superior (N. Am.),	31,500	602	1,008
Titicaca (Peru),	4,000	12,874	700
Victoria (Africa),	40,000	3,775	240

*Elevations marked — are below sea level.

Latitude. The latitude of a place on the surface of the earth is its distance north or south from the equator, and is equal to the angle which a plumb line at that place makes with the plane of the earth's equator, or to the angle which the horizon plane of the place makes with the earth's axis. Hence it may be measured by measuring the altitude of the pole of the heavens above the horizon, or by measuring the distance on the meridian of the equator from the zenith.

Latvia, a Baltic republic situated in the basin of the Dvina, around the Gulf of Riga, and inhabited chiefly by Letts. The country is bounded on the north by Esthonia, on the east by soviet Russia, on the south by Lithuania, and on the west by the Baltic Sea. Latvia comprises the former Russian province of Courland, together with parts of Livonia and Vitebsk, an area of about 24,440 square miles, with a population, in 1920, of 1,503,193. The generally flat surface of the country is interspersed with many lakes, the largest of which is Lake Preipus. Agriculture and dairying are the main occupations, though fisheries are important and industries are growing. Riga, the chief seaport, with a population about 570,000, is the capital and largest city.

Liberty Enlightening the World. A colossal statue, on Liberty Island, New York harbor, designed by Bartholdi, and presented

LINCOLN SEA
GRANT LAND
GRINNELL LAND
HALL ID.
WASHINGTON LAND
INGLEFIELD LAND
C. Alexander
PRUDHOE LAND
HAYES PENIN.
AXEL HEIBERG ISLAND
EUREKA
EUREKA SOUND
SMITH SOUND
KING WILLIAM LAND
LIVERPOOL COAST
C. Brewster
SCORESBY SOUND
ARCTIC OCEAN
O. McClintock
PR. PATRICK ISLAND
RINGNES IS.
NORTH LINCOLN
GRINNELL I.
BATHURST ID.
MELVILLE I.
NORTH DEVON
BAFFIN BAY
Upernivik
Prince Alfred C.
Banks Strait
BANKS LAND
BARROW STR.
LANCASTER SD.
NORTH SOMERSET
MELVILLE SOUND
PRINCE OF WALES LAND
BABIN LAND
PRINCE ALBERT LAND
PRINCE WILLIAM LAND
COCKBURN I.
BAFFIN ISLAND
DAVIS STRAIT
Disco B.
Godthaab
Julianshaab
Frederikshaab
Arsuk
Fiskernaes
Holstenborg
Christianshaab
Egedesminde
Amalia
C. Farewell
C. Lisburne
Kotzebue Sound
Kunatok on Inland R.
Pt. Barrow
BERING STRAIT
St. Lawrence I.
Norton Sd.
Pr. of Wales C.
BERING SEA
ARCTIC CIRCLE
ALASKA
TO UNITED STATES
Fairbanks
Yukon
Romanzoff
Kuskokwim R.
Mt. McKinley
Yukon R.
Copper R.
C. Bathurst
MACKENZIE BAY
Dolphin & Union Str.
Pr. Albert Sd.
VICTORIA LAND
WOLLASTON LAND
Duke of York
KENT PEN.
Back R.
ARCTIC CIRCLE
C. Krusenstern
Barren Ground
Great Bear L.
Mackenzie R.
KING WILLIAM LAND
Boothia Pen.
Gulf of Boothia
C. Chapman
SIMPSON PEN.
MELVILLE PENINSULA
Cumberland I.
Cumberland Sd.
Foxe Channel
FOX LAND
Frobisher B.
Meta Incognita
RESOLUTION I.
Hudson Strait
C. Farewell
Julianshaab
Frederikshaab
YUKON TERRITORY
Dawson
Klondike R.
Stewart R.
Pelly R.
Ft. Selkirk
Ft. Frances
White Horse
Mt. St. Elias
Mt. Fairweather
Skagway
Sitka
MACKENZIE
NORTHWEST TERRITORIES
Great Slave L.
Clinton Colden L.
C. Fullerton
Chesterfield Inlet
Rowe's Welcome
SOUTHAMPTON ID.
C. Wolstenholme
C. Chidley
Tuvak
Ungava B.
Akpatok
Fort Chimo
LABRADOR
MUGFORD I.
Nain
Hopedale
Kiboktok
Riglet
Hamilton Inlet
Southbrook
Hamilton R.
Ft. Mumford
Ft. Wrangell
Pt. Vermilion
Lake of the R.
L. Athabasca
Island L.
HUDSON BAY
Portland Pt.
Fort Churchill
Port Nelson
York Factory
Nelson R.
Churchill R.
Reindeer L.
Wollaston L.
Pr. Rupert
Queen Charlotte Is.
Little Slave L.
BRITISH COLUMBIA
C. Henrietta Maria
JAMES BAY
Mt. Brown
Athabasca R.
Edmonton
C. Scott
SASKATCHEWAN
Battleford
Prince Albert
Winnipeg L.
Fort Albany
East Main R.
Rupert R.
Missassini R.
ANTICOSTI I.
GULF OF ST. LAWRENCE
Fraser R.
Kamloops
Vancouver
Victoria
ALBERTA
Calgary
Saskatchewan R.
Winnipegosis L.
Manitoba L.
MANITOBA
Lethbridge
Medicine Hat
Moose Jaw
Regina
Brandon
Port Arthur
Quebec
Montreal
Richmond
St. John
Halifax
NEWFOUNDLAND
St. John's
Cape Breton
Louisburg
Pr. Edward I.
NEW BRUNSWICK
Moncton
Bay of Fundy
Seattle
Tacoma
Olympia
Astoria
Portland
Pasco
Walla Walla
Umatilla Jr.
Salem
Mt. Hood
Huntington
Boise City
Helena
Missouri R.
Devils L.
Grand Forks
Bismarck
Fargo
Miles City
Bozeman
Butte
Yellowstone R.
Duluth
Brainerd
Marquette
LAKE SUPERIOR
Sudbury
Ottawa
Kingston
Augusta
Portland
Bangor
C. Sable
C. Oxford
PACIFIC OCEAN
ATLANTIC OCEAN

NORTH AMERICA
Prepared especially for this Volume
by The Matthews-Northrup Works
SCALE OF STATUTE MILES
450 MILES TO THE INCH.
COPYRIGHT, 1922, BY THE J. N. MATTHEWS CO., BUFFALO, N. Y.
UNITED STATES
MEXICO
CENTRAL AMERICA
SOUTH AMERICA
WEST INDIES
GREATER ANTILLES
LESSER ANTILLES
BAHAMA ISLANDS
GULF OF MEXICO
CARIBBEAN SEA
ATLANTIC OCEAN
PACIFIC OCEAN
GULF OF CALIFORNIA
LOWER CALIFORNIA
TROPIC OF CANCER
Longitude 100° West from 95° Greenwich
120° 115° 110° 105° 90° 85° 75° 70°
35° 30° 25° 20° 15° 10°
C. Mendocino
Mt. Shasta
Red Bluff
Sacramento
San Francisco
Stockton
Oakland
Virginia Cy.
Carson Cy.
Pt. Conception
Los Angeles
San Diego
Mt. Whitney
Mojave
Colorado R.
Yuma
Prescott
Santa Fe
Albuquerque
Las Vegas
Tucson
Deming
Nogales
Benson
El Paso
Sierra Blanca
Del Norte
Socorro
Rincon
Guadalupe I.
Cedros I.
Hermosillo
Guaymas
Chihuahua
Jimenez
C. S. Lazaro
C. S. Lucas
Mazatlan
Durango
Torreon
Saltillo
Monterey
Presidio
Zacatecas
Aguascalientes
San Luis Potosi
San Blas
Guadalajara
Leon
Guanajuato
Queretaro
Tampico
Brownsville
Matamoros
Laredo
San Antonio
Galveston
Austin
Houston
Waco
Fort Worth
Dallas
Shreveport
Vicksburg
Jackson
Baton Rouge
New Orleans
Mobile
Pensacola
Tallahassee
St. Augustine
Jacksonville
Savannah
Charleston
Wilmington
C. Fear
Columbia
Charlotte
Raleigh
Norfolk
C. Charles
C. Hatteras
Bermudas Is.
Philadelphia
Baltimore
Washington
Richmond
Lynchburg
Knoxville
Asheville
Chattanooga
Nashville
Memphis
Little Rock
Birmingham
Atlanta
Augusta
Macon
Montgomery
Meridian
Ft. Smith
Oklahoma City
Wichita
Kansas City
St. Louis
Springfield
Cairo
Evansville
Louisville
Lexington
Frankfort
Cincinnati
Dayton
Columbus
Toledo
Cleveland
Detroit
Ft. Wayne
Chicago
Milwaukee
Grand Rapids
Lansing
Bay City
Minneapolis
St. Paul
Sioux Falls
Sioux City
Omaha
Council Bluffs
Lincoln
St. Joseph
Quincy
Hannibal
Terre Haute
Indianapolis
Peoria
Madison
Oshkosh
Eau Claire
Toronto
Buffalo
Albany
Boston
Providence
Hartford
Fall River
Newport
New Haven
Newark
Trenton
New York
Harrisburg
Wilmington
Dover
Annapolis
Pittsburg
Wheeling
Parkersburg
Denver
Leadville
Pueblo
Colorado Springs
Cheyenne
Laramie
Granger
Salt Lake City
Ogden
Great Salt L.
Silverton
Durango
Trinidad
Fremont
Hastings
Deadwood
Yankton
Pocatello
Shoshone
Snake R.
Columbia R.
Sevier L.
Mohave
Colorado R.
San Juan R.
Rio Grande
Canadian R.
Red R.
Arkansas R.
Mississippi R.
Missouri R.
Ohio R.
Yucatan Channel
Campeche Bay
Progreso
Merida
Campeche
Veracruz
Puebla
Orizaba
Mexico City
Puerto Mexico
Belize
British Honduras
Gulf of Honduras
Guatemala
Tehuantepec
Gulf of Tehuantepec
Acapulco
Manzanillo
Colima
Morelia
Lake Chapala
Tepic
Cape Catoche
Havana
Matanzas
Cuba
Camaguey
Isle of Pines
Santiago de Cuba
Jamaica
Kingston
Haiti
Santo Domingo
Port au Prince
Porto Rico
San Juan
Windward Passage
Mona Passage
Caicos Is.
Turks Is.
Grand Bahama I.
Grand Abaco I.
Eleuthera I.
Nassau
San Salvador (Columbus 1492)
Cat I.
Andros Is.
Key West
Straits of Florida
Charlotte Harbor
Miami
C. Sable
Tampa
Honduras
Tegucigalpa
Nicaragua
Mosquito Reserve
San Salvador
Managua
Costa Rica
San Jose
Colon
Panama
Panama Canal
Gulf of Panama
Gulf of Darien
Mosquito Gulf

by the French nation to the people of the United States in commemoration of the centennial of their national independence. The height of the statue proper is 151 feet, of the pedestal 95 feet, and of the whole work above the waters of the bay 305 feet, the tallest statue in the world. The pedestal was built by popular subscription throughout the United States but the statue was the free gift of the French people. It was unveiled with imposing ceremonies October 28, 1886. The statue weighs 450,000 pounds. Forty persons can stand comfortably in the head and the torch will hold twelve people.

Lisbon (Portuguese, *Lisboa*), the capital of Portugal, in the province of Estremadura, on the right bank of the Tagus, about ten miles from the mouth of that river. It stretches for about five miles along the river side, and is built on several hills rising to a considerable elevation. The new royal palace, which was completed in 1864, is a magnificent edifice. Opposite the city the river is about six miles wide, and its harbor, or roadstead, is one of the finest in the world. Lisbon owes its beauty as a modern city to the great earthquake of November 1, 1755, when it is said that 50,000 lives were lost, and when a great part of the old city was destroyed. Since then the modern city has grown up. Population, 500,276.

Lithuania, a republic of northern Europe, comprising the former Russian province of Kovno, together with portions of Vilna, Grodno, and adjoining provinces. On the north the country is bounded by Latvia, on the east by soviet Russia, on the south by Poland and Germany, and on the west by the Baltic Sea. The republic comprises an area of about 60,000 square miles, with a population estimated at 5,000,000, chiefly Lithuanians and Russians. The country is largely covered with forests and marshes and much of the soil is unproductive. Agriculture and timber production are leading occupations, with various industries in the larger towns. Vilna, population about 210,000, is the capital and chief city. Other important centers are Grodno, Kovno, and Suvalki.

Liverpool is an important fortified seaport, borough, and commercial emporium of England, on the estuary of the Mersey. This city is the chief port of the trade between the United States and England, and possesses shipping interests on a gigantic scale. The famous docks here, nine miles in length, and unsurpassed with regard to massiveness of construction and extent of accommodation, were constructed at a cost of $65,000,000. Population, 1921 census, 803,118.

London, on the Thames, fifty miles from the sea, the capital of the British Empire and its most noted, populous, and wealthy city. The city of London proper occupies one square mile in the center, is wholly a commercial port, and is governed by an annually elected mayor and aldermen; is the seat of a bishopric, with St. Paul's for cathedral. The city of Westminster is also a bishopric under a high steward and high bailiff, chosen by the dean and chapter. These two cities, with twenty-six boroughs under local officers, constitute the metropolis, and since 1888 the county of the city of London. Streets in the older parts are narrow, but newer districts are well built; the level ground and density of building detracts from the effect of innumerable magnificent edifices. Buckingham, Kensington, and St. James's are royal residences; the houses of parliament are the biggest Gothic building in the world; St. Paul's, built by Sir Christopher Wren, contains the remains of Nelson and Wellington, Reynolds, Turner, and Wren himself. Westminster, consecrated 1269, is the burial place of England's greatest poets and statesmen, and of many kings; the royal courts of justice in the Strand were opened in 1882. There are many educational institutions, medical hospitals, and charitable institutions of all kinds. London is the center of the English literary and artistic world, and of scientific interest and research; here are the largest publishing houses, the chief libraries and art galleriès, and museums; the British Museum and library, the national galleries, and magnificent botanical and zoölogical gardens. London is also a world emporium of commerce and banking center. It has nine principal docks; its shipping trade is enormous; it pays more than half the custom duties of the kingdom, and handles more than a quarter of the total exports. Its manufactures are very extensive. Population, 4,540,062.

Longitude is the angle at the pole between two great circles drawn on the earth's surface, passing through the poles, and touching respectively the place whose longitude is in question and the place selected as the origin of longitudes. Accordingly, the difference in longitude of two places is equivalent to the difference of the arc of the equator intercepted between their meridians. As nature has not, as in the case of latitude, supplied us with a fixed meridian, each nation has chosen its own prime meridian. Thus, in the United States, Great Britain and her colonies, Germany, Holland and other states, longitude is reckoned from the meridian passing through Greenwich. France uses the meridian passing through Paris. Longitude is reckoned east and west from 0° to 180°, though astronomers reckon west from 0° to 360°, never using east longitude. Longitude is employed to reckon time, a difference of fifteen degrees representing one hour.

Los Angeles, on Los Angeles River, 480 miles southeast of San Francisco, is the commercial center of Southern California. Its seaport on the Pacific is San Pedro, at the mouth of the river. It is the center of a region rich in gold, silver, and lead mines, and petroleum wells, and yielding the principal grains, wines, and citrus and deciduous fruits. Los Angeles is a beautiful residence city, the seat of the University of Southern California. Its fine climate has attracted many people of wealth and culture to its environs, and has stimulated its marvelous growth as well. Until 1847 it alternated with Monterey as the capital of the Mexican province of California. Population, 1920 census, 576,673.

Lyons, third city of France in population, is situated chiefly on the peninsula between the Rivers Rhone and Saone, 245 miles south-

east of Paris. It is the great warehouse of the south of France and of Switzerland; principal manufacture, silk stuffs, giving employment directly or indirectly to 200,000 hands. The cathedral and Church of St. Nizier, the Hotel de Ville (town hall), the finest edifice of the kind in the country, the hospital, the public library, and the Palais des Beaux Arts, are the most notable among numerous institutions. There are also a university academy, an imperial veterinary school — the first founded in the country, and still the best — schools for agriculture, medicine, etc. The two rivers are crossed by nineteen bridges; twelve over the Saone, and seven over the Rhone. The quays, twenty-eight in number, are said to be the most remarkable in Europe. There are several large and important suburbs; several fine squares, of which the Place Bellecour is one of the largest in Europe. Population, 1911, 523,796.

Madrid, the capital of Spain and of the province of Madrid, a part of New Castile, situated near the heart of the country, on the left bank of the Manzanares, a sub-affluent of the Tagus, and on a hilly, sandy plateau, 2,200 feet above the sea. One of the handsomest of European cities, it has a very modern aspect, and is partly surrounded by a brick wall twenty feet high, and pierced by sixteen gates, the most notable being the Puerta de Alcala, a triumphal arch seventy-two feet high at the foot of the Calle de Alcala, a magnificent street that traverses the city from northeast to southwest. The city is girt with fine promenades and stately suburban villas embowered in beautiful gardens.

The great building in Madrid is the Real Palacio, on the west side, between the city and the river. It is a square, 470 feet on each side, and 100 feet high, built (1737–1750) of granite and white marble, inclosing a court 240 feet square, and containing a library of 100,000 volumes, an armory of 2,533 specimens, and a numismatic collection of 150,000 pieces. Madrid has also about sixty churches, forty-four monasteries, used since 1836 for secular purposes, twenty-four nunneries, twenty-four hospitals (one with 1,526 beds), fourteen barracks, 100 elementary schools, several colleges or higher schools, a university, a medical school, a conservatory of music, eight theaters, four public libraries, eight museums, a botanical garden, an observatory, an academy modeled on that of Paris, etc. The royal museum in the Prado contains a gallery of 1,833 pictures, one of the richest collections in the world.

The industries of Madrid are slight. The commerce, however, is important, as Madrid is the entrepôt for all the interior provinces. Population, 1918, 652,157.

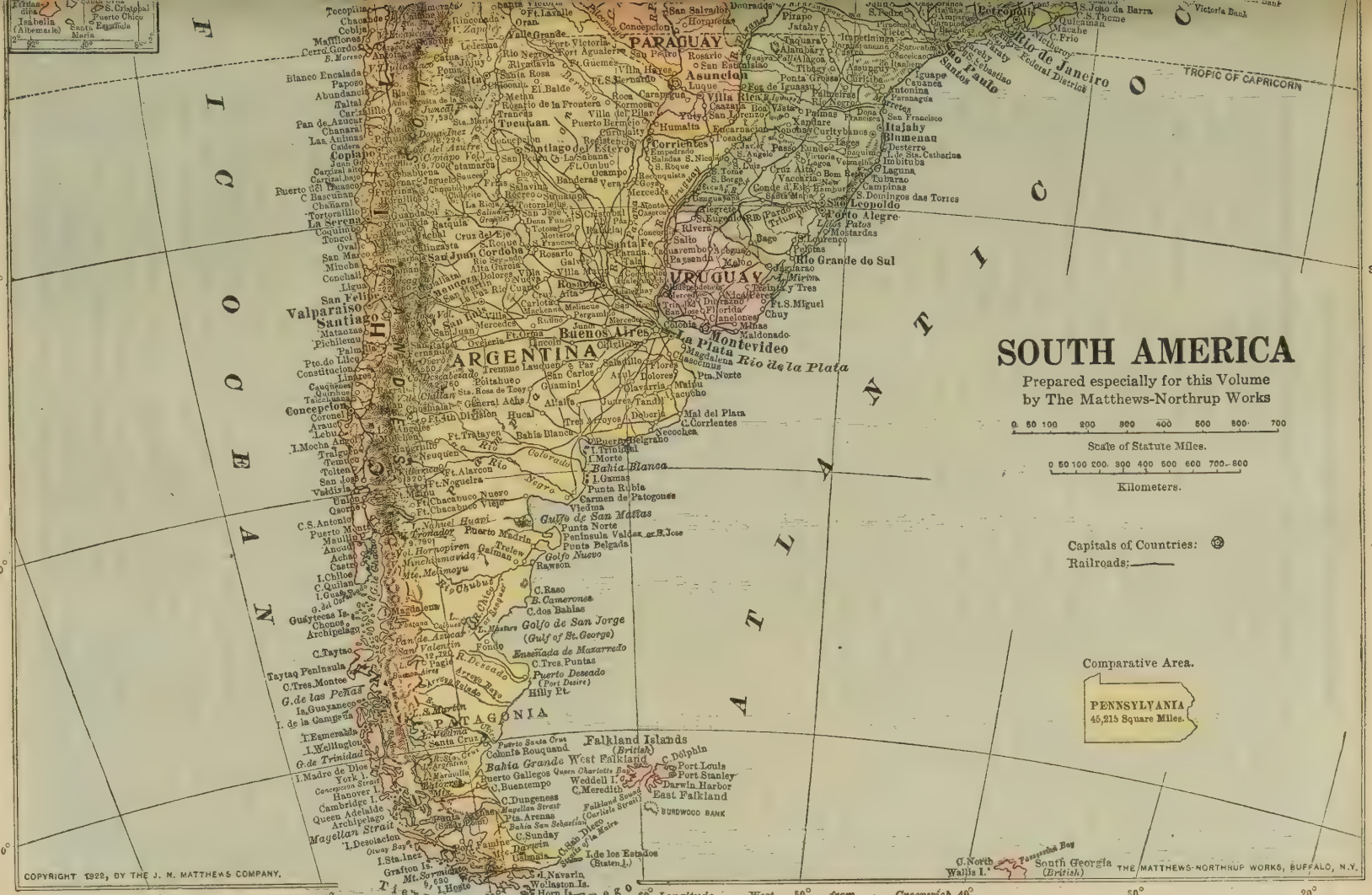
Maggiore (Lake) (*măd-jo'ra*), or Locarna, a considerable expanse of water in Northern Italy, lying partly within the latter, and partly included in the Swiss canton of Ticino. Length, thirty-nine miles, breadth from one-half mile to five and one-half miles; 636 feet above sea-level, with a maximum depth of 1,221 feet. It receives the rivers Tresa and Ticino, and its surface is dotted with several islands, chief among them being the Borromean group — one of which, "Isola Bella," is renowned for its exquisite beauty of location and surroundings.

Malays, a people inhabiting the Malay Peninsula and the Eastern or Malay Archipelago, or collectively Malaysia. They are of Mongolian affinity. This enterprising race has made its way widely over the Pacific islands, reaching as far south as Madagascar, where they exist as the dominant Hova element of the population. This widespread dominion is due to their bold, enterprising, and roving disposition, their place of residence on the peninsula and the larger islands being the coast region, whence they have driven the natives into the interior and where they long pursued a piratical career, darting from hidden streams in their well-manned proas on any vessel that approached too near the coast, or more boldly lying in wait in fleets in the open sea, for any expected rich prize. Physically considered, the Malays are of low stature. In various respects they bear a close resemblance to the Mongolians of Eastern Asia, but differ from them radically in language. Of late years the lessons taught them by European naval vessels have forced the Malays to desist from piracy. Intellectually they seem at a low level, and have never developed a native literature, such civilization as they possess being due to Arab and Hindu influence.

Mammoth Cave, a cavern near Green River, Edmonson County, Kentucky, about 85 miles south-southwest of Louisville. The cave is about 10 miles long, but it requires upward of 150 miles of traveling to explore its multitudinous avenues, chambers, grottoes, rivers, and cataracts. The main cave is 4 miles long, from 40 to 300 feet wide, and rises in height to 125 feet. The most interesting features of the cave are: The Chief City or Temple, covering an area of about four acres and having a dome of solid rock 120 feet high; the Star Chamber, about 500 feet long by 70 feet wide, with a ceiling 70 feet high, consisting of black gypsum dotted with many white points, which, when the chamber is lighted, have all the appearance of stars; Silliman's avenue, 1½ miles long, 20 to 200 feet wide, and 20 to 40 feet high; Cleveland's Cabinet, an arch 50 feet wide, 10 feet high and 2 miles long, covered with a variety of formations; the Maelstrom Abyss and Bottomless Pit, each of which is 20 feet wide and about 175 feet deep; and the river Styx, 450 feet long, and crossed by a natural bridge about 30 feet high. The cave contains various kinds of animals, and there are also found lizards, crickets, frogs, bats, and different sorts of fish. The latter include the famous eyeless fish, which are white in color. The atmosphere is pure and healthful and there is a temperature throughout the year of from 52° to 59°.

Manchester, a city in Lancashire, England, on the Irwell, an affluent of the Mersey, thirty-one miles east of Liverpool. It is the center of the cotton trade of Great Britain, and one of the principal manufacturing cities in the world. The manufacture of silk goods, which was introduced in 1816, has generally flourished since 1826, producing every description of fabrics from the rich brocade to the flimsy Persian. In some cotton factories the process of spinning

Caribbean Sea
Gulf of Mexico
Atlantic Ocean
Pacific Ocean
Longitude West from Greenwich
EQUATOR
CURAÇAO (Dutch)
Port of Spain
TRINIDAD (Brit.)
Caracas
Maracaibo
Orinoco Delta
Georgetown
Paramaribo
VENEZUELA
BRITISH GUIANA
DUTCH GUIANA (Surinam)
FRENCH GUIANA
Cayenne
COLOMBIA
Bogotá
ECUADOR
Quito
PERU
Lima
Callao
BOLIVIA
La Paz
Cochabamba
Sucre
Potosí
BRAZIL
Rio de Janeiro
Pará
Manáos
Santarem
Belem
Maranhão (S. Luiz)
Ceará (Fortaleza)
Natal
Parahiba
Pernambuco
Maceio
Bahia
Bahia de Todos os Santos
Rio Negro
Rio Madeira
Rio Purus
Rio Juruá
Rio Javary
Rio Tapajos
Rio Xingu
Rio Tocantins
Rio Parnahiba
Rio S. Francisco
Rio Paraguay
Rio Paraná
Rio Uruguay
Rio Grande do Sul
Rio Grande do Norte
Rio Jequitinhonha
Rio Doce
Rio Pardo
Rio Grande
Rio Negro
Rio Branco
Rio Trombetas
Rio Nhamunda
Rio Tapajos
Rio Arinos
Rio Paraguay
Rio Guaporé
Rio Mamoré
Rio Beni
Rio Madre de Dios
Rio Purus
Rio Juruá
Rio Javary
Rio Içá
Rio Japurá


SOUTH AMERICA
Prepared especially for this Volume
by The Matthews-Northrup Works
0 50 100 200 300 400 500 600 700
Scale of Statute Miles.
0 50 100 200 300 400 500 600 700 800
Kilometers.
Capitals of Countries:
Railroads:
Comparative Area.
PENNSYLVANIA
45,215 Square Miles.
PARAGUAY
URUGUAY
ARGENTINA
CHILE
PATAGONIA
Buenos Aires
Montevideo
La Plata
Rio de la Plata
Bahia Blanca
Golfo de San Matias
Golfo de San Jorge
(Gulf of St. George)
Falkland Islands
(British)
West Falkland
East Falkland
Asuncion
Rio de Janeiro
TROPIC OF CAPRICORN
Valparaiso
Santiago
Concepcion
Cordoba
Rosario
Tucuman
Puerto Deseado
(Port Desire)
Puerto Gallegos
Puerto Santa Cruz
Colonia Rouquand
Bahia Grande
Ensenada de Mazarredo
Golfo Nuevo
Puerto Madryn
Rio Negro
Rio Colorado
Rio Chubut
Rio Deseado
Rio Santa Cruz
Rio Gallegos
Rio Negro
Rio Pilcomayo
Rio Paraguay
Rio Parana
Rio Uruguay
Rio Salado
Rio Dulce
Rio Salado
Rio Colorado
Rio Negro
Rio Chubut
Rio Deseado
Rio Santa Cruz
Rio Gallegos

only is carried on; in many of them upward of 600 power looms are in action, each producing from fifteen to twenty pieces of fabric, of twenty-four yards each per week. There are over 60,000 persons employed in the cotton mills, besides 7,000 skilled mechanics engaged in the production of steam engines, looms, and other machinery. The climate of Manchester is very healthy, despite the disadvantage of the prevalence of smoke arising from the number of factories, etc. Population, 1921 census, 730,551.

Manchuria (Chinese, Shing-king), a Chinese territory occupying the northeast corner of China; it is divided into three provinces, Shing-king, Feng-Tien, or Liao-tung in the south (of which Mukden is the capital), Kirin in the center (with a capital of the same name), and Hei-Lung-Kiang in the north (with capital Tsitsihar); total area, 363,610 square miles; population is estimated at 20,000,000. The country is mountainous, but on the whole fertile. The climate is good; though the winters are severe, they are healthy and bracing. The vast forests of the north are rich in useful timber of all kinds. The administration is military, the governors of the two northern provinces being subordinate to the governor of Mukden. The Manchus are a hardy race, and their country has long been the great recruiting ground for the Chinese army; but of late years vast numbers of Chinese proper have flocked into it, so that now they by far outnumber the native race. In the Seventeenth Century the Manchus invaded China and placed their leader's son on the throne. From that time until 1912 the Manchu Dynasty continued to reign in China. The Manchu language has become the court and official language.

For a considerable time prior to 1891, when the first sod was turned for the construction of the great Siberian railroad, the Russian Government was anxious to secure control of this territory. On November 9, 1901, the Russian minister of finance, in announcing the completion of this railroad from Transbaikal territory to Vladivostok and Port Arthur, used the phrase "Our enterprise in Manchuria is practically, though not entirely, concluded." A number of times it was declared that the Chinese Government, under pressure from Li Hung Chang, had signed a secret treaty with Russia for the cession of this territory. In 1900, while the allied army was hastening to the relief of the legations in Peking a Russian military force occupied the right bank of the Amur River, and declared it to be Russian territory, and a provisional Russian administration was established. Official declarations were sent out from Petersburg to the effect that the current rumors of an incorporation of Manchuria with the Russian Empire were groundless.

In October, 1903, Russia having failed to evacuate Manchuria on the 8th of that month, as promised, Japan made military and naval preparations of a warlike character, while Russia also strengthened her forces in the distant Orient, which eventuated in the Russo-Japanese War. While, by the treaty of Portsmouth, Manchuria was restored to China, it is still a bone of contention between Russia and Japan.

Manila, or **Manilla,** a seaport of the island of Luzon, capital of the Philippines, situated near the mouth of the River Passig, at the head of a bay of same name. It possesses an excellent harbor, and carries on a large and important commerce with Europe, the United States, and China. The climate is healthful on the whole, but the place is subject to earthquakes, the last of which, in 1863, was the cause of serious loss of life. In Manila Bay, on May 1, 1898, Admiral Dewey with six warships, destroyed Spain's Asiatic Squadron, thirteen vessels, under Admiral Montejo. Population in 1918, 283,613.

Marseilles (*mär-sälz*), French **Marseille** (*mär-say'-e*), a city, principal commercial seaport of France, on the Mediterranean, and capital of the department of Bouchesdu-Rhone. It lies in the form of an amphitheater round a natural harbor of moderate size, now known as the Old Harbor. Though a handsome city as a whole, Marseilles is not rich in public edifices. The harbor is strongly defended by various works. What is called the New Harbor consists of a series of extensive docks along the shore to the west, with a protecting breakwater in front.

In recent times Marseilles has made great progress in its extent, street improvements, population, and commerce, largely owing to the conquest of Algeria, and the opening of the Suez Canal. Marseilles was founded by a colony of Greeks from Asia Minor, about 600 years before Christ, the original name being Massalia. It attained great prosperity as a Greek colonial center, and the Greek language is said to have been spoken there till several centuries after Christ. It was taken by Cæsar in 49 B. C. On the decline of the Roman Empire it became a prey to the Goths, Burgundians, and Franks. In 735 it fell into the hands of the Saracens, and in the Tenth Century it came under the dominion of the counts of Provence, and for some centuries after followed the fortunes of that house. Population, 1911, 550,619.

Matterhorn, a peak of the Alps, between the Swiss canton of Valais and Piedmont, rising to the altitude of 14,780 feet. The actual peak was first scaled by Lord Francis Douglas, the Rev. C. Hudson, Hadow, and Whymper, with three guides, July 14, 1865, when the three first-named and one of the guides fell over a precipice and were killed.

Mecca, a city of Arabia, about sixty miles from the Red Sea, the chief town of the Hedjaz, and celebrated as the birthplace of Mohammed, It is the sacred city of the Mohammedans, and, in itself uninteresting, is important on account of the pilgrimages which are made annually to the Great Mosque, in which is contained the Kaaba. From 100,000 to 150,000 persons are said to take part in these pilgrimages annually. The city, like the whole province of the Hedjaz, now belongs to Turkey. Population, about 80,000.

Medina, a city of Arabia, about 230 miles north of Mecca. It is the second capital of the Hedjaz, and is celebrated as the seat of Mohammed's empire, as the place to which he fled from Mecca, and likewise as his burial place. To the Mohammedans Medina is only less sacred than Mecca, but it is now chiefly important as one

of the stations on the pilgrim route to Mecca. The city, like the whole province of the Hedjaz, belongs to Turkey. Stationary population, about 40,000.

Mediterranean Sea, The (*med-e-tĕr-ra'ne-ăn*), a great inland sea, separating the continent of Europe from that of Africa and part of Western Asia; connecting by the Strait of Gibraltar, at its western extremity, with the Atlantic Ocean, and on the northeast with the Sea of Marmora by the channel of the Dardanelles, and thence by the Bosporus with the Euxine. Extreme length, 2,300 miles; maximum breadth, 1,200 miles. Estimated area, 690,000 square miles. Various portions of its surface take other names, as the "Ligurian," "Tyrrhenian," "Ionian," "Ægean," and "Adriatic" seas. Its coast line, too, embraces the extensive gulfs of Taranto, Patras, Ægina, Salonika, Smyrna, Adalia, Iskanderoon, Gaeta, Genoa, Lyon, Cabes, and Sidra. It receives the waters of the Nile, Ebro, Rhone, Po, and many others; contains the considerable islands of Sardinia, Corsica, Sicily, the Balearic group, Malta, Candia, Cyprus, and the clusters of the Greek Archipelago; and possesses a temperature averaging from 72° to 76°, or ½° Fahr. higher than that of the Atlantic Ocean. It has a tide rising from five to seven feet, and a constant upper current sets in from the Atlantic, through the Strait of Gibraltar. Its depth varies according to situation; and it is at times subject to destructive winds, such as the "sirocco" and the "white squall." The surrounding territories are the richest in the world, and the greatest movements in civilization and art have taken place around it in Africa, Phenicia, Carthage, Greece, and Rome.

Melbourne, the capital of Victoria in southeastern part of Australia; situated on the Yarra Yarra River, a stream of no great size, Melbourne proper being several miles from its mouth, while suburban extensions reach the shores of Port Phillip Bay, into which the river flows. The shipping trade is large, in both exports and imports, the chief of the former being wool, of the latter manufactured goods. Most imports are subject to a heavy duty.

By its railway system the city is connected with some of the principal towns of the Australian continent. The first settlements on the site of Melbourne were made in 1835, and a year or two after it received its present name, being so called after Lord Melbourne, who was then British prime minister. It was incorporated in 1842. In 1851 it became the capital of Victoria (then established as a separate colony), and received an immense impetus from the discovery of gold fields. A centennial exhibition was held in 1888 in celebration of the founding (in 1788) of the Australian colonies. The first Parliament of the Commonwealth of Australia was opened in the Exhibition Building on May 9, 1901, by the Prince of Wales. Population, 1921 census, 748,506.

Melrose, a village of Scotland, county of Roxburgh; on the Tweed, thirty-one miles southeast of Edinburgh. It is celebrated for possessing the finest monastic ruin in Scotland, Melrose Abbey, originally founded by David I., in 1136, was destroyed by Edward II., of England, in 1322. In 1336 it was rebuilt by Robert Bruce, and completed in the reign of James IV., about 1488-1513. It was again destroyed by the English in 1545. It was of Gothic style, and the ruins still attest its grandeur and magnificence.

Mexico (Spanish, Mejico), a republic of North America, bounded on the north by the United States, on the east by the gulf of Mexico, on the southeast by Central America, and on the west and south by the Pacific ocean. Its extreme length from northwest to southeast is about 2,000 miles and its maximum breadth about 800 miles. Mexico is one of the richest and most varied regions of the world. It consists of three natural divisions: the *tierras calientes*, or hot regions; the *tierras templadas*, or temperate tracts, and the *tierras frias*, or cold climes, found high up among the Cordilleras and the Sierra Madres. Connected with these mountain chains are some of the loftiest volcanic peaks of the continent, the highest of which are Orizaba and Popocatepetl.

States and Territories	Area Sq. Mi.	Pop. 1921
Aguascalientes	2,969	106,625
Campeche	18,089	74,170
Chiapas	27,527	415,673
Chihuahua	90,036	397,998
Coahuila	63,786	391,335
Colima	2,272	85,282
Durango	42,272	332,542
Federal District	578	847,942
Guanajuato	10,950	886,986
Guerrero	25,279	550,513
Hidalgo	8,637	628,211
Jalisco	33,492	1,201,775
Lower California	58,338	62,144
México	9,230	869,432
Michoacán	22,621	915,559
Morelos	1,895	103,822
Nayarit	10,953	138,179
Nuevo León	25,032	330,418
Oaxaca	35,689	813,640
Puebla	12,992	1,035,014
Querétaro	4,493	221,514
Quintana Roo	19,270	10,915
San Luis Potosí	24,004	428,312
Sinaloa	27,557	365,160
Sonora	76,633	269,136
Tabasco	10,374	132,132
Tamaulipas	30,831	288,188
Tlaxcala	1,534	180,198
Veracruz	27,880	1,071,926
Yucatán	15,939	317,227
Zacatecas	24,471	372,275
Grand Total	765,623	13,844,243

Michigan, Lake, the second largest of the Great Lakes of North America. It is wholly within the United States, having the State of Michigan on the east and northwest, Wisconsin and Illinois on the west, and Indiana on the south. On the northeast it communicates with Lake Huron by the narrow Strait of Mackinaw. It is 350 miles long, and about seventy-five miles broad; area, estimated at 22,450 square miles. The lake is 581 feet above sea level; the greatest ascertained depth is about 1,000 feet.

Milan, a city of Italy, in the province of Milan, which is a part of the old province of Lombardy. It is situated on a plain, between the rivers Ticino and Adda, and is the largest city of Italy after Naples. Under the name of *Mediolanum* it was an important town of the Romans, and, from the time of Diocletian

EUROPE
Showing New Boundary Lines
Prepared especially for this Volume
by The Matthews-Northrup Works
Scale of Statute Miles.
0 100 200 300 400 500
Kilometers.
0 100 200 300 400 500 600 700 800
Capitals of Countries:
Railroads: Canals:
Comparative Area.
PENN.
45,215 Square Miles.
International Territory...
Longitude West from Greenwich
35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15°
60° 55° 50° 45° 40° 35°
Jan Mayen Land
ARCTIC OCEAN
Denmark Strait
North Cape (Horn)
ICELAND
Langanes
Cape Horn
ARCTIC CIRCLE
Norwegian Sea
Faroe Islands
Thorshavn
Shetland Islands
Mainland
Orkney Islands
Hebrides or Western Isles
British Isles
SCOTLAND
IRELAND
Dublin
GREAT BRITAIN
North Sea
ENGLAND
London
DENMARK
Copenhagen
NORWAY
SWEDEN
Stockholm
Kristiania
Bergen
Trondhjem
Lofoten
Vesteraalen
Hamburg
Berlin
GERMANY
NETHERLANDS
Amsterdam
The Hague
Brussels
BELGIUM
Paris
FRANCE
Bay of Biscay
English Channel
Lands End
Brest
Pt. St. Mathieu
Lisbon
PORTUGAL
Oporto
Madrid
SPAIN
Barcelona
Gibraltar (Br.)
Ceuta (Sp.)
Tangier
Algiers
Tunis
TUNIS
Bizerta
Malta (Brit.)
Valetta
Sicily
Messina
Naples
Rome
Sardinia
ITALY
Corsica (To France)
Balearic Islands
Majorca
Minorca
Ivica
Formentera
Tyrrhenian Sea
Ionian Sea
Gulf of Lions
Marseille
Nice
Toulon
Switzerland
Vienna
AUSTRIA-HUNGARY
CZECHO-SLOVAKIA
Prague
Budapest
Trieste
Venice
Milan
Turin
Geneva
Lyons
Strait of Gibraltar
Morocco
Fez
Algeria
Tripoli
Strait of Messina
Mt. Etna
Malta Channel
THE MATTHEWS-NORTHRUP WORKS, BUFFALO, N.Y.

Longitude East from Greenwich
OCEAN
ARCTIC CIRCLE
RUSSIA IN ASIA
RUSSIA
FINLAND
SWEDEN
NORWAY
ESTHONIA
LATVIA
LITHUANIA
POLAND
RUMANIA
BULGARIA
SERVIA
GREECE
TURKEY IN ASIA
ASIA MINOR
SYRIA
PERSIA
CENTRAL ASIA
TURKESTAN
Petrograd
Moscow
Warsaw
Riga
Reval
Helsingfors
Stockholm
Christiania
Copenhagen
Berlin
Vienna
Budapest
Bucharest
Constantinople
ZONE OF THE STRAITS
Black Sea
Sea of Azof
Caspian Sea
Caucasus Mountains
Ural Mountains
Aral Sea
Lake Ladoga
White Sea
Archangel
Odessa
Sebastopol
Yalta
Batum
Tiflis
Baku
Erzerum
Mt. Ararat
Trebizond
Samsun
Angora
Smyrna
Athens
Salonika
Sofia
Belgrade
Jerusalem
Damascus
Aleppo
Baghdad
MESOPOTAMIA
BRITISH MANDATE
FRENCH MANDATE
Tashkend
Samarkand
Bokhara
Khiva
Orenburg
Kazan
Nijni Novgorod
Moscow
Petrograd
Archangel
Tobolsk
Irkutsk
Yakutsk
Vladivostok
Port Arthur
Tsingtau
Kiaochau
Peking
Tientsin
Shanghai
Hankow
Canton
Hongkong
Singapore
Batavia
Sumatra
Java
Borneo
Celebes
Philippines
Manila
Luzon
Mindanao
Sulu Archipelago
Formosa
Japan
Tokio
Yokohama
Nagasaki
Osaka
Kobe
Hiogo
Yezo
Hakodate
Saghalien
Kamchatka
Petropavlovsk
Behring Sea
Behring Strait
Aleutian Islands
Alaska
Sitka
Yukon
Klondike
Dawson
Fairbanks
Nome
Seward
Valdez
Juneau
Skagway
Vancouver
Victoria
Seattle
Portland
San Francisco
Los Angeles
San Diego
Mexico
Guadalajara
Vera Cruz
Tampico
Monterey
Chihuahua
Durango
Zacatecas
Guatemala
Salvador
Honduras
Nicaragua
Costa Rica
Panama
Colon
Havana
Cuba
Jamaica
Haiti
Porto Rico
Trinidad
Barbados
Martinique
Guadeloupe
Dominica
Antigua
Bermuda
Azores
Madeira
Canary Islands
Cape Verde Islands
Gibraltar
Malta
Tripoli
Algiers
Tunis
Oran
Tangier
Fez
Morocco
Mogador
Rabat
Casablanca
Mazagan
Mogadore
Agadir
Timbuctoo
Senegal
Gambia
Sierra Leone
Liberia
Ivory Coast
Gold Coast
Dahomey
Togoland
Kamerun
Lagos
Niger
Nigeria
Sokoto
Kano
Bornu
Lake Chad
Wadai
Darfur
Kordofan
Khartoum
Omdurman
Fashoda
Abyssinia
Addis Abeba
Harrar
Somaliland
Zanzibar
Mombasa
Uganda
Victoria Nyanza
Lake Albert
Lake Tanganyika
Lake Nyasa
Lake Rudolf
Lake Tana
Nile
Blue Nile
White Nile
Suez Canal
Port Said
Alexandria
Cairo
Suez
Red Sea
Aden
Arabia
Mecca
Medina
Muscat
Persian Gulf
Bushire
Bahrein
Basra
Mosul
Urfa
Aleppo
Damascus
Beirut
Haifa
Jaffa
Jerusalem
Gaza
Port Sudan
Massowah
Eritrea
Italian Somaliland

till its capture by Attila, it was the usual residence of the emperors of the West. The modern city is about eight miles in circumference, and is encompassed on three sides by walls and low ramparts. It has a cathedral, the "Duomo," which dates from the Fourteenth Century, and which is the finest Gothic edifice in Italy, being constructed entirely of white marble. In the *Duomo*, in 1805, Napoleon I. was crowned King of Italy. The city possesses many other splendid buildings, and numerous educational and other institutions. It is the center of the silk trade of Lombardy, and is the largest book-mart in Italy. In 1872 an Arts Exposition was held in the city, in 1881, a National Exposition, and in 1907, an International Exposition of Industrial Arts. Population, according to 1915 census, 663,059.

Minneapolis, a city of the United States, county seat of Hennepin County, Minnesota, on both sides of the Mississippi, at the Falls of St. Anthony, and now contiguous to St. Paul. It is regularly laid out with broad and attractive streets and avenues, many having double rows of trees on each side. The public buildings include the court house, the University of Minnesota (chartered in 1851), the Augsburg Theological Seminary, Lutheran (opened in 1869); a handsome Free Public Library, the building alone costing $350,000, and containing 335,000 volumes. There are numerous fine schools, churches, colleges, banks, theaters, and parks. The principal industries are the manufacture of flour, lumber, engines, boilers, agricultural implements, carriages, wagons, bicycles, machinery, foundries, and pork-packing. It leads all other centers in the manufacture of flour. It is also an important lumber and wheat mart. The city possesses a territory of about sixty square miles, and is built on a fine esplanade that commands a very fine view of the justly-celebrated Falls of Minnehaha, and several fine lakes. It is a great railroad center, being on the Burlington route; Chicago & Northwestern; Chicago Great Western; Chicago, Milwaukee & St. Paul; Chicago, St. Paul, Minnesota & Omaha; Great Northern; Minneapolis, St. Paul & Sault Ste. Marié; the North Pacific; St. Paul & Duluth; and Wisconsin Central R. R's. The city and county building stands a monument of the enterprise of the city; it is a most beautiful structure and was built at a cost of $4,000,000. The Masonic Temple and other buildings add to the architectural beauties. There are six daily journals, and a large number of weekly, monthly, and other periodicals. Population, 380,582.

Mirage, a phenomenon extremely common in certain localities, and as simple in its origin as astonishing in its effects. Under it are classed the appearance of distant objects as double, or as if suspended in the air, erect or inverted, etc. One cause of mirage is a diminution of the density of the air near the surface of the earth, produced by the transmission of heat from the earth, or in some other way; the denser stratum being thus placed *above*, instead of, as is usually the case, *below* the rarer. Now, rays of light from a distant object, situated in the denser medium (i. e., a little above the earth's level), coming in a direction nearly parallel to the earth's surface, meet the rarer medium at a very obtuse angle, and instead of passing into it, are reflected back to the dense medium; the common surface of the two media acting as a mirror. Suppose, then a spectator to be situated on an eminence, and looking at an object situated like himself in the denser stratum of air, he will see the object by means of directly transmitted rays; but besides this, rays from the object will be reflected from the upper surface of the rarer stratum of air beneath to his eye. The image produced by the reflected rays will appear inverted, and below the real object, just as an image reflected in water appears when observed from a distance. If the object is a cloud or portion of sky, it will appear by the reflected rays as lying on the surface of the earth, and bearing a strong resemblance to a sheet of water; also, as the reflecting surface is irregular, and constantly varies its position, owing to the constant communication of heat to the upper stratum, the reflected image will be constantly varying, and will present the appearance of a water surface ruffled by the wind. This form of mirage, which even experienced travelers have found to be completely deceptive, is of common occurrence in the arid deserts of Lower Egypt, Persia, Tartary, etc. In particular states of the atmosphere, reflection of a portion only of the rays takes place at the surface of the dense medium, and thus double images are formed, one by reflection, and the other by refraction — the first inverted, and the second erect.

Miseno, a promontory of the province of Naples, nine miles southwest of the city of Naples. On the outskirts of the promontory are the extensive ruins of the ancient city of Misenum, including a vast church and theater. Miseno is much visited on account of its wonderful grotto Draconara, and a curious subterranean building or labyrinth, called the Hundred Chambers, supposed to have been anciently employed as dungeons.

Mississippi, a river rising in northern Minnesota in Lakes Elk and Itasca, and flowing southward through a drainage area of about two-fifths of the United States to the Gulf of Mexico. The main stem is about 2,500 miles long, and is overtopped by its chief tributary, the Missouri. The total length from the sources of the latter to the Gulf is about 4,250 miles, making the longest river in the world. The Mississippi proper is navigable to the Falls of St. Anthony at Minneapolis, 2,161 miles from its mouth. The other chief tributaries are the Arkansas, the Red, and the Ohio rivers. The southern half of the river flows through a broad, flat region, lower at times than the river level, and the surrounding country has been protected against floods by levees, supplementing the natural embankments. The river reaches the Gulf through several openings, forming an immense delta, 12,000 square miles. Annually the river carries 145 cubic miles of sediment to the Gulf, the deposit being estimated at 400,000,000 tons.

Missouri, a river of the United States; formed in the Rocky Mountains, in Montana, winds circuitously along the base of the moun-

tains, then east till it reaches the west boundary of North Dakota and receives the Yellowstone. Here it begins to flow southeast through North and South Dakota, then forms the east boundary of Nebraska, separates for a short distance Kansas from Missouri, then strikes east across the latter State, and joins the Mississippi after a course of 2,908 miles. It is navigable 2,500 miles from the Mississippi, giving a water-route for commerce into the remote Northwestern States.

Mitylene (the ancient *Lesbos*), an island in the Grecian Archipelago, one of the largest of the Sporades, about ten miles from the Asiatic coast. Its chief town, *Mitylene,* or *Castro,* is situated on the east side of the island. Lesbos was important in the early history of Greece as the native region of the Æolian school of lyric poetry. Both Alcæus and Sappho were natives of the island. It attained great importance likewise, as a naval power, and planted colonies in Mysia and Thrace. The island is mountainous and is covered with pine forests. Its area is about 600 square miles, and its population is about 180,000.

Monaco, a small principality in the south of France, within the department of Alpes Maritimes. The capital, Monaco, is situated on a lofty promontory on the shore of the Mediterranean, about nine miles northeast of Nice, and about one mile from Monte Carlo. It has a fine climate, being sheltered toward the north by the lofty range of the Alps; its soil is singularly fertile, producing oranges, lemons, and other fruits in abundance. It is notorious, however, for its great gaming establishments of Monte Carlo, from which the prince derives nearly the whole of his revenue. Monaco was held by the Genoese family of the Grimaldi from about the close of the Tenth to the close of the Eighteenth Century. In 1848, the communes of Roccabruna and Mentone, which up to that time had belonged to the principality, were annexed to Sardinia, and in 1861 they were ceded to France, the prince receiving for his remaining interest in them the sum of four million francs. The area of the still existing principality is about eight square miles; population, 1913, 22,956.

Mongols (*mŏng′gŭlz*). A division of the human race, ranking second in the classification of Blumenbach, and, viewed collectively, the one great nomadic people of the earth. They include besides the Mongols Proper, the Tartars, Chinese and Indo-Chinese, the Burmese, Siamese, Japanese, Esquimaux, Samoyedes, Finns, Lapps, Turks, and Magyars. The physical characteristics of the true Mongol is thus depicted by Dr Latham: "The face of the Mongolian is broad and flat. This is because the cheek-bones stand out laterally, and the nasal bones are depressed. The cheek-bones, we say, stand out *laterally,* since they are not merely projecting, for this they might be without giving much breadth to the face, inasmuch as they might stand forward. * * * The distance between the eyes is great, the eyes themselves being oblique, and their carunculæ concealed. The eyebrows form a low and imperfect arch, black and scanty. The iris is dark, the cornea yellow. The complexion is tawny, the stature low. The ears are large, standing out from the head; the lips thick and fleshy rather than thin; the teeth somewhat oblique in their insertion, the forehead low and flat, and the hair lank and thin." Under the various designations of Scythians, Huns, Tartars, Turks, the Mongols during centuries were the terror of Eastern Europe, and under Genghis Khan and Tamerlane carried their victorious arms over China, Persia, Siberia, and India. The Mongolian family is estimated to number 825,000,000, or about one-half of the human race.

Mont Blanc, the highest mountain in the Alps, generally spoken of as the highest mountain in Europe, though Elbruz, in the mountains of the Caucasus, is 3,000 feet higher. It is situated in the French department of Haute Savoie, on the Italian border, and about thirty-eight miles south of the Lake of Geneva. It has an elevation above the sea of 15,781 feet. The mountain is generally ascended from the village of Chamouni. The summit was first reached by Balmat, a guide, in 1786; the next year by him and Saussure.

Monte Carlo, in the principality of Monaco, is beautifully situated on a sheltered bay and enjoys a delightful climate, while the surrounding scenery is full of charm and variety. The Casino is on a promontory on the east side of the town; besides a fully-supplied reading room, there is an elaborately decorated salle de fetes and widely known salles de jeu (gaming rooms). High-class music twice daily. There is a splendid view from the terrace behind the casino. The salles de jeu are open from 11.30 A. M. until 11.30 P. M., tickets gratis obtained in the vestibule; inhabitants of principality are not admitted. Trente-et-quarante and roulette are the games played, at the former the minimum stake is twenty francs, the maximum 12,000 francs; at roulette the minimum is five francs, the maximum 6,000 francs. The gardens of the casino are famous for their beauty.

Adjoining the casino terrace is the tir aux pigeons, attended by the most expert trap shots from all parts; the grand prix, competed for in January, is 20,000 francs.

Montenegro, a province of the new state of Jugoslavia; it is bounded by Dalmatia, Herzegovina, Serbia, Albania, and the Adriatic Sea. Area, about 5600 square miles. The surface is everywhere mountainous, being covered by an extension of the Dinaric Alps, rising to the height of 8,850 feet. There are, however, a few beautiful and verdant plains and valleys, in which the soil is tolerably fertile. The principal river is the Moratcha. About half of the Lake of Scutari, besides several smaller lakes, lies within the Montenegrin boundary. The climate is healthy. Forests of beech, pine, chestnuts, and other valuable timber cover many of the mountain sides. Fruit trees of all kinds abound, especially in the sheltered valleys, where even almonds, vines, and pomegranates ripen. Agriculture is in a very rude and inefficient state, though every cultivable piece of land is planted with Indian corn, potatoes, tobacco, rye, wheat, cabbages, or some other useful plant. Sheep, cattle, and goats are reared in great num-

ARCTIC
ATLANTIC OCEAN
CENTRAL ASIA
PERSIA
ARABIA
INDIAN
ASIA
Comparative Area
PENN.

Bering Strait
East Cape
St. Lawrence I.
C. Chukotskii
Long. East from Greenwich
180°
70°
60
OCEAN
C. Chelyuskin
Nordenskjolds Group
Taimur I.
Severnaya Zemlya
Thaddeus Bay
New Siberian Is.
Bennett I.
Faddeyi I.
Liakof I.
New Siberia
Kamennoi
G. of Khatanga
Tundra
Khatangskoe
Gavriga
Dudinskoe
Tolstoinos
Diudinskoe
L. Yegé Mission
Mission
Sibirtsevi Mts.
Troitski Monastery
Novosaliskaia
Peskovsk
Nijni Bakhtinsk
Verkhne Tchunskaia
Yeniseisk
Yartsovskoe
Preobrajenskoe
Roshdestvenskoe
Yarkino
IRKUTSK
Kirensk
Vitim
Ust Kutskoe
Angara
Tcheremkovo
Berillusikoi
Atchinsk
Kansk
Marlinsk
Nikolaevsk
Kyasnoyarsk
Nijni Udinsk
Minusinsk
Tcheulsk
Balaganskh
Irkutsk
Selenginsk
Troitskosavskii
Kiakhta
Kosogol
Tannu Mts.
Uliassutai
Kobdo
Bulun-tokhoi
Altai Mts.
Barkul
Khamil
Urumchi
Turfan
Pichan
Toksun
Kuchi
Tarim
Lob-nor
Desert of Gobi
Borzon
Shara-muren
Mingan
Dolonor
Jehol
Ergi
Urga
Tola
Kerulun (Trto)
Buir-nor
Dalai-lor
Khalkha
Maimatchin
Kiakhta
Selenginsk
Troitskosavskii
Khilar
Nerchinsk
Argun
Mergen
Hailar
Tsitsihar
Taheiho
Sakhalin Island
Aian
Shiranui Is.
Romanzof Is.
Maria Is.
Okhotsk
Sea of Okhotsk
St. John I.
Tauisk Bay
Ayan
Udskoi Ostrog
Nikolaievsk
Amgun
Sofiisk
Khabarovsk
Blagovestchensk
Albazin
Kumara
Mazur
Mts.
Jugjur Mts.
Aldan
Lena
Olekminsk
Vitim
Yakutsk
Suntar
Ankula
Preobrajensk
Pitimsk
Niurba
Viluisk
Verkhoiansk
Ust Mai-kara
Stanovoi Mts.
Kia-ma-chi
Kalgan
Urga
Ergi
Shibetu
Tui
Sair-usu
Mongolia
Tsitsihar
Taheiho
Manchuria
Harbin
Bodune
Ashchu
Kirin
Hunchun
Vladivostok
C. Povorotni
Sea of Japan
Yezo
Hakodate
Aomori
Hirosaki
Akita
Honshu or Hondo
Sado I.
Tokyo
Yokohama
Empire of Japan
Nagoya
Kioto
Osaka
Hiogo
Matsuyama
Kochi
Shikoku I.
Nagasaki
Fukuoka
Kagoshima
Volcano Is.
Aoga Shima
Hachijo Jima
Izu Shima
Oshima
Vries I.
Pacific Ocean
Tropic of Cancer
Ryukyu Islands
Miyako Jima
Ishigaki Jima
Formosa (Taiwan)
Samasana
Batan Is.
Babuyan Is.
C. Engaño
Luzon I.
Polillo I.
Catanduanes
Philippine Islands (To United States)
Manila
Bataan
Corregidor
Mindoro Strait
Mindoro I.
Calamianes I.
Panay I.
Negros I.
Leyte I.
Mindanao I.
Sulu Sea
Misamis
Zamboanga
Sandakan
Sulu Archipelago
Sibutu I.
Karkaralong Is.
Sangir Is.
Celebes Sea
Celebes
Menado
Gilolo I.
Passage I.
Moluccas or Spice Is.
Ceram
Banda Sea
Timor
Arafura Sea
Gulf of Carpentaria
Torres Strait
Coral Sea
Australia
Queensland
Great Barrier Reef
Brisbane
Sydney
New South Wales
Victoria
Melbourne
Tasmania
Hobart
Port Phillip Bay
Port Jackson
Wollongong
Port Macquarie
Newcastle
Port Stephens
Moreton Bay
Maryborough
Rockhampton
Gladstone
Mackay
Townsville
Cooktown
Thursday I.
Cape York
Prince of Wales I.
Booby I.
Torres Strait
Arafura Sea
Timor
Timor Sea
Ashmore Is.
Cartier I.
Scott Reef
Browse I.
Bonaparte Archipelago
Cambridge Gulf
Port Darwin
Melville I.
Bathurst I.
Van Diemen Gulf
Groote Eylandt
Wessel Is.
Arnhem Land
Gulf of Carpentaria
Mornington I.
Sir Edward Pellew Group
Barrow I.
Port Keats
Victoria River Downs
Daly River
Roper River
Limmen Bight
Sturt Creek
Fitzroy River
Ord River
Kimberley
Derby
Broome
Nicholson River
Wyndham
Cambridge Gulf
Port Darwin
Melville I.
Bathurst I.
Van Diemen Gulf
Groote Eylandt
Wessel Is.
Arnhem Land
Gulf of Carpentaria
Mornington I.
Sir Edward Pellew Group
Barrow I.
Port Keats
Victoria River Downs
Daly River
Roper River
Limmen Bight
Sturt Creek
Fitzroy River
Ord River
Kimberley
Derby
Broome
Nicholson River
Wyndham
Chinese Empire
Republic of China
Tibet
Lhasa
Shigatse
Chetang
Mt. Everest
Punakha
Tsangpo R.
Brahmaputra R.
Himalaya Mts.
Darjiling
Mawun
Upper Assam
Mongolia
Desert of Gobi
Inner Mongolia
Great Wall
Peking
Tientsin
Pt. Arthur
Kwantung
Weihaiwei
Chefoo
Korea
Seoul
Fusan
Yellow Sea
Kiaochow
Tsingtau
Shanghai
Nanking
Hankow
Kiukiang
Kuling
Poyang L.
Eastern Sea
Amoy
Foochow
Swatow
Canton
Hongkong
Macao
Mirs Bay
Pescadores Is.
Bashi Channel
Ballingtang Channel
Formosa Strait
Hainan
Tonkin
Gulf of Tonkin
China Sea
French Indo-China
Annam
Cochin China
Hanoi
Haiphong
Hue
Saigon
Phnom-Penh
Cambodia
Siam
Bangkok
Gulf of Siam
Mouths of the Mekong River
Condore I.
Pr. of Wales Bank
Trident Shoal
Palawan I.
Balabac I.
Balabac Strait
Borneo
British North Borneo
Brunei
Labuan
C. Baram
Sarawak
Kuching
Dutch Borneo
Pontianak
Banjermassin
Java Sea
Java
Batavia
Sunda Strait
Sumatra
Singapore
Johore
Malacca
Straits Settlements
Federated Malay States
Kuala Lumpur
Port Weld
Port Dickson
Penang I.
Georgetown
Malay Pen.
Langkawi
Nicobar Is.
Great Nicobar I.
Sambrero Channel
Little Andaman
Ten Degree Channel
Car Nicobar
Sayer Islands
Salang I.
St. Matthew I.
Isthmus of Kra
Andaman Islands
Port Blair
Archipelago
Duncan Passage
Barren I.
King I.
Mergui
Tavoy
Tavoy Point
Mergui Archipelago
Preparis I.
Narcondam I.
Amherst
Martaban
Moulmein
Thaton
Salween R.
Sittang R.
Pegu
Rangoon
Bassein
Irrawaddy R.
Prome
Mandalay
Bhamo
Myitkyina
Upper Burma
Lower Burma
Shwegyin
Toungoo
Yenangyaung
Akyab
Kyaukpyu
Sandoway
Bay of Bengal
Chilka Lake
Puri
Calcutta
Hugli R.
Dacca
Comilla
Assam
Manipur
Cachar
Silchar
Jaintia Hills
Khasi Hills
Garo Hills

bers. Manufactures, with the exception of a coarse woolen stuff, are unknown. The chief occupations of the Montenegrins are agriculture and fishing, trade being altogether left to foreigners. The exports are sheep and cattle, mutton-hams, sumach, honey, hides, cheese, butter, and other agricultural produce. The chief towns are Cettinje (5300 inhabitants), the capital; Podgoritza (10,000 inhabitants); Niksich; and the seaports, Dulcigno and Antivari. The Montenegrins are pure Serbs and speak a Serbian dialect. They are generally of tall stature and well proportioned. The men go at all times fully armed, whatever be the occupation in which they are engaged. In religion they are practically all communicants of the Greek Church. Elementary education, formerly much neglected, is now compulsory, and, in all the primary schools under the ministry of education, it is free. Formerly Montenegro was a separate kingdom or principality, which had long and stubbornly maintained its independence, but, at at the close of the World War, the people voted to join the Serb-Croat-Slovene State. Population, about 500,000.

Montreal (*mŏnt-rē-ôl'*), the metropolitan city of Canada; on an island of the same name, in the province of Quebec, at the head of ocean navigation on the St. Lawrence River. The city, which is one of the most attractive in Canada, contains many handsome public buildings, and is divided into distinctly marked English and French quarters. The chief public buildings are the court house, the barracks, Bonsecours Market, custom house, city hall; and the principal churches are St. James's Cathedral, constructed on the model of St. Peter's at Rome, the church of Notre Dame (large enough to accommodate 10,000 persons), St. Patrick's, Christ Church Cathedral, St. Andrew's, and St. Paul's. McGill University, Presbyterian College, Wesleyan Theological College, Congregational College, Anglican Diocesan College, Bishop's College and University, the Montreal School of Medicine and Surgery, are the leading Protestant educational institutions; those of the Roman Catholics comprise Laval University, St. Mary's College, Montreal College, and Hochelaga Convent. There are several libraries besides those of the above institutions, a natural history society with museum, an art association, and musical societies. The exports are chiefly the products of the country, such as grain, flour, cheese, and lumber, and there is a large trade in furs. The principal imports are cottons, woolens, silks, iron, hardware, tea, and sugar. Among the industrial establishments of Montreal are iron foundries, distilleries, breweries, sugar refineries, soap and candle works; and there are manufactures of cotton, silk, boots and shoes, paper, carpets, tobacco, hardware, edge tools, floor-cloth, and carriages. The Grand Trunk Railway, connecting the railways of Canada with those of the United States, first crossed the St. Lawrence at Montreal by the famous (tubular) Victoria Bridge, 9,437 feet in length, built in 1854–59, which was replaced by a fine structure of the modern truss type, 1897.

Montreal was founded by Maisonneuve, May 18, 1642, during the French régime in Canada. On September 8, 1760, Montreal capitulated to General Amherst and the surrender of the city completed the conquest of New France by the English. In 1775, Montreal was captured by the Americans, who sent expeditions under Montgomery and Arnold to capture Quebec and Montreal; and General Carleton in command of the British forces at Montreal had to retreat to Quebec, where the Americans were ultimately defeated. In 1775, the American General Wooster made his headquarters in the Chateau de Ramergay, which was the official residence of the British governors after the conquest. In this same chateau, the Commissioners of Congress, Benjamin Franklin, Samuel Chase, and Charles Carroll, in 1776, met and held council under General Benedict Arnold. In 1776 the American forces retreated. Montreal obtained its first city charter in 1833, the first mayor being Jacques Viger. The recent history of the city has been an almost unbroken record of commercial and industrial progress. Great impetus was given to its growth by the opening of the Canadian Pacific Railway, the first train on which left Montreal for Vancouver on June 28, 1886. Population, 1921 census, 607,163.

Morocco, a French protectorate at the extreme northwestern angle of the continent of Africa, has about one-fifth its coast line on the Mediterranean and the remainder on the Atlantic. Its eastern boundary is Algeria, and to the south lie the Spanish colony of Rio de Oro and the Sahara. Along the northern coast rises a low mountain chain forming the maritime district of Er-Rif, which has the climate usual to the Mediterranean basin. The High Atlas mountains in two or more parallel chains intersect the country, running northeast and southwest. Their snow-clad peaks, rising in places to a height of 11,000 to 14,000 feet, interpose their eastern slopes against the scorching winds of the Sahara and upon the west receive the moist breezes of the Atlantic. Hence, the region of valleys and plains east of the Atlas is tropical in climate and the rivers run dry in their lower courses, whereas the rolling tract of plateaus, plains, and valleys in the angle between Er-Rif, the Atlas and the Atlantic is well-watered, fertile, and of temperate and salubrious climate. The country is populated by several distinct tribes, Berbers, Tuaregs, Shellah Berbers, Beduin and Mued Arabs, besides negroes, Jews, and a small number of Europeans. These racial elements tend to antagonize rather than to amalgamate with one another, and this fact, coupled with the extreme taxation and other evils of the absolute despotism that has hitherto prevailed, has prevented a national development. Large tracts are admirably suited to the production of crops, yet agriculture is most backward. The people are chiefly pastoralists, their wealth being almost wholly in their flocks and herds. Morocco has long been coveted as a rich prize by the nations of continental Europe and their conflicting claims have more than once threatened an international crisis. In 1912 France was successful in negotiating treaties with Germany, Morocco and Spain, respectively, whereby her suzerainty is acknowledged and the way is opened for rapid internal development of the country.

With the exception of France, the only European nation which at present holds any territory in Morocco is Spain, which controls a large extent of territory on the Mediterranean and a small extent of territory near the port of Ifni.

Much of the interior of Morocco is unknown to Europeans. The hostility of the interior tribes has prevented any organized industries; but rich mineral deposits of copper, iron, lead, antimony, sulphur, silver, gold, and petroleum are said to exist in various parts of the country. Fez, the capital, has a population of 140,000, Tangier, with a population of about 35,000, is a recognized health resort. Morocco City is the southern capital.

Moscow (*mŏs'-kō*) [Russian, Moskwa], the second capital of Russia. It is the chief town of the government of the same name, and is situated in a highly cultivated district on the Moskwa River, 400 miles southeast of Petrograd, with which it is in direct communication by rail. The quarter known as the Kreml or Kremlin, on a height about 100 feet above the river, forms the center of the town, and contains the principal buildings. It is inclosed by a high stone wall, and contains the old palace of the czars and several other palaces; the Cathedral of the Assumption, founded in 1326, rebuilt in 1472; the Church of the Annunciation, in which the emperors are recrowned; the Cathedral of St. Michael; the Palace of Arms, an immense building occupied by the senate, the treasury and the arsenal; and the Tower of Ivan Veliki (209 feet), surmounted by a gilded dome, and having at its foot the great Czar Kolokol, or king of bells, sixty feet round the rim, nineteen feet high, and weighing upward of 200 tons, the largest in the world. Outside the Kreml the chief building is the Cathedral of St. Vassili, with no less than twenty gilded and painted domes and towers, all of different shapes and sizes. Among the principal educational establishments is the Imperial University, founded in 1755 by the Empress Catharine. It has a rich museum and a library of 200,000 volumes, and is the most important of the Russian universities. Moscow is the first manufacturing city in the country, and of late years its industrial and commercial activity has greatly increased. The principal manufactures are textile fabrics, chiefly woolen, cotton, and silk, besides hats, hardware, leather, chemical products, beer, and spirits. From its central position, Moscow is the great distributing point for the internal commerce of Russia. The foundation of the city dates from 1147. It became the capital of Muscovy, and afterwards of the whole of Russia; but was deprived of this honor in 1712, when Petrograd received it. The principal event in the history of Moscow is the burning of it in 1812 for the purpose of dislodging the French from their winter quarters. Population, 1919 est., 1,121,000.

Mountains, Greatest in the World

Name	Location	Height (Feet)
Ben Nevis,	Scotland,	4,406
Blackburn,	Alaska,	16,140
Blanc, Mont.,	France,	15,781
Brown, Mt.,	Canada,	9,055
Cenis, Mt.,	France,	11,755
Chinati Peak,	Texas,	7,730
Clingman Dome,	Tennessee,	6,619
Condor,	Argentina,	21,128
Crillon,	Alaska,	15,900
Dapsang,	Tibet,	28,278
Dhawalaghiri,	Asia,	26,826
Douglass, Mt.,	Montana,	11,300
Everest, Mt.,	India,	29,141
Fisherman,	California,	14,448
Fremont's Peak,	Wyoming,	13,790
Gilbert Peak,	Utah,	13,687
Godwin-Austen (K^2),	India,	28,278
Harney Peak,	South Dakota,	7,216
Hermon, Mt.,	Palestine,	9,166
Hogback, Mt.,	Nebraska,	5,084
Hooker, Mt.,	Canada,	15,700
Hyndman Peak,	Idaho,	12,078
Itacolumi,	Brazil,	5,740
Itambe,	Brazil,	4,300
Kanchanjanga,	India,	28,156
Katahdin,	Maine,	5,200
Korintje,	Sumatra,	12,480
Kosciusko, Mt.,	Australia,	7,336
Lebanon, Mt.,	Syria,	11,000
Logan, Mt.,	Canada,	19,500
Long's Peak,	Colorado,	14,271
McKinley,	Alaska,	20,464
Mansfield, Mt.,	Vermont,	4,364
Marcy, Mt.,	New York,	5,344
Massive,	Colorado,	14,424
Matterhorn,	Switzerland,	14,780
Mercedario,	Argentina,	22,312
Miltsin, Mt.,	Morocco,	11,400
Mitchell, Mt.,	North Carolina,	6,711
Monte Rosa,	Italy,	15,217
Olympus,	Greece,	6,600
Olympus,	Turkey,	9,745
Parnassus,	Greece,	8,070
Perdu, Mont.,	France,	11,300
Peaks of Otter,	Virginia,	4,250
Pike's Peak,	Colorado,	14,108
Redslate Peak,	California,	13,400
Roa, Mt.,	Hawaii,	17,500
Rogers, Mt.,	(Grayson Co.) Virginia,	5,719
Roraima,	Venezuela,	8,740
Santa Clara Mountain,	New Mexico,	11,507
Santa Fé Baldy Peak,	New Mexico,	12,661
Simplon,	Alps, Switzerland,	11,541
Sinai, Mt.,	Turkey,	8,593
Sitting Bull Mountain,	Georgia,	5,046
Snehaetten,	Norway,	7,566
Snowdon,	Wales,	3,571
Sorata,	Bolivia,	21,490
Spruce Mountain,	(Pendleton Co.) W. Va.,	4,860
St. Bernard,	Switzerland,	8,110
St. Elias, Mt.,	Alaska,	18,024
St. Gothard,	Switzerland,	10,500
Truchas Peak,	New Mexico,	13,275
Vancouver,	Alaska,	15,666
Washaku Needle,	Arizona,	12,000
Washington, Mt.,	New Hampshire,	6,293
Wheeler Peak,	Nevada,	13,058
Whitney,	California,	14,502
Ymesfield,	Norway,	8,543

Mount McKinley, a mountain of the McKinley Range, in Alaska. It is situated about 125 miles north of Cook Inlet, and stands close to the intersection of the 63rd parallel of north latitude with the 151st meridian of west longitude. Recent measurements made by the United States Geological Survey show this to be the tallest peak in the United States, overtopping Mount St. Elias and Mount Logan by about 1,000 feet, its height being 20,464 feet. The great height of Mount McKinley has been known to the Indians and the scattering whites of that region for many years, as its towering summit is plainly visible on clear days for a distance of 125 miles or more. In 1912 Herschell C. Parker and Belmore Browne, climbed to 20,300 feet, or virtually to the summit, which was finally reached in 1913 by Hudson Stuck.

Munich (*mū'-nik*), the capital city of Bavaria, on an extensive plateau, about 1,700 feet above sea level, chiefly on the left bank of the

AFRICA
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Capitals thus: ◎ Railroads { Finished / Proposed
Canals thus:
Scale of Statute Miles.
0 100 200 300 400 500 600 700 800 900 1000
630 MILES TO ONE INCH.
Kilometers.
0 200 400 600 800 1000
British
Portuguese
French
Spanish
Italian
Belgian
Independent States
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Longitude 20° West from 10° Greenwich
EQUATOR
TROPIC OF CANCER
TROPIC OF CAPRICORN
ATLANTIC OCEAN
Gulf of Guinea
PORTUGAL
SPAIN
ITALY
Lisbon
Azores
Madeira Islands
Canary Islands
Cape Verde Islands
MOROCCO
SOUTHERN ALGERIA
NORTHERN ALGERIA
TUNISIA
Tripolitania
LIBYA
Fezzan
Sahara
Desert of Igidi or Gidi
RIO DE ORO
MAURITANIA
FRENCH WEST AFRICA
UPPER SENEGAL AND NIGER
CIVIL TERRITORY OF THE NIGER
Air
Timbuktu
Senegal
Dakar
St. Louis
GAMBIA
Bathurst
PORTUGUESE GUINEA
FRENCH GUINEA
SIERRA LEONE
Freetown
LIBERIA
Monrovia
Grand Bassa
Konakry
Bissao
Bissagos Is.
Bolama
Timbo
Kankan
Sikasso
Bamako
Segu
Niger R.
Gao
Timbuktu
Kayes
Niore
Sansandig
Wagadugu
VOLTA
IVORY COAST
ASHANTI
GOLD COAST
Kumassi
Cape Coast Castle
Accra
Grand Bassam
Assinie
Sassandra
Harper
C. Palmas
DAHOMEY
Porto Novo
Lagos
Benin
Abeokuta
Ilorin
Zungeru
Bida
Yola
NIGERIA
Bauchi
Zaria
Kano
Sokoto
Gando
Machiuna
Kukawa
Lake Chad
Ft. Lamy
Tessawa
Zinder
Galmi
Agades
Tin-Telust (Asben)
Ghadames
Ghat
Gatron
Murzuk
Sebkha Oasis
Tuside Mts.
Tibesti Mts.
Ennedi Mts.
Tibesti
Borku
Ennedi
Wadai
Taudeni
Arawan
Azawad
Walata
Adrar
Shingetti
C. Blanco
C. Mirik
Villa Cisneros
Canary Islands (Sp.)
Santa Cruz de la Palma
Santa Cruz de Tenerife
Grand Canary
Las Palmas
C. Juby
C. Bojador
Ifni (Sp.)
C. Nun
Tinduf
Oglet uld Yacub
Ain Sefra
Colomb Bechar
El-Golea
Igli
Ghardaia
Wargla
Guerrara
Tuggurt
Laghwat
Biskra
Batna
Constantine
Philippeville
Bougie
Algiers
Tenes
Orleansville
Oran
Mostaganem
Tlemcen
Nemours
Melilla
Ceuta
Tetuan
Larache
Rabat
Tangier
Casablanca
Mazagan
Mogador
Agadir
Saffi
Mequinez
Fez
Taza
Gabes
Zarsis
Suara
Tripoli
Homs
Misurata
Gharyan
Sardinia
Palermo
C. Bon
Tunis
Suss
Sfax
Malta (Br.)
Sicily
Strait of Gibraltar
Gibraltar (Br.)
Malaga
Algeciras
Tarifa
Cadiz
Ascension I. (Br.)
St. Helena (Br.)
Annobon I. (Sp.)
Princes I. (Port.)
St. Thomas I. (Port.)
Fernando Po (Sp.)
Sette Kama
Mayumba
Libreville
Lamberene
Mokuko
Cameroon Mt.
Duala
Calabar
Bata
RIO MUNI
CAMEROONS
Fr. Man.
Ngaundere
Adamawa
Kunde
Lai
Yola
Nikè
Wukari
Lokoja
Ibadan
Asaba
Benin
Akassa
Bight of Biafra
Bight of Benin
Mouths of the Niger
Dahomey
Porto Novo
Lagos
Akra
Cape Coast Castle
Grand Bassam
Assinie
Sassandra
Harper
C. Palmas
Bissagos Is.
Bolama
Konakry
Freetown
Monrovia
Grand Bassa
Dakar
St. Louis
Cape Verde Islands
St. Vincent
Brava
C. Verde
Thies
Kayes
Niore
Sansandig
Segu
Bamako
Sikasso
Kankan
Timbo
Bissao
Bissagos Is.
Bolama
C. Verga
Konakry
Freetown
Monrovia
Grand Bassa
Harper
C. Palmas
Sassandra
Grand Bassam
Assinie
Cape Coast Castle
Accra
Kumassi
Bonduku
Wagadugu
Say
Niger R.
Gao
Timbuktu
Ramba
Arawan
Azawad
Walata
Adrar
Shingetti
C. Blanco
C. Mirik
Villa Cisneros
Wadan
Taudeni

Longitude 50° East from 60° Greenwich
EQUATOR
ASIA
AFRICA
INDIAN OCEAN
Arabian Sea
Caspian Sea
Red Sea
Persian Gulf
Gulf of Aden
Gulf of Oman
Mediterranean Sea
Mozambique Channel
TURKEY
SYRIA
PALESTINE
MESOPOTAMIA
PERSIA
AFGHANISTAN
BALUCHISTAN
ARABIA
EGYPT
SUDAN
ANGLO-EGYPTIAN
NUBIA
ABYSSINIA
ITALIAN SOMALILAND
BRITISH SOMALILAND PROTECTORATE
FRENCH SOMALILAND
YEMEN
ASIR
OMAN
KENYA COLONY
UGANDA
TANGANYIKA TERRITORY
NORTHERN RHODESIA
SOUTHERN RHODESIA
PORTUGUESE EAST AFRICA
MADAGASCAR
TRANSVAAL
ORANGE FREE STATE
NATAL
CAPE COLONY
UNION OF SOUTH AFRICA
Cairo
Alexandria
Suez
Jerusalem
Damascus
Beirut
Baghdad
Teheran
Bokhara
Kabul
Herat
Karachi
Muscat
Aden
Mecca
Medina
Jidda
Khartum
Omdurman
Port Sudan
Suakin
Berbera
Addis Ababa
Harar
Zeila
Obbia
Mogadisho
Kismayu
Port Durnford
Nairobi
Mombasa
Zanzibar
Dar-es-Salaam
Lindi
Mikindani
Comoro Is.
Amber
Diego Suarez
Hellville
Mozambique
Majunga
Mananara
Ste. Marie
Fenerive
Tamatave
Antananarivo
Marolika
Rodriguez I.
Port Louis
Mauritius I.
St. Denis
Reunion I.
Masindrano
Fianarantsoa
Ambahy
Benanoremana
Andrakala
C. Ste. Marie
Tulear
Ambato
Betsio
Beira
Sofala
Chiloane
Chinde
Kilimane
Mouths of the Zambezi
Maintirano
Porto Amelia
Parapato
C. St. Andrew
Lourenco Marques
Delagoa Bay
Inhambane
Johannesburg
Pretoria
Durban
Pietermaritzburg
Ladysmith
Zululand
Kokstad
Umtata
East London
Port Elizabeth
Port Alfred
Algoa Bay
Cape St. Francis
Mosselbay
Cape Agulhas
Graaf Reinet
Colesberg
Bloemfontein
Kimberley
Vryburg
Kuruman
Mafeking
Rietfontein
Bechuanaland Protectorate
Palachwe
Shoshong
Matabele Land
Bulawayo
Gwelo
Salisbury
Livingstone
Victoria Falls
Broken Hill
Lialui
Zumbo
Blantyre
Tete
Abercorn
Karonga
Lake Nyasa
Lake Bangweolo
Chitambo
Elizabethville
Bukama
Bandaquinville
Albertville
Kongolo
Nyangwe
Kasongo
Uiji
Tabora
Dodoma
Karema
Pangani
Bagamoyo
Pemba I.
Zanzibar I.
Mafia I.
Kilwa Kivinje
Kilwa Kisiwani
Aldabra Is. (Br.)
Amirante Is. (Br.)
Seychelles Is. (Brit.)
Socotra (Brit.)
C. Guardafui
Hafun
Berbera
Lamu
Formosa Bay
Malindi
Voi
Mt. Kilimanjaro
Mt. Kenya
Nairobi
Nakuru
Naivasha
Kisumu
Entebbe
Lake Victoria
Lake Albert
Lake Edward
Lake Rudolf
Lake Stefanie
Ruwenzori Mts.
Stanleyville
Ponthierville
Kirundu
Kindu
Albertville
Bukama
Bondo
Amadi
Wadelai
Gondokoro
Mongalla
Doruma
Janda
Moenge
Zemio
Obbo
Wau
Shambe
Gore
Kaka
Fashoda
Shakka
Dara
El-Fasher
Darfur
Kordofan
El-Obeid
Kobei
Debbo
Berber
Atbara
El-Ordeh
Suna
Halfa
Korosko
Nubian Desert
Abu Hamed
Assuan
Luxor
Esna
Kena
Girga
Tahta
Minieh
Assiut
Siwa Oasis
Libyan Desert
Sinai Pen.
Suez Canal
Port Said
Ismailia
Isthmus of Suez
Tanta
Damietta
Rosetta
Alexandria
Derna
Benghazi
Tobruk
Cyrenaica
Fuka
Jarabub
Medinet-el-Fayum
Crete
Cyprus (Br.)
Athens
Smyrna
Euphrates R.
Tigris R.
Basra
Kelat
Yambo-el-Bahr
Perim I. (Br.)
Hanish Is.
Mocha
Sana
Makalle
Massawa
Asmara
Keren
Kassala
Gondar
Adua
Aualo
Senaar
Tsana
Debra Tabor
Blue Nile
White Nile
Sobat R.
Bahr el Arab
Bahr el Ghazal
Welle R.
Semliki R.
Albert Nile
Victoria Nile
Kagera R.
Shire R.
Zambezi R.
Limpopo R.
Orange R.
Vaal R.
Kuruman R.
Kunene R.
Kuando R.
Kubango R.
Kasai R.
Lualaba R.
Congo R.
Ubangi R.
Shari R.
Logone R.
Benue R.
Niger R.
Senegal R.
Gambia R.
Volta R.
Ogowe R.
Sanaga R.
Cameroon Mt.
Fernando Po
Lagos
Accra
Cape Palmas
Monrovia
Freetown
Sierra Leone
Conakry
Portuguese Guinea
Bissao
Bathurst
Dakar
Cape Verde
Canary Is.
Madeira
Azores
Tripoli
Tunis
Algiers
Oran
Gibraltar
Tangier
Fez
Mogador
Rabat
Casablanca
Mazagan
Mt. Atlas
Sahara Desert
Libyan Desert
Nubian Desert
Kalahari Desert
Namib Desert
Great Karroo
Little Karroo
Drakensberg Mts.
Lebombo Mts.
Cape Colony
Cape of Good Hope
Cape Town
Table Bay
Simonstown
Saldanha Bay
Walfish Bay
Swakopmund
Windhuk
Damaraland
Ovampoland
Great Namaqualand
Little Namaqualand
Bechuanaland
Matabeleland
Mashonaland
Manicaland
Gazaland
Zululand
Natal
Basutoland
Transvaal
Orange Free State
Cape Colony
Union of South Africa
Portuguese East Africa
Madagascar
Mauritius
Reunion
Rodriguez
Seychelles
Amirante Is.
Aldabra Is.
Comoro Is.
Socotra
Zanzibar
Pemba
Mombasa
Lamu
Kismayu
Mogadisho
Obbia
Berbera
Zeila
Harar
Addis Ababa
Ankober
Shoa
Gondar
Massawa
Asmara
Keren
Kassala
Suakin
Port Sudan
Khartum
Omdurman
Sennar
Kordofan
Darfur
El-Fasher
El-Obeid
Kobei
Debbo
Berber
Atbara

Isar. The old town has a quaint and irregular character, but the new town, which has sprung up chiefly to the north and west, has a regular and imposing appearance, and altogether Munich is one of the finest towns in Germany. The royal palace forms a very extensive series of buildings chiefly in the Italian style, and contains many magnificent apartments and rich artistic and other treasures. The royal library has upward of 1,000,000 volumes and 30,000 manuscripts, being thus one of the largest in Europe. The university had in 1902, 200 professors and teachers, and 4,766 students in theology, jurisprudence, medicine, and philosophy, together with a library of over 500,000 volumes. The industries are numerous; brewing ranks first, about 76,000,000 gallons (half of which are exported) being produced annually. Among others may be mentioned painted glass and other artistic productions, mathematical, optical, and surgical instruments, gold and silver lace, jewelry, glass, carriages, bells, musical instruments, etc. Munich is the seat of the high courts of legislature and of law, and of all the more important offices of the state. It was founded by Henry the Lion, about 1142, was taken by Gustavus Adolphus in 1632, by the French under Moreau in 1800, and by Napoleon in 1805. Population, 1919 census, 630,711.

Naples (Italian, Napoli), a magnificent city of Southern Italy, capital of a province of same name, and of the former kingdom of the Two Sicilies, on the north side of the far-famed Bay of Naples, near the base of Mount Vesuvius, 118 miles southeast of Rome. Built in the form of an amphitheater, Naples, as viewed from the sea, presents a panorama of almost unrivaled beauty. Architecturally speaking, its public edifices are more remarkable for their size than for their elegance of design. It has some manufactures and a large commerce. This city, the supposed *Parthenope* of the ancients, has, at various times, been devastated by the effects of war, earthquakes, and the volcanic eruptions of its neighbor, Vesuvius. The environs of Naples — Capri, Pompeii, etc. — are renowned for their picturesqueness and archæological interest. Population, 697,917.

Netherlands, The, or **Holland** (Dutch Nederland, or Koninkrijk der Nederlanden), is a kingdom of Europe on the North Sea, north of Belgium and west of part of Northern Germany. In addition to its European territories, Holland possesses extensive colonies and dependencies in the Asiatic archipelago and America; including Java, Sumatra, a great part of Borneo, Celebes, part of New Guinea, Surinam or Dutch Guiana, the West Indian islands of Curacao, Saba, St. Eustatius, etc. Some portions of the Netherlands proper are sixteen to twenty feet below the surface of the sea, and nearly all parts too low for natural drainage. The coast line is very irregular, being marked by the great inlet of the Zuider Zee, as well as by various others, and fringed by numerous islands. In great part the coast is so low that were it not for massive sea-dykes, large areas would be inundated and lost to the inhabitants. In the interior also dykes are a common feature, being built to protect portions of land from the lakes or rivers, or to enable swampy pieces of land to be reclaimed by draining, the water being commonly pumped up by windmills. These inclosed lands are called "polders," and by the formation of the polders the available area of the country is being constantly increased, lakes and marshes being converted into fertile fields, and considerable areas being even rescued from the sea. One of these reclamations was the Lake of Haarlem, the drainage of which, yielding more than 40,000 acres of good land now inhabited by about 12,000 persons, begun in 1839, was finished in 1852. Almost the only heights are the sand hills, about 100 to 180 feet high, along the coast, and a similar chain of low hills, southeast of the Zuider Zee. In the same line with the sand hills, extending past the mouth of the Zuider Zee, runs a chain of islands, namely, Texel, Vlieland, Terschelling, Ameland, etc., which seem to indicate the original line of the coast before the ocean broke in on the low lands. The coast of Friesland, opposite these islands, depends for its security altogether on artificial embankments. The highest elevation, 656 feet, is in the extreme southeast. The general aspect of the country is flat, tame, and uninteresting, and about a fifth of the whole surface consists of marsh, sand, heath, or other unproductive land. Wheat, of excellent quality, is grown only in favored portions of the south provinces. Rye, oats, and buckwheat, with horse-beans, beet, madder, and chicory, are more common crops; and tobacco is cultivated in the provinces of Gelderland, South Holland, and Utrecht; flax in North Brabant, South and North Holland, Friesland, and Zeeland; and hemp, sugar-beet, oilseeds, and hops in various parts of the kingdom. Culinary vegetables are cultivated on a large scale, not merely for the sake of supplying the internal demand, but also for the exportation of the seeds, which form an important article of Dutch commerce. But it is in stock (cattle, horses, sheep, swine, goats), and dairy products in particular, that the rural industry of the Netherlands shows its strength. The commerce of the country was, at one time, the most important in the world, and is even yet of great importance and activity. The foreign trade centers chiefly in Amsterdam and Rotterdam. The industrial occupations are varied. Shipbuilding and subsidiary trades are among the chief. Of textile manufactures, that of linen is the most important; but silks and velvets, as well as woolens and cottons, are produced in considerable quantity. Pigments, brandy, gin, paper, glass, earthenware, etc., are among the more important products. Large numbers of the seaboard population are employed in the deep-sea fisheries.

New Orleans, the largest city in Louisiana and in the southern part of the United States, is located on both sides of the Mississippi River, 107 miles from its mouth. Built originally in the bend on the left side of the river, it was called the "Crescent City," but it has grown so rapidly as to lose its former shape. It is protected by great levees from the overflow of the river. It is divided into the American and the French quarters; in the latter the

French language, manners, and customs still rule. Here dwell the old Creole families. The annual Mardi-Gras festival is as unique as it is magnificent. New Orleans is the seat of the United States mint and of Tulane University. Population, 1920 census, 387,219.

New York City, the largest city in the world, occupies the whole of the island of Manhattan lying between Hudson and East rivers, in the southeast corner of the State of New York, and large contiguous areas, the total area being 327 square miles. The Greater City comprises the boroughs of Manhattan, Bronx, Brooklyn, Queens, and Richmond. Manhattan, or the city proper, is eighteen miles from the Atlantic, with which it is connected by New York Bay. The harbor of New York, forming the inner portion of its bay, is one of the safest and finest commercial natural basins known, is strongly fortified, and has lighthouses at its respective entrances. Manhattan Island is separated from the mainland of the State by the Harlem River and Spuyten Duyvel Creek. Built on a long, narrow, and gently undulating spit of land, New York, viewed from seaward, presents to the eye of the spectator a most striking and picturesque sky line. The city, as seen internally, is characterized by all those salient features of space, development, and architectural attraction, which unite in giving it metropolitan rank. Broadway, its chief artery, extends the whole length of Manhattan, or more than 13 miles, and is one of the finest thoroughfares in the world. The shopping, hotel, and theater district from Madison Square for a distance of 35 blocks along Broadway to Columbus Circle has received international celebrity as the "Great White Way." The principal civic and social centers from the Battery northward are City Hall Square, containing the old city hall, and flanked by the new municipal building, and the World and other newspaper buildings in Park Row; Union Square; Madison Square, where stand the celebrated Flatiron building, Madison Square Garden, and the Metropolitan Tower; Bryant Square near which are grouped the new public library, the new Grand Central station, and many notable hotels and theaters, and the section from Columbus Circle to the Plaza at the entrance to Central Park. This great park, the principal of the nineteen public squares and grounds of New York City, is a magnificently and picturesquely laid out area of 843 acres. It contains the Metropolitan Museum of Art and is rich in notable statuary. Facing Central Park from the east is "Millionaires' Row," and in this immediate vicinity are the splendid mansions of many of the oldest and best known families in America. As a manufacturing place, New York carries on various and important industries, embracing the chief articles of fabrication and use required by civilized life. Commercially, its trade is surpassed only by that of London and Liverpool; it constitutes the main American emporium and is the entrepôt of a vast and yearly increasing export and import traffic. New York, too, besides being the financial focus of the Union, is the port at which the bulk of immigrants into the United States arrive. It has progressed in size, wealth, and population until it has become the largest city in the World. Pop., 1920 census, 5,620,048.

New York State Barge Canal. A system of inland waterways based on the improvement and extension of four older canals, namely, the Erie, the Oswego, the Champlain, and the Cayuga and Seneca canals. The project was authorized in 1903 by the people of New York who, during the ensuing 12 years, voted bond issues totaling $154,800,000 for construction. This involved about 440 miles of improvement or new construction, together with the canalization of some 350 miles of lakes and rivers. The resulting waterway system, known as the Barge Canal, comprises a total length of almost 800 miles. It connects the waters of the Hudson with those of Lake Erie, Lake Ontario, Lake Champlain, Lake Cayuga, and Lake Seneca by a channel 12 feet deep and at least 75 feet wide at the bottom, with standard locks admitting the passage of 2000-ton barges.

Niagara Falls. The Niagara River, which flows from Lake Erie north into Lake Ontario, is about thirty-six miles in length; its descent from the level of one lake to that of the other is about 334 feet. At the foot of Grand Island, which reaches within one and one-half miles of the falls, the river is contracted to a width of two and one-half miles, and grows narrower as it proceeds. By this, and by the descent in the channel, which is about sixty feet in the mile, are produced the swift currents known as the rapids, in which the river, not withstanding its great depth, is perpetually white with foam. At the falls, which are twenty-two miles from Lake Erie, the river is divided by an island called Goat Island; but the largest portion of the water is sent down by the Canadian side. On this side is the grander cataract, which has been named the Horseshoe Fall, and which is about 600 yards in width and 154 feet high. The water rushes over with such force that it is thrown about fifty feet from the foot of the cliff. The separation caused by Goat Island leaves a large wall of rock between the Canadian and American falls, the latter being again divided by an islet at a short distance from Goat Island. This fall is from eight to ten feet higher than the Horseshoe, but only about 220 yards wide. A stratum of rock runs across the direct course of the river, three or four miles below, which, after forming a vast circular basin, with an almost impassable whirlpool, is forced away at right angles to its old channel. The total energy of the falls is calculated at 16,000,000 horsepower, and the work of utilizing this power has led to some of the most stupendous engineering feats ever undertaken.

Nile (Latin, Nilus), a large and celebrated river of Africa, formed by the confluence of two branches, the Bahr-el-Azrek, or "Blue River" (often called the "Blue Nile"), and the Bahr-el-Abiad, or "White River." ("White Nile"). The first-mentioned arm rises in Abyssinia, and taking a northerly course through the Lake of Dembea, joins the Bahr-el-Abiad at Khartoum, after being in some places broken by cataracts. The real sources of the Nile were, until recently, supposed to lie in

THE WORLD
Prepared especially for this Volume
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Showing Aerial Distances between Principal Places
thus:
Scales along the Equator
NAUTICAL MILES
0 500 1000 2000 3000
KILOMETERS
0 500 1000 2000 3000 4000
Arctic Ocean
Pacific Ocean
Indian Ocean
Atlantic Ocean
Antarctic
ANTARCTIC CIRCLE
ARCTIC CIRCLE
TROPIC OF CANCER
EQUATOR
TROPIC OF CAPRICORN
C.Chelyuskin
New Siberia
Wrangell I.
Pt.Barrow
C.Bathurst
Parry Islands
Melville Sound
Banks I.
Great Bear Lake
Great Slave Lake
Lena R.
SIBERIA
ALASKA
East Cape
C.Prince of Wales
Nome
Bering Strait
Yukon R.
Mackenzie R.
Dawson
Yakutsk
Okhotsk
Bering Sea
Pribilof Islands
Sea of Okhotsk
Kamchatka
Sitka
DOMINION OF
Irkutsk
Nikolaievsk
Sakhalin Island
Kurile Islands
Aleutian Islands
Queen Charlotte Islands
Vancouver
Vancouver Island
Winnipeg
Seattle
Portland
Missouri R.
CHINESE REPUBLIC
Vladivostok
Amur R.
Peking
Tientsin
Kiaochau
Port Arthur (Russ.)
Hwang Ho
Wei Hai Wei (Br.)
Yellow Sea
Tokyo
Honshu
Yokohama
Shanghai
Yang-tse-kiang
Formosa
Canton
Hongkong
Mandalay
Rangoon
Bangkok
Luzon I.
Philippine Islands
Manila
Saigon
Hue
Hainan
Marianas Is.
Guam (U.S.)
Wake I.
Midway I.
Morrell I.
Marcus I.
Honolulu
Hawaii (U.S.)
C.S.Lucas
Revillagigedo Islands
Mexico
San Francisco
Los Angeles
San Diego
New Orleans
MEXICO
MICRONESIA
(Japanese Mandate)
Caroline Islands
Marshall Is.
Gilbert Is.
Palmyra I.(U.S.)
Fanning I.(Br.)
Christmas I.(Br.)
Howland I.(U.S.)
Baker I.(U.S.)
Nauru (Br.Man.)
Phoenix Is.(Br.)
Galapagos Islands
Sulu Is.
Celebes
Borneo
Malay Peninsula
Labuan
Singapore
Achin
Sumatra
Java
DUTCH EAST INDIES
Batavia
Timor
Darwin
Gulf of Carpentaria
Thursday I.
Coral Sea
New Guinea
Solomon Is.
Bismarck Archipelago
MELANESIA
Silice Is.(Brit.)
Union Group (Br.)
Manahiki Is.(Br.)
Marquezas Is.(Fr.)
Samoa
POLYNESIA
New Hebrides (Br.-Fr.)
Futuna (U.S.)
Society Is.(Fr.)
Paumotu Is. or Low Archipelago (Fr.)
Tahiti (Fr.)
Fiji (Brit.)
New Zealand (Mans.)
Loyalty Is.(Fr.)
Tonga Is.(Br.)
Cook Is.(Br.)
Austral Is.(Fr.)
Pitcairn I.(Br.)
Christmas I.(Br.)
Keeling (Cocos) Is.(Br.)
N.W.Cape
New Caledonia (Fr.)
AUSTRALIA
Brisbane
Kermadec Is.(Brit.)
Perth
C.Leeuwin
Albany
Adelaide
Melbourne
Sydney
Cape Howe
Auckland
NEW ZEALAND
North Island
Wellington
South Island
Chatham Is.(Br.)
Dunedin
Tasmania
Hobart
Stewart I.
Antipodes (Br.)
Bounty Is.(Br.)
Royal Company Is.(Br.)
Auckland I.(Br.)
Campbell I.(Br.)
Macquarie I.(Br.)
Extreme Limits of Icebergs
Scale of English Statute Miles at different Latitudes
1000 500 0
0° 30° 70°
THE M.-N. WORKS, BUFFALO.
Longitude East from Greenwich
Longitude West
90° 105° 120° 135° 150° 165° 180° 165° 150° 135° 120° 105°
80° 70° 60° 50° 40° 30° 20° 10° 0° 10° 20° 30° 40° 50° 60° 70°

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Lakes Victoria Nyanza and Albert Nyanza, discovered by the English explorers Speke and Baker. After the union of the two branches at Khartoum, the Nile forms one grand main river, taking a generally winding course north, as far as Edab, in Dongola, where it forms what is called the Great Bend. Thence flowing through a country rich in architectural trophies of the past, and rendered highly fertile by its annual inundations, the Nile empties into the Mediterranean by a delta of seven mouths, of which that of Rosetta, the principal one, has a width of 1,800 feet, with a depth of five feet in the dry season. Total length, 3,500 miles from Victoria Nyanza.

Norway is a kingdom of Europe, occupying the western portion of the Scandinavian peninsula. The coast line is extensive, of bold outline, and deeply indented by fiords and fringed with almost innumerable islands, chief among which are the Loffoden group. The surface of the country is rugged and somewhat bleak, comprising a succession of mountains and valleys. The Kjölen, or Great Scandinavian chain, running south from Finland for several hundred miles, forms an Alpine barrier between this country and Sweden; in the province of Trondhjem it lapses into the Dovrefjeld, which, with its spurs, extends nearly as far south as the Naze. Highest points, Glittertind and Galdhöpiggen, each about 8,400 feet. Chief rivers, the Glommen and Tana; lakes, those of Mjosen, Fœmund, and Sperdillen. A large extent of the mountain districts produces only lichens, mosses, and hardy berry-yielding plants; the Scotch fir, spruce and birch cover extensive tracts, constituting nearly half of the country. The hardier fruits flourish well. Agriculture, though pursued with some vigor of late years, is still unable to furnish sufficient produce for home consumption. Flax and hemp are raised in some parts; in others, barley and oats. Next, or about equal, in importance to the timber trade are the cod and herring fisheries, which employ a large part of the population during the entire year. In Finmark, the fisheries and reindeer form the only wealth and source of subsistence of the population. The mineral products are similar to but less considerable than those of Sweden. Shipbuilding is largely carried on, and the chief exports include timber, fish, fish oil, minerals, furs, feathers, and ice. Chief cities and towns are Christiania, Bergen, and Trondhjem.

Nyassa, a lake in the heart of Africa, which Livingstone discovered in 1859, by ascending the River Shiré. The lake is 340 miles long, about twenty-six miles wide, and is 1,300 feet above sea level. It is in many places over 100 fathoms in depth. The scenery of Nyassa is described as grand in the extreme, though much of the land surrounding it is low and marshy.

Oakland, the county seat of Alameda county, California, is situated directly across the bay from San Francisco, with which it is connected by ferries. It has large industrial and manufacturing interests, a splendid harbor, and is the western terminus of the Southern Pacific, Atchison, Topeka and Santa Fé, and the Western Pacific railroads. It is a beautiful residential city. Berkeley, a city immediately adjoining, is the seat of the University of California. Population, 1920 census, 216,261.

Obelisk, a column of a rectangular form, diminishing towards the top, generally terminating in a low pyramid. The proportion of the thickness to the height is nearly the same in all obelisks, that is, between one-ninth and one-tenth; and the thickness at the top is never less than half, nor greater than three-fourths of the thickness at the bottom. Egypt abounded with obelisks, which were always of a single block of hard stone; and many have been removed thence to Rome and other places. They seem to have been erected to record the honors or triumphs of the monarchs. The two largest obelisks were erected by Sesostris in Heliopolis; the height of these was 180 feet. They were removed to Rome by Augustus. A fine obelisk from Luxor was erected in Paris in 1833; and the two known as Cleopatra's Needles are now in London and New York, ornaments of public places. The obelisks which were common to Rome and Florence had all been removed from Egypt during its domination by the Roman emperors.

Oberammergau, a village in Upper Bavaria, celebrated because in 1633, in gratitude for the cessation of a plague, the inhabitants took a vow pledging the performance, every ten years, of the passion-play of Christ's crucifixion and ascension. The performance takes place every Sunday during the summer, on a large wooden stage open to the sky, and it usually lasts eight hours. Primarily regarded by these Bavarian villagers as a religious exercise, it has become in their performances a mystery play of impressive beauty. Latterly, however, it has taken the character of a European amusement and a source of profit.

Ohio, a river in the United States of America, formed by the confluence of the Allegheny from the north and the Monongahela from the south at Pittsburgh in Pennsylvania, where it is a navigable stream 600 yards broad. It flows west-southwest, separating the States of Virginia and Kentucky on the south from Ohio, Indiana, and Illinois on the north, and enters the Mississippi at Cairo. Its length from Pittsburgh to its junction with the Mississippi is 975 miles; area of basin, 214,000 square miles. The width of the river varies from 400 to 1,400 yards; average width, about 800 yards, at its mouth 900 yards. Its principal affluents are the Miami, Kentucky, Wabash, Green, Cumberland, and Tennessee.

Ontario, Lake, the most easterly of the great lakes of North America, lying along the northwest side of the State of New York, and forming part of the boundary between the United States and Canada; greatest length, 190 miles; greatest breadth, fifty-five miles; area, 7,250 square miles. It receives the waters of Lake Erie by the Niagara, and discharges its waters by the St. Lawrence into the Atlantic, 1,000 miles distant. The Hudson river and the Oswego and Erie canals form a connection, through the United States, between it and the Atlantic. It is navigable throughout its whole extent and at all seasons. The most important places on its shores are Toronto, Hamilton,

Kingston, and Coburg in Canada, and Oswego in the United States.

Oporto, the second city of the republic of Portugal, in the province of Minho, about two miles from the mouth of the Douro. The city is picturesquely situated on a declivity above the river, and has several well-built suburbs, with one of which, Villanova de Gaya, on the opposite bank of the river, it is connected by an elegant wire suspension bridge, about 750 feet in length. It is the seat of a bishopric, and has a cathedral. The city has some manufactures of hats, silks, linen, and pottery; but it chiefly depends on its trade in wine, of which large quantities are annually exported, chiefly by British merchants. Oporto is the ancient *Portus calensis*. Population, 1920, 215,330.

Orinoco, one of the great rivers of South America, has its origin on the slopes of the Sierra Parima, in the extreme southeast of Venezuela; its exact sources were only discovered in 1886, by Chaffanjon. It flows at first west by north, a mountain stream. A little below Esmeralda it divides and sends off to the south an arm, the Cassiquiare, which, after a course of 180 miles, enters the Rio Negro, a tributary of the Amazon. The other branch on reaching San Fernando, is met by the strong current of the Guaviare; the united stream then turns due north, and, after passing over the magnificent cataracts of Maypures and Atures, and picking up the Meta on the left, meets the Apure, which likewise strikes it from the left. Below the confluence with the Apure, the Orinoco turns east and traverses the llanos of Venezuela, its waters with an average breadth of four miles, being augmented from the right by the Caura and the Caroni. About 120 miles from the Atlantic, into which it rolls its milk-white flood, its delta (8,500 square miles) begins. Of the numerous mouths which reach the ocean over 165 miles of coast line only seven are navigable.

Orleans (*or-lā-on'*), English (*or'lē-anz*), a city of France, the capital of the department of Loiret, about seventy-six miles southwest of Paris. It is situated on the right bank of the Loire, and on the edge of the Forest of Orleans, which is 146 square miles in extent. The city is well and regularly built, and has a large trade, and several manufactures. Its cathedral, which dates only from the Seventeenth Century, is one of the finest Gothic edifices in France. The city was besieged by the English in 1428, and was saved by the heroism of Joan of Arc, whose house is still preserved, and of whom the city contains three statues. It gives its name to the Royal House of Orleans, of which the Bourbons constitute the principal branch. Population, 72,096.

Osaka or **Ozaka,** an important city of Central Japan, at the head of the gulf of the same name, and at the mouth of the Yodo River, which issues from Lake Biwa. The city covers an area of about eight square miles, and is intersected with canals. Its fine castle, the stones of whose walls are of astonishing size, was constructed in 1583, and the palace, built afterward in its precincts and destroyed in 1868, was perhaps the most magnificent structure in Japan. Population, 1920 census, 1,252,972.

Ottawa, a city in the province of Ontario, capital of the Dominion of Canada, on the right bank of the Ottawa, about ninety miles above its confluence with St. Lawrence, 100 miles west of Montreal, and on the Canadian Pacific Railway. The city, divided into the Upper and Lower town by the Rideau Canal, has wide streets crossing at right angles, and some of the finest buildings in the Dominion. The chief are the government buildings, constructed of light-colored sandstone, in the Italian-Gothic style. The parliament building, whose corner stone was laid by the then Prince of Wales (afterwards Edward VII) in 1860, was 470 ft. long; it was dominated by the Victoria tower which rose 180 ft. over the main entrance. The Commons wing was destroyed by fire Feb. 3, 1916, and the rest of the parliament building seriously damaged. The library just back of the main building was saved, although many books and documents were damaged. The buildings cover about four acres and are said to have cost several millions. The educational institutions include a Roman Catholic College, the Canadian Institute, the Mechanics' Institute, and Athenæum, etc. Ottawa has important and increasing manufactures, and is the great center of the lumber trade. It is connected with Hull, on the Quebec side of the Ottawa, by a suspension bridge. Ottawa was founded in 1827 by Colonel By, and until 1854 was known as Bytown. Population, 1921 census, 107,732.

Ottawa, a river in the Dominion of Canada, forming for a considerable part of its length the boundary between the provinces of Quebec and Ontario. It rises in the high land which separates the basin of Hudson's Bay from that of the St. Lawrence, and after a course of some 750 miles discharges into the St. Lawrence by two mouths forming the island of Montreal. Six miles above the city of Ottawa, rapids begin which terminate in the Chaudière Falls, where the river, here 200 feet wide, takes a leap of forty feet. Its banks, mostly elevated, offer magnificent scenery. Immense quantities of valuable timber, floated down the Ottawa to Ottawa city, are manufactured into lumber.

Oxford, a city and county borough in England; capital of Oxfordshire, and seat of one of the most celebrated universities in the world; about fifty miles west-northwest of London, on a gentle acclivity between the Cherwell and the Thames, here called the Isis. Of the university buildings, the most remarkable are Christ's Church, the largest and grandest of all the colleges, with a fine quadrangle and other buildings, a noble avenue of trees (the Broad Walk), the cathedral serving as its chapel; Magdalen College, considered to be the most beautiful and complete of all; Balliol College, with a modern front (1867-1869), and a modern Gothic chapel; Brasenose College; and New College (more than 500 years old), largely consisting of the original buildings, and especially noted for its gardens and cloisters; besides the Sheldonian Theater, a public hall of the university; the new examination schools, new museum, Bodleian Library, Radcliffe Library, and other buildings belonging to the university. Oxford depends mostly on the university, and on its attractions as a place of residence. Population, 1921, 57,052.

Pacific Ocean, the largest of the five great oceans, lying between America on the east, and Asia, Malaysia, and Australasia on the west. The name "Pacific," given to it by Magellan, the first European navigator who traversed its wide expanse, is doubtless very appropriate to certain portions of this ocean; but, as a whole, its special claims to the epithet are, at the least, doubtful, though the name has by long usage become too well established to be easily supplanted by any other. The greatest length of the Pacific Ocean, from the Arctic (at Bering Strait) to the Antarctic Circles is 9,200 miles, and its greatest width, about 10,300 miles; while its area may be roughly estimated at about two-fifths of the whole surface of the earth. Its surface is studded with numerous islands, either scattered or in groups. The deepest sounding yet found in the Pacific Ocean is 31,614 feet, or about six miles — more than equal to the height of the highest mountain on the globe. The coasts of the Pacific Ocean present a general resemblance to those of the Atlantic, and the similarity in the outline of the western coasts of each is even striking, especially north of the equator. The shore on the American side is bold and rocky, while that of Asia varies much in character. Though the Pacific Ocean is by far the largest of the five great oceans, the proportion of land drained into it is comparatively insignificant. Its basin includes only the narrow strip of the American continent to the west of the Andes and Rocky Mountains; Melanesia, which contains few rivers, and none of them of large size; the Indo-Chinese states, China proper, with the eastern part of Mongolia, and Manchuria in the Asiatic continent.

The currents of the Pacific Ocean are less marked in character than those of the Atlantic. In the northern trade wind belt a great equatorial current sweeps westward until at the western side it is largely deflected northward to the belt of westerly winds, where it flows north-eastward as the Kuro Shiwo, or Japan Current, toward North America. A part of it subsequently turns southward along the American coast until it joins the equatorial current again; thus the surface drift of the Northern Pacific Ocean constitutes a great eddy revolving slowly in the N. E. S. W. direction. In the Southern Pacific a similar surface drift in the opposite direction, namely, N. W. S. E., is maintained, though not as well defined, because of the absence of the circumscribing continents. The existence of this ocean first became known to Europeans through Columbus, who had received accounts of it from some of the natives of America, though it was first seen by Balboa, September 29, 1513, and first traversed by Magellan seven years afterward. Captain Cook deserves the first place among the investigators of the Pacific Ocean.

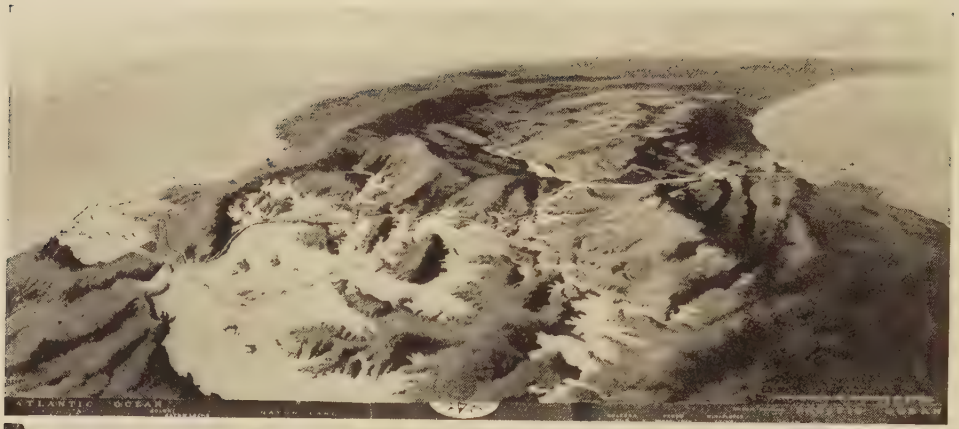
Palestine, a country of Southwestern Asia, forming the southern portion of Syria, in which most of the events recorded in Scripture took place. It stretches from Mount Hermon to the Desert of Arabia, and is bounded by the Mediterranean on the west, and by the Syrian Desert on the east. The deep valley of the Jordan divides the country from north to south, the surface on either side rising into elevated plains with alternate hills and valleys. The climate is mild and warm, though in the hilly districts the winters are often severe, and snow sometimes falls. The soil may, with care be rendered exceedingly productive, but agriculture is in a backward condition. In the time of the Romans it was divided into four tetrarchies or presidencies, viz., Judæa, Samaria, Galilee, and Peræa. The first three were included in what was considered Palestine proper; the last embraced the territory beyond the Jordan. There was also a fifth division, Idumæa, part of which lay, however, out of the borders of Palestine. In the Seventh Century this country fell into the power of the Mohammedans, and afterwards of the Turks, which led to the wars called the Crusades. In 1099 the city of Jerusalem was taken, and was, under Godfrey de Bouillon, made the capital of a Latin kingdom, which lasted for above eighty years. In 1187 the country was reconquered by Saladin, and in 1291 the Crusaders were finally expelled. From this time it continued subject to the sovereigns of Egypt, until the conquest of both Syria and Egypt by Selim I., in 1517, when they were brought under the Turkish sway. In 1919 the country was conquered by British forces, and, in 1920, the Supreme Council of the Allied Powers gave a mandate for Palestine to Great Britain.

In recent years the country has been carefully surveyed, many hitherto doubtful sites have been settled, and much light has been thrown upon the history of the country, especially as it is contained in the Bible records.

The area of Palestine under British control is about 9000 square miles. Its population in 1919 was 647,850, of whom about 515,000 were Moslems, 65,000 Jews, and 62,000 Christians. In 1920, 10,000 Jewish emigrants entered the country; the Jewish Zionist organization in that year controlled over 100 schools, with nearly 12,000 pupils.

Panama, City of. The capital and chief port of both the republic and province of the same name, founded by Avila in 1519, is notable as the oldest European settlement upon the mainland of America. It is built upon a coral peninsula which juts out at the head of the bay of Panama. The population of the city in 1917 was 61,369.

Soap and chocolate are manufactured but the inhabitants have always derived their support chiefly from the interoceanic transport trade. After the 17th and 18th centuries, this declined. It was partly revived by the second great discovery of gold in the new world, in California, 1848. This led to the construction of the Panama railway, a single track line 47½ miles long from Colon to Panama. The adoption of the same route for the interoceanic canal has greatly enhanced the city's commercial importance. Balboa (formerly La Boca), three miles west by railway on the Canal Zone, is the actual seaport of the canal. The future prosperity of Panama will depend upon the tariff policy and other regulations adopted for that port by the United States. There is no land-locked harbor, but the roadstead is closed by a group of islands to the south and, though shallow,



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A—Bird's-eye View of the Isthmus and Canal Zone.

B—Gaillard (formerly Culebra) Cut at Deepest Point; Total Length, 8 Miles.

C—Gatun Locks; Three Sets in Pairs, Usable Length Each 1,000 Feet, Width 110 Feet.

PANAMA CANAL

affords safe and commodious anchorage. The city's imports are about double its exports. The latter are chiefly gold, rubber, hides, mother-of-pearl, coffee and cocobolo wood. Steamship lines ply to San Francisco, Yokohama, and various other Pacific ports. Over one million tons of merchandise are annually received from more than one thousand ships to be transported across the isthmus.

Panama, Isthmus of. A thin strip of land between Central and South America which separates the Atlantic and Pacific oceans by an average span of but 70 miles. By its low mountain passes it admits of easy portage from sea to sea. The two oceans approach within 31 miles between the bays of San Blas and Panama. Just here occurs the famous Culebra pass, only 287 feet above sea level, the lowest point but one on the great continental divide of the western hemisphere. This strategic spot, as the natural highway from Europe and the eastern shores of the two Americas to the west coast of the new world and to the orient, has become world famous as the site of the Panama railway and transisthmian canal.

Panama, Republic of. This Central-American republic occupies the entire isthmus from ocean to ocean between Colombia and Costa Rica. It thus has great commercial and military importance. Its greatest dimensions are length 480, width 110 miles. Its area is 32,380 square miles. Its population in 1920, exclusive of the Canal Zone, was 401,428, chiefly of mixed Indian, negro and Spanish descent. Panama was part of Colombia when that republic revolted from Spain in 1819, and has been subject in the main to the political vicissitudes of that state, but, being a geographically distant and distinct territory, has thrice seceded. It finally achieved independence in 1903 through the intervention of the United States.

The climate is tropically warm and damp. The land is well suited to agriculture, the soil fertile and the drainage excellent; but less than one-third is under cultivation and that very imperfectly developed. About one-half the cultivated area is devoted to the banana, the great staple crop. There is much good grazing land, but, like agriculture, stock-raising is backward. Recently some blooded stock has been imported for breeding and some hides are exported. The interior is heavily wooded with dense tropical forests and jungles. India rubber and valuable hard-wood trees abound. Cereals, coffee, indigo, tropical nuts and spices, cacao, tobacco, and such medicinal plants as sarsaparilla, copaiba and ipecacuanha either grow wild or thrive under cultivation.

The extent of the mineral resources is unknown. Gold is being successfully mined; copper is also found; valuable deposits of coal are known to exist; salt is mined, being a government monopoly; iron ore is abundant. Pearl oysters are found on the Pacific coast. Many mineral springs occur near extinct volcanoes. The trade is chiefly with the United States, and to a much less extent with Great Britain. The exports to the United States for the fiscal year ending June 30, 1920, were $8,272,586, chiefly bananas. Other exports were hides, rubber, cocoanuts, limes, native curios and quaqua bark. The imports from the United States for the same year were $33,333,155.

Transit is chiefly by river to the coast and thence by sea. There are no railroads, except the single track transisthmian line 47½ miles in length from Colon to Panama, nor any wagon roads except in and about the principal towns. The crude trails of the interior are almost wholly unfit for travel. The latest maps mark most of the interior "unexplored."

Panama Canal. A treaty between the United States and Panama was signed Nov. 18, 1903, providing for the construction and maintenance of an interoceanic canal. Under this treaty the United States guarantees the independence of the republic of Panama. Panama grants to the United States in perpetuity the use, occupation, and control of a zone, called the Canal Zone, five miles wide on each side of the canal route, and within this zone the exclusive control for police, judicial, and sanitary purposes. The cities of Panama and Colon are not within the grant, but the United States has complete jurisdiction in both the cities and in their harbors in all that relates to sanitation and quarantine. For these concessions the United States paid Panama $10,000,000 on the ratification of the treaty, 1904, and will pay $250,000 annually beginning nine years after exchange of ratifications.

Work was begun in June, 1904, under a civil commission with J. F. Wallace as chief engineer. The commission was reorganized in April, 1905, and in June Wallace was succeeded by John F. Stevens who resigned in 1907. Col. G. W. Goethals became engineer in chief in 1907, and it is to him that the success of the canal project is largely due, not alone from an engineering point of view, but because of his skill in dealing with an army of 40,000 workmen speaking forty-five languages.

The canal from deep water in the Atlantic to deep water in the Pacific is about fifty miles in length, and connects the cities of Colon and Panama. It has six locks, three at Gatun on the Atlantic side and three on the Pacific side — one at Pedro Miguel and two at Miraflores. The 31½ miles of canal between Gatun and Pedro Miguel are from 82 to 87 feet above sea level. This is known as summit level.

At Gatun a dam 7,200 feet long confines the waters of Gatun lake and forms a reservoir for receiving the floods of the Chagres and other rivers and supplies water for lockage. The dam is 2,000 feet wide at its base, 100 feet wide at the top and rises 115 feet above the sea level. Between Gatun and the Caribbean a space 1,000 feet in width forms a waiting basin for ships. After passing Gatun the channel for 16 miles is about 1,000 feet wide, narrows to 300 feet through Culebra cut, a distance of 9 miles, and widens again to 500 feet, maintaining this width until it reaches the ocean. The cutting at Culebra was the most difficult part of the excavation owing to the earth slides with which the engineers had to contend. A smaller dam at Pedro Miguel contains a lock which lowers

the ships to the surface of Lake Miraflores. One and a half miles farther on the canal descends 55 feet to the level of the Atlantic by means of a double lock.

Gamboa dike, between Gatun lake and Culebra cut, the last obstruction to navigation from ocean to ocean, was destroyed on October 10, 1913, and the water was let into Culebra cut. The name Culebra cut was changed to Gaillard cut by executive order of President Wilson in April, 1915.

In August, 1914, the canal was formally opened to the commerce of the world. The opening was celebrated by the Panama-Pacific international exposition held at San Francisco, February 20 to December 4, 1915.

The canal shortens the sea journey between New York and the west coast of the United States by over 8,000 miles; it shortens the voyage from New York to Valparaiso by 4,000 miles.

While the possibilities and advantages of the Panama canal are yet to be demonstrated, and the yield from such an enormous investment remains to be seen, it is probable that its construction, which has cost the United States approximately $400,000,000, is the greatest engineering feat in the history of humanity.

Pantheon, The (*pan'-the-on*), Rome, was erected by Agrippa, son-in-law of Augustus, B. C. 27. There has been much discussion as to the original purpose of the building, but the name Pantheon was in use as early as A. D. 59. In 399 it was closed as a temple by decree of Honorius, and in 608 it was consecrated as a Christian Church, to which latter fact its preservation is doubtless due. The Pantheon is the only building of ancient Rome not now in ruins; excavations and removals are in progress to ascertain, if possible, its connection with the other ancient structures.

Papal States, that portion of Central Italy of which the pope was sovereign by virtue of his position. The territory extended irregularly from the Adriatic to the Mediterranean, and latterly comprised an area of 15,289 square miles, with 3,126,000 inhabitants. Rome was the capital. The foundation of the Papal States was laid in 754. Benevento was added in 1053. In 1102 Matilda of Tuscany left Parma, Modena, and Tuscany to the pope. In 1201 the Papal States were formally constituted an independent monarchy. Subsequently various territories were added to or subtracted from the pope's possessions, which were incorporated with France by Napoleon in 1809, but restored in 1814. A revolution broke out in Rome in 1848, and the pope fled to Gæta; but he was reinstated by French troops, and Rome was garrisoned by French soldiers until 1870. In the meantime one state after another threw off its allegiance to the pope and joined the kingdom of Italy. When the French left Rome in August, 1870, King Victor Emmanuel took possession of the city, declared it the capital of Italy, and thus abolished the temporal power of the pope.

Paris, the capital of France and of the department of the Seine. The city lies in the Seine valley, surrounded by heights, those on the north being Charonne La Villette, the Buttes-Chaumont, and Montmartre, those on the south, St. Geneviève, Montrouge, and the Butte-aux-Cailles. Through the valleys between these heights the river runs from east to west, inclosing two islands, upon which part of the city is built. It is navigable by small steamers. The quays or embankments, which extend along the Seine on both sides, being built of solid masonry, protect the city from inundation, and form excellent promenades. The river, which within the city is fully 530 feet in width, is crossed by numerous bridges, the more important being Pont Neuf, Pont des Arts, Pont du Carrousel, Pont Royal, Pont de l'Alma, etc. The city is surrounded by a line of fortifications which measures twenty-two miles; outside of this is the enceinte, while beyond that again are the detached forts. These now form two main lines of defense. The inner line consists of sixteen forts, the outer line of eighteen forts, besides redoubts. In the older parts of the city the streets are narrow and irregular, but in the newer districts the avenues are straight, wide, and well-paved. What are known as "the boulevards" include the interior, exterior, and military. That which is specifically called "The Boulevard" extends, in an irregular arc on the north side of the Seine, from the Place de la Bastille in the east to the Place de la Madeleine in the west. It includes the Boulevards du Temple, St. Martin, St. Denis, des Italiens, Capuchins, Madeleine, etc., and its length of nearly three miles forms the most stirring part of the city. Here may be noted also the magnificent triumphal arches of Porte St. Denis and Porte St. Martin, the former of which is seventy-two feet in height. On the south side of the Seine the boulevards are neither so numerous nor so extensive. Among the many public squares or places is the Place de la Concorde, one of the largest and most elegant squares in Europe, surrounded by fine buildings, and adorned by an Egyptian obelisk, fountains, and statues. But the most extensive parks are outside the city. Of these the Bois de Boulogne, on the west, covers an area of 2,150 acres, gives an extensive view toward St. Cloud and Mount Valerien, comprises the race courses of Longchamps and Auteuil, and in it are situated lakes, an aquarium, conservatories, etc. The Bois de Vincennes, on the east, even larger, is similarly adorned with artifical lakes and streams, and its high plateau offers a fine view over the surrounding country. Of the churches of Paris the most celebrated is the Cathedral of Notre Dame, situated on one of the islands of the Seine, called the Ile de la Cité. It is a vast cruciform structure, with a lofty west front, flanked by two square towers, the walls sustained by many flying buttresses, and the east end octagonal. The whole length of the church is 426 feet, its breadth 164 feet. The foundation of Notre Dame belongs to the sixth century; the present edifice dates from 1163, but was restored in 1845. The interior decorations are all modern. Saint Chapelle is said to be the finest Gothic masterpiece extant. The Panthéon, originally meant for a church, is the burial-place of the great men of the country, where lie the remains of Voltaire, Rousseau, and Carnot. Notable among the pub-

lic buildings of Paris are its palaces: The Louvre, a great museum containing splendid collections of sculpture, paintings, engravings, bronzes, pottery, and antiquities; the palace of the Tuileries, the Palais du Luxembourg, the Palais Royal, the Palais de l'Elysee, and many others. A notable and unique structure is the Eiffel Tower, a structure of iron lattice-work, 984 feet high, as yet the highest building in the world. The University Schools in the Quartier Latin attract the youth of all France; the chief are the Schools of Medicine and Law, the Scotch College, the College of France, and the Sorbonne.

The first appearance of Paris in history is on the occasion of Cæsar's conquest of Gaul, when the small tribe of the Parisii were found inhabiting the banks of the Seine, and occupying the island now called Ile de la Cité. Population, 1921 census, 2,863,711.

Parks and Monuments, National. National parks are more or less extensive tracts of public land set apart, protected, and administered by special act of Congress for the recreation and education of the people. The controlling purpose has usually been the preservation of scenic wonders, primitive wildernesses, archeological ruins, and places or objects of historical or other special interest. National monuments are not essentially different from national parks except in methods of establishment and administration. As a rule, monuments are smaller than parks and, as Congress does not provide funds or administrative machinery for their protection, they have been placed in charge of the nearest administrative officer of one of three departments—war, interior, or agriculture.

NATIONAL MONUMENTS

Name	Created	Location	Area Acres
Bandelier,	1916	New Mexico,	18,000
Big Hole Battlefield,	....	Montana,	....
Cabrillo,	....	California,	....
Capulin,	1916	New Mexico,	681
Casa Grande,	1918	Arizona,	480
Chaco Cañon,	1907	New Mexico,	20,629
Colorado,	1911	Colorado,	13,883
Devil Postpile,	1911	California,	800
Devil's Tower,	1906	Wyoming,	1,152
Dinosaur,	1915	Utah,	80
El Morro,	1906	New Mexico,	160
Gila Cliff Dwellings,	1907	New Mexico,	160
Gran Quivira,	1909	New Mexico,	160
Jewel Cave,	1908	South Dakota,	1,280
Katmai,	1918	Alaska,	1,088,000
Lewis & Clark Cavern,	1911	Montana,	160
Montezuma Castle,	1906	Arizona,	160
Mount Olympus,	1912	Washington,	299,370
Muir Woods,	1908	California,	295
Natural Bridges,	1909	Utah,	2,740
Navajo,	1912	Arizona,	360
Old Kasaan,	1916	Alaska,	30
Oregon Caves,	1909	Oregon,	480
Papago Saguaro,	1914	Arizona,	2,050
Petrified Forest,	1911	Arizona,	25,625
Pinnacles,	1908	California,	2,080
Rainbow Bridge,	1910	Utah,	160
Scott's Bluff,	1919	Nebraska,	2,054
Shoshone Cavern,	1909	Wyoming,	210
Sitka,	1910	Alaska,	57
Tonto,	1907	Arizona,	640
Tumacacori,	1908	Arizona,	10
Verendrye,	1917	North Dakota,	253
Walnut Cañon,	1915	Arizona,	960
Wheeler,	1908	Colorado,	300
Yucca House,	1919	Colorado,	10

NATIONAL PARKS

Name	Date of Founding	Location	Area Sq. Mi.
Crater Lake,	1902	Oregon,	249
General Grant,	1890	California,	4
Glacier,	1910	Montana,	1,534
Grand Canyon,	1919	Arizona,	958
Hawaii,	1916	Hawaiian Is.,	117
Hot Springs,	1832	Arkansas,	1½
Lafayette,	1919	Maine,	8
Lassen Volcanic,	1916	California,	123
Mesa Verde,	1906	Colorado,	77
Mount McKinley,	1917	Alaska,	2,200
Mount Rainier,	1899	Washington,	324
Platt,	1906	Oklahoma,	1⅓
Rocky Mountain,	1915	Colorado,	400
Sequoia,	1890	California,	252
Sully's Hill,	1904	North Dakota,	....
Wind Cave,	1903	South Dakota,	....
Yellowstone,	1872	Wyoming,	3,348
Yosemite,	1890	California,	1,125
Zion,	1919	Utah,	120

Parthenon, a celebrated temple of Athena (Minerva) at Athens, erected under the superintendence of Phidias, during the administration of Pericles, about 440 B. C. The Parthenon was 227 feet long by 101 feet broad, and sixty-five feet high; and it was built entirely of Pentelic marble, in the purest style of Doric architecture. In 1687, during a siege of Athens by the Venetians, a bomb exploded in the very center of the building, and threw down much of both the side walls. The ruins are still, however, in sufficient preservation to give a good idea of the ancient structure. A large number of fragments of the Parthenon were taken to England by Lord Elgin in 1812, and are preserved in the British Museum.

Patagonia, the name applied to the extreme southern portion of South America between the Rio Negro and the Strait of Magellan. In 1881 this large territory was divided between Chile and Argentina, the portion west of the Andes now belonging to Chile and that east of the Andes to Argentina. Patagonia east of the Andes consists mainly of vast undulating plains, frequently covered with shingles and broken by ridges of volcanic rock. Vegetation is scanty except near the Andes and in many places there are shallow salt lakes and lagoons. The Patagonians, now rapidly disappearing, are a nomad race divided into tribes, whose chief occupation is hunting and cattle breeding. Many tracts are suitable for European settlement and colonization is encouraged.

Peking, or **Pekin,** in the Province of Chihli, or Pechili, is the capital of China. It consists of two contiguous cities, each separately surrounded by walls, and together entered by sixteen gates. The entire circumference is twenty-five miles. The northern city, which is nearly a perfect square, consists of three enclosures. The outer one is used by Chinese traders. The second enclosure contains the residences of the dignitaries of the republic and foreign legations, the national literary institutions, the temples of Ancestors and Peace, and is inhabited mostly by the Manchus. The inner enclosure, or "forbidden city," surrounded by walls of yellow tiles, two miles in circumference, hence called the "Yellow Wall," contains the palaces

formerly occupied by the emperor. The southern city, called the Wai-ching, or "outer city," is also square, occupied by the Chinese, and is both the seat of business and the residence of most of the population. The wall is thirty feet high, twenty-five feet thick at the base, and twelve feet at the top. That of the imperial city is forty feet high. The principal streets are very wide and regular, running between opposite gates. The houses are generally one story high, and built of brick. Of the ornamental buildings, the most conspicuous are those commonly called triumphal arches. They consist of a large central gateway, with small ones on each side, all covered with narrow roofs, and, like the houses, are splendidly gilded, varnished and painted. Peking is indebted for its importance to its being the residence of the emperor and the seat of government. The country round the city being sandy and poor, a large portion of its supplies are brought from a distance — partly from sea by the Pei-ho, but principally by the Grand Canal and the Eu-ho, which connect it with Nankin, and most of the eastern provinces. The early history of Peking is involved in obscurity. Kublai Khan rebuilt it, and made it his capital in 1260. The Mongol dynasty, founded by Kublai Khan, continued to occupy this city till it was expelled from China, in 1367. In 1421, the third emperor of the Chinese dynasty of Ming transferred his residence thither from Nankin, since which time it has been the capital of China. During the "Boxer" uprising of 1900 the various foreigners in Peking were besieged in the English legation. For weeks they were given up as lost, but they managed to hold out till the arrival of the foreign troops. Population, about 1,300,000.

Pelée, Mont, an active volcano situated in the northwestern part of the island of Martinique in the West Indies. Previous to the terrible eruption of 1902, the elevation of the mountain was about 4,300 feet. The only eruptions of Mont Pelée previously recorded are those of 1762 and 1851. Prior to the eruption of 1902, a small lake occupied the flattened summit of the volcano, and was surrounded by beautiful and rank vegetation. The crater opened on April 25th, and for the several days ensuing the volcano gave warning of the impending outbreak. On May 8th the volcano threw up a tremendous column of explosive and exploded superheated steam, ashes, and glowing blocks, fully 1,500 feet in diameter, the initial velocity of which was computed at 100 miles an hour. The city of St. Pierre and its thirty thousand people were wiped out instantly. Only two inhabitants of the city proper seem to have survived. The most remarkable feature was the great mass of rock, 300 feet wide, a veritable obelisk, pushed upward 800 feet from the new crater. This has since been greatly reduced by disruption. Another eruption on August 30, 1902, destroyed about 2,500 people. The great eruption was extraordinary in its wide disturbance of the magnetic field, which was transmitted to the antipodal region of the earth in two minutes' time. The noise was heard at a distance of eight hundred and fifty miles.

Peloponnesus, the ancient name of the peninsula which forms the southern part of Greece, now called the "Morea." It is said to have derived its name from Pelops, a son of Tantalus, King of Phrygia, and grandson of Zeus (Jupiter), who was celebrated in Greek fable, and by whom the country was said to have been settled about 1280 B. C. The "Peloponnesian War," between the Athenians and the people of the Peloponnesus (431–404 B. C.) is the most famous of the wars of Greece. The area of the peninsula is 8,263 square miles, and its population about 1,500,000, divided among the five provinces, or nomarchies, of Argolis and Corinth, Achaia and Elis, Arcadia, Messenia, and Laconia.

Persia (native name *Iran*), the most extensive, opulent, and powerful kingdom of Western Asia, is bounded north by the Caspian Sea Asiatic Russia and Turkestan, east by Afghanistan and Beloochistan, south by the Persian Gulf and west by the Turkish territories. Length from north to south, about 700 miles; breadth, 900 miles. The surface of Persia is for the greater part a vast plateau, broken in upon in the north by the Elbruz Mountains, and in the west and south by various isolated ranges. In the more east and northeast parts are found the Great Salt Desert, and that of Luth. Persia is drained by the Aras, Kerkhas, etc., but has scarcely a river that can be termed navigable, though some of them extend several hundred miles in length, and possess great volumes of water. Some of its immense valleys abound with vegetable productions; among them are wheat of the very best quality, barley, and other cereals, cotton, sugar, rice, and tobacco. The vine flourishes in many of the provinces, and the wines of Shiraz are celebrated. The mulberry tree is largely cultivated, silk being one of the most important staples of the country. The chief manufacture is that of silk stuffs, of the richest kinds, textile goods, arms, carpets, shawls, etc. Persian commerce is very extensive, chiefly carried on with Russia via the Caspian Sea, and with British India via the Persian Gulf.

Petrograd—See **St. Petersburg,** 572.

Philadelphia is coextensive with Philadelphia County, Pa., and is situated on the Delaware and Schuylkill rivers, eighty-five miles southwest of New York. It is the largest city of Pennsylvania and the third largest in the United States. The city is built chiefly on a low peninsula between the two rivers. There is a water frontage on the Delaware River of over sixteen miles, of which more than five miles have docks. The harbor has been greatly improved by the removal of the islands in the middle of the river, and in front of the wharves there is an average depth of fifty feet. Among the attractions of the city is Fairmount Park, one of the largest public parks in the world, extending more than seven miles on both banks of the Schuylkill River, and more than six miles on both banks of Wissahickon Creek, giving it an area of over 3,000 acres. In 1876, the Centennial Exposition was held here. Memorial Hall, erected at a cost of $1,500,000, which was used for the art gallery of the Exposition, now contains a permanent industrial and art collec-

tion. Here also is the Horticultural Building filled with tropical and other plants and surrounded by thirty-five acres of ground devoted to horticulture. In the heart of the city, at Market and Broad streets, stands the City Hall, on a piece of ground which was formerly Penn Square. This great structure, usually called the Public Building, is said to be the largest building in the United States. It is built of white marble and granite. The central tower rises to a height of 547 feet, eleven and three quarters inches, and is surmounted by a colossal statue of William Penn, thirty-seven feet high. The total cost of the building was over $20,000,000. In addition to these, its chief public buildings comprise Girard College, United States Mint, customhouse, exchange, chamber of commerce, post office, etc. The State house contains the so-called Independence Hall, a chamber in which sat the Congress which issued the American Declaration of Independence in 1776. The Academy of Music, union league clubhouse, newspaper buildings and Masonic Temple, are imposing structures. In manufactures, Philadelphia ranks third in the United States. The chief products are locomotives, sugar, molasses, men's clothing, foundry and machine shop products, carpets and rugs, hosiery and knit goods, woolen and cotton goods, malt liquors, morocco, chemicals, packed meat, refined petroleum, silk, and silk goods. The great Cramp shipbuilding yards are on the Delaware, just west of the heart of the city. The institutions for higher education include the William Penn Charter School, founded in 1689, the University of Pennsylvania, several well-known medical colleges, and many others. Population, 1,823,779.

Philippine Islands lie north of Borneo and Celebes. They are 3,141 in number, with an area of about 120,000 square miles. Luzon, which is the largest, in the north, has an area of about 43,000 square miles, and Mindanao, in the south, an area of about 45,500 square miles. To the southwest of Luzon lies the long, narrow island of Palawan, formed of a mountain chain with low coast lines, cut with numerous streams, and exceedingly fertile. The forests abound in ebony, logwood, gum-trees, and bamboos. To the north of Luzon lie the Batan and Babuyan Islands. The former has a population of about 12,000 inhabitants; the latter is unpeopled. The Sulu Islands form a long chain from Mindanao to Borneo, having the same mountainous and volcanic structure as the Philippine Islands, and all are probably fragments of a submerged continent. Immense forests spread over the Philippine Islands, clothing the mountains to their summits, ebony, ironwood, cedar, sapanwood, gum trees, etc., being laced together and garlanded by the bush-rope or palasan, which attains a length of several hundred feet. The variety of fruit trees is great, including the orange, citron, breadfruit, mango, cocoanut, guava, tamarind, rose apple, etc.; other important products of the vegetable kingdom are the banana, plantain, pineapple, sugar cane, cotton, tobacco, indigo, coffee, cocoa, cinnamon, vanilla, cassia, the areca nut, ginger, pepper, etc., with rice, wheat, maize, and various other cereals. Agriculture, however, is still in a primitive condition. Gold is found in riverbeds and detrital deposits, being used, in form of dust, as the medium of exchange in Mindanao. Iron is plentiful, and fine coal beds, from one to four feet thick, have been found. Copper has long been worked in Luzon. There are also limestone, a fine variegated marble, sulphur in unlimited quantity, quicksilver, vermilion, and saltpeter — the sulphur being found both native and in combination with copper, arsenic, and iron. The Tagals and Visayans are the most numerous native races. They dwell in the cities and cultivated lowlands, 2,500,000 being converts to Roman Catholicism, and a considerable number, especially of the Visayans, Mohammedan. The mountain districts are inhabited by a negro race, who, in features, stature, and savage mode of living, closely resemble the Alfoors of the interior of Papua, and are probably the aborigines driven before the inroads of the Malays. A few of the negroes are Christians, but they are chiefly idolaters, or without any manifest form of religion, and roaming about in families without fixed dwelling. The Mestizos form an influential part of the population, by their activity engrossing the greatest share of the trade. These are mostly of Chinese fathers and native mothers. Few Spaniards reside in the Islands. The population of the Philippine Islands in 1918 was 10,350,730; the capital is Manila.

Phœnicia (*fē-nish'yă*), the name given by the Greeks and Romans to a fertile province of Syria, on the western declivity of Lebanon, and bordering upon the Mediterranean. Its limits varied at different times; generally it was included within two degrees of latitude, and was of narrow breadth. Its inhabitants were enterprising navigators, and the country has been called "the birthplace of commerce." Phœnician pilots and sailors navigated the vessels of Solomon; and, before other ships had ventured to lose sight of their own shores, colonies of this people were established in some of the most distant parts of Europe, Asia, and Africa. They were also distinguished for their knowledge of the arts and sciences. Phœnician workmen were employed at the building of the Temple of Solomon, and by Phœnicians the knowledge and use of letters were introduced into Greece. The climate of the country is mild; the land is abundantly watered; and it yields large crops of fruit, corn, cotton, and sugar. But its once populous and opulent cities are reduced, under the rule of a despotic government, to impoverished villages or masses of ruins. Under the Romans, Phœnicia formed a part of the Province of Syria. Since the beginning of the Sixteenth Century, it has formed a part of the Turkish Empire.

Pike's Peak, a famous peak of the Rocky Mountains, is in El Paso county, Colorado, near Colorado Springs. It is named after General Zebulon M. Pike, United States Army, by whom it was discovered in 1806. It rises 14,108 feet above sea level, and commands a magnificent view of the great plains and of a rugged, mountainous country with many lakes and rivers. Pine forests cover the slopes to a height of 11,700 feet, above which is bare granite rock. A meteorological station was maintained here

for years, and was reoccupied by the weather bureau in 1892. A railroad reaches to the summit.

Pisa (*pē'zā*), a city of Italy, the capital of a province of the same name, which was formerly a part of Tuscany. The city, which is situated on the banks of the Arno, about eight miles from the mouth of that river, is surrounded by old walls and moats, within which are numerous gardens and cultivated fields, studded with the ruins of convents. Among its old buildings the most noteworthy is its cathedral, in the Tuscan style of the Eleventh Century; to the east of which is the famous Campanile, or leaning Tower of Pisa, a round, marble belfry, 179 feet in height, erected in the latter part of the Twelfth Century. Pisa is the seat of a university, which was founded in 1338. At the Council of Pisa, in 1409, the rival popes, Benedict XIII. and Gregory XII., were deposed, and Alexander V. elected in their room. Pisa is said to have been founded six centuries before Christ. It was a flourishing city in the time of the Romans. At the time of the Crusades its population was not less than 150,000, and at one time it disputed the dominion of the sea with Genoa. Population, 67,285.

Pittsburg (according to its city charter, Pittsburgh), a city, port of entry, and county-seat of Allegheny County, Pennsylvania; at the confluence of the Monongahela and Allegheny rivers, at the head of the Ohio River, 353 miles west of Philadelphia. The city owns a water-works system, costing over $7,000,000. The reservoirs have a storage capacity of 68,000,000 gallons, and the water is distributed through 300 miles of mains. There are in all 230 miles of streets, of which 200 miles are paved. The sewer system covers 220 miles. The city is lighted by electricity. The annual death rate averages nineteen per 1,000. The principal public buildings are the Allegheny court-house, the Carnegie Library and Institute, with museum, music hall, and art gallery, and having an endowment of $2,000,000; the United States Government building, the West Pennsylvania Exposition Society's buildings; Municipal Hall; United States Arsenal, and the Western State Penitentiary. The two chief industries are the production of iron and steel; but there are many other flourishing manufactures. The city is well known as the Iron City, for there is nothing in the iron industry which is not here manufactured. The capacity of the iron mills is over 800,000 tons annually, and that of the Bessemer steel mills upward of 400,000 tons. There are, besides blast furnaces and iron and steel works, over 1,500 manufacturing establishments employing more than 60,000 persons. The schools are flourishing and their accommodations keep pace with increasing population. There are, over 200 churches in Pittsburg. In 1754, at the suggestion of George Washington, the English began to erect a block-house on the present site of the city. They were driven away by the French, who built a fort at the junction of the two rivers and named it Du Quesne. In 1758, after two unsuccessful attempts to retake the place, the English, under General Forbes, made a third attempt, and the French burned and evacuated the fort. In the following year another fort was erected here, named in honor of William Pitt. The British withdrew from the post in 1772, and it was held by Virginia in 1775–1779. The place was incorporated as a city March 18, 1816. In 1877 a railroad strike and riot occurred in which much damage was done to railroad property and for which Allegheny County had to settle at a cost of $4,000,000. In 1907, after a long discussion, the city absorbed Allegheny and other surrounding boroughs, which are now under the municipal government. Population, 1920 census, 588,343.

Plymouth, the largest town in Devonshire, stands on the north shore of Plymouth Sound, 227 miles west of London by rail; adjacent to it are the towns of Saltash and Devonport. Among the chief buildings are a Gothic town-hall, a Fifteenth-Century church, and a Roman Catholic cathedral. The chief industry is chemical manufactures. There is a large coasting trade, and important fisheries. Many sea-going steamship companies make it a place of call. The Sound is an important naval station, and historically famous as the sailing port of the fleet that vanquished the Armada, and of the Pilgrims. Population, 1921, 209,857.

Po, the largest river of Italy, rises on Monte Viso, one of the Cottian Alps, at an altitude of 6,405 feet, close to the French frontier. It has an entire length of 390 miles, and drains an area of nearly 28,900 square miles. Below Piacenza its stream has from ante-Roman days been artificially embanked along great stretches with double lines of embankments on each side.

Pompeii, a seaport at the mouth of the Sarnus, on the Neapolitan Riviera, founded about 600 B. C. by the Oscans, and after them occupied by the Tyrrheno-Pelasgians, and by the Samnites, till these, about 80 B. C., were dispossessed by the Romans. From that time down to its destruction, A. D. 79, it became a sort of Rome-super-Mare, frequented by the aristocracy. On February 5, A. D. 63, by an earthquake in the vicinity, these buildings were all but leveled with the ground, and some years elapsed ere the fugitive citizens recovered confidence enough to reoccupy and rebuild what was once Pompeii. Revolutionized as it was for the worse, the city, however, retained much of Greek character and coloring, and had relapsed into more than its former gaiety and licentiousness, when, on August 23 (or, more probably, on November 23), 79, with a return of the shocks of earthquake, Vesuvius was seen to throw up a column of black smoke expanding like some umbrella pine of the neighborhood, till it assumed the proportions of a great swarthy cloud, dense with ashes, pumice, and red-hot stones, settling down with a force increased by the rain-torrents that intermittently fell. For three days the flight of the inhabitants continued till Pompeii was abandoned by all who could effect their escape. By the fourth day the sun had partially reappeared, and the more courageous of the citizens began to return for such of their property as they could disinter. The reigning emperor, Titus, organized relief on an imperial scale, and even undertook the clear-

ing and rebuilding of the city. This attempt was soon abandoned, and Pompeii remained a heap of hardened mud and ashes, gradually overgrown with grass — the wall of the great theater and the outline of the amphitheater alone marking its site — till 1592, when the architect Fontana, in cutting an aqueduct, came on some ancient buildings. Unsystematic, unscientific excavations proceeded fitfully till 1860, when the Italian kingdom took in hand the unearthing of the city. This was carried out with admirable ingenuity, care, and success, and it now attracts the pilgrim from every clime for the object lessons it is unique in affording as to the public and private life of antiquity. House construction consists mainly of concrete or brick, and sometimes of stone blocks, especially at the corners. Two-storied, sometimes three-storied, houses are numerous, though the upper floors, built of wood, have been consumed by the eruption. Stores usually occupied the ground floors of dwelling houses, on their street aspect, let out to merchants or dealers as at the present day, but not connected with the back part of the house. They could be separated from the street by large wooden doors, while inside they had tables covered with marble, in which earthern vessels for wine or oil were inserted. The storekeeper had sometimes a second room at the back, when he did not live on an upper floor or in another part of the town. Retail traffic must have been considerable at Pompeii, to judge from the number of those stores along the streets. Only a personal visit can convey an idea of the indoor life of the Pompeiians, with whom the absence of glass, the fewness of the openings in the street aspect of the house wall, and the protection of these with iron gratings are among the points noted by the most casual visitor. As rebuilt after 63, Pompeii shows little marble, the columns being of tufa or brick cemented by mortar. A coating of stucco was laid over wall or column and presented an ample field for ornamental painting. This must have given to Pompeii its bright, gay coloring, which, with its reds, blues, and yellows, on column and capital, on wall and partition, harmonize so well with the glowing sunlight of the south.

Port Arthur, a strongly-fortified port commanding the northern promontory enclosing the Gulf of Pechili, in China. It was taken by storm by the Japanese in the war of 1894, but Japan was compelled to restore it, in return for an increased indemnity, by Russia, Germany, and France. China, however, gained nothing by invoking this European intervention, Port Arthur being occupied by Russia in December, 1897, immediately after the seizure of Kiao-Chau by Germany. In the spring following, Russia secured by "lease" both Port Arthur and Talienwan, with other advantages, which gave her the command of Manchuria and a sort of tacit acknowledgment that this portion of China belonged to her exclusive sphere of influence. The Russians, under Gen. Stössel, were successfully besieged here by the Japanese under Gen. Nogi, July, 1904, to January 1, 1905. At the close of the war, the lease was transferred to Japan by the treaty of Portsmouth, in 1905. As the terminus of a branch of the Siberian Railway, Port Arthur is an important strategic point.

Portland, the county seat of Multnomah County, is the largest city and the commercial center of Oregon. It is situated on both sides of the Willamette River, twelve miles above its confluence with the Columbia, and about 120 miles from the Pacific. The law and medical departments of the state university are here. A large Pacific commerce, about $15,000,000 annually, is carried on, chiefly with Great Britain and its possessions, and the city is an important distributing and industrial center. A large government dry dock was built here in 1903, and the city possesses a splendid harbor open to the largest ships. Portland is picturesquely situated with the Cascade mountains in the background, and is noted as a beautiful residence city. The Lewis and Clark Exposition was held here in 1905. Population, 258,288.

Porto Rico, a West Indian island; seventy miles east of Haiti; till 1898 a colony of Spain; area, 3,606 square miles; population, 1,299,809; capital, San Juan, metropolis, Ponce. Under the provisions of the Spanish-American peace protocol the American flag was officially raised and the island formally transferred to the United States on October 18, 1898. The Spanish form of the name of the island is Puerto Rico; but an act of the United States Congress, approved April 12, 1900, established the official form as Porto Rico. The people are most loyal in their devotion to their new country and are solicitous to be regarded as a part of the United States. While there is a great amount of wealth in the island, and in many places evidences of great prosperity, rich plantations, and promise of a great future for Porto Rico, throughout the interior of the island the people are poor and their homes are of the poorest character, consisting almost altogether of "shacks" constructed of the palm and covered with a straw thatch or palm leaves. Into the cities and these homes is crowded a large population that is typically Spanish-American in character. They are generally a peaceful and law-abiding people, and while there is unquestionably some lawlessness, and some small offences are being committed, they do not exceed, if they equal, the number being committed in the States of a like population. It has been estimated that from 10 to 20 per cent. only of the people can read and write. The people are anxious to have their children educated, and are exceedingly solicitous for the establishment of public schools. There is no starvation upon the island, and while there is great poverty in many places, there cannot be any real starvation in Porto Rico, for the reason that the people live frugally and are content with little, while the soil and the climate are so productive of many of the simple necessaries of life that it would be almost impossible to starve a people who live upon tropical fruits and tropical vegetable productions. Vegetables of all kinds known to our climate grow in abundance. Irish potatoes are not a success. There are no plums, cherries, or grapes. It would seem that there would be no difficulty in growing grapes, but so far they have not been tried. Indian corn is raised with some success, and

while the ears are small, that is made up by the fact that two and even three crops can be grown yearly on the same ground. Coffee and sugar are the chief products and exports. No wheat is grown on the island. At present all flour is imported. The native grasses grow luxuriantly wherever an opportunity offers, from the lowest valley to the highest mountain top, and afford excellent pasture for stock everywhere all the months of the year. They make no hay, but cut it with sickles or the machete and tie it in small bundles, pack it on ponies to the cities, and sell it while it is still green. The cattle grazing in large numbers on the pastures are found all over the island, and are mostly in very good condition, making excellent beef. Hogs are raised to a limited extent, but are of poor breeds, being of the old "razor-back" variety. They are fed mainly from the nuts grown on the royal palm trees. Horses are plentiful. They are small, and used only to ride and as pack ponies and in carriages. The hard work of hauling loads and plowing the land is done with oxen, yoked in the Spanish fashion by tying the yoke to the horns, and they are guided with a whip or "gad." The wagons are mostly two-wheeled carts with large wooden axles. There seems to be a considerable deposit of iron and copper on the island. In some places these are being developed with good prospects of proving paying investments. Traces of gold and silver are also found in the mountains, but up to date prospecting has not developed any considerable quantities of these more precious metals. Soon after the surrender of Santiago de Cuba to the American forces under General Shafter, July 17, 1898, an army numbering 16,973 men was sent from Guantanamo to Porto Rico to take possession of that island. They landed July 25th at Quanica, fifteen miles west of Ponce. Lieutenant Haines, commanding the marines, went ashore and raised the American flag over the custom-house, amid the cheers of the people. General Wilson was the first army officer to land, and was welcomed with cheers and a serenade. A portion of the army marched toward the capital, San Juan, but were stopped when about half way by the suspension of hostilities between the belligerent powers. On October 18th the island was formally surrendered to the United States in the city of San Juan. Immediately the United States authorities began the work of sanitary and educational improvement. Public works were instituted, schools established, and industries fostered. The Porto Ricans responded eagerly and have given their best efforts to assisting the government. They have exhibited excellent capacity for citizenship. The island has prospered greatly under American rule, and is fast becoming Americanized.

Portugal. The most western republic of Europe, occupying the greater portion of western seaboard of the Iberian peninsula. North and east it is bounded by Spain, and on all other sides by the Atlantic Ocean. Length, from north to south, about 350 miles; mean breadth, about 100 miles. The surface of the country is generally of a hilly character, receiving the terminal continuation of several Spanish mountain chains — one of which, under the name of Serra da Estrella, pierces the center in a southwesterly direction, and rises in its highest part to an altitude of 7,524 feet above the sea. Further south is the Serra de Monchique, terminating at the Atlantic in the headland of Cape St. Vincent. The chief rivers are the Tagus, Douro, Minho, Guadiana, and Mondego. The soil is, generally speaking, quite rich, but agriculture is much neglected. Wine is the chief industrial product of the country, the best growths of which, known as *port*, are shipped to England, the United States, and other countries. The exports consist almost entirely of wine, fruits, oil, cork, and salt. Portuguese manufacturing interests include those of the fabrication of textile goods, gloves, metallic, and ceramic wares, tobacco, cigars, etc. The chief cities and towns are Lisbon, the capital; Oporto, Braga, Coimbra, Setúbal, Evora; in Madeira, Funchal; in the Azores, Ponta Delgada.

Potomac, a river of the United States, formed by two branches which rise in the Alleghenny Mountains in West Virginia, and unite fifteen miles southeast of Cumberland, Md., from which point the river flows in a generally southeast course 400 miles, and falls into Chesapeake Bay, after forming an estuary nearly 100 miles long, and from two and one-half to seven miles wide. The largest ships can ascend to Washington. The Potomac forms the greater part of the boundary between Virginia and Maryland.

Potsdam, eighteen miles southwest of Berlin, stands on an island at the confluence of the Nuthe and Havel, and is the capital of the Prussian Province of Brandenburg; a handsome town, with broad streets, many parks and squares, numberless statues and fine public buildings; it became a favorite residence of Prussian royalty, and has several palaces; was the birthplace of Alexander von Humboldt; has sugar and chemical works, and a large violet-growing industry. Population, 58,397.

Prague (*präg*), the capital and chief city of Czecho-Slovakia, and formerly the capital of the Austrian province of Bohemia. It is situated on the Moldau, about 160 miles northwest of Vienna. In the former Austro-Hungarian Empire, Prague ranked next to Vienna and Budapest in size. Both the old and the new town stand on the right bank of the river; on the left bank are the quarters known respectively as the Kleinsite and the Hradshin, the scene of the famous "defenestration" of 1618, when the throwing of two imperial officers out of a window began the Thirty Years' War. In it dwell the nobility and the higher officers of state. This portion of the city is surrounded by a wall. In the immediate neighborhood is the White Mountain, 1,300 feet high, where the Protestants of Bohemia suffered a decisive defeat early in the same war (November 8, 1620). The Cathedral belongs to the Fourteenth Century, as does also the university, founded in 1348 by the Emperor Charles IV. A large trade is carried on in the city, and several large fairs are held in it annually. It has, however, suffered greatly from war, and so recently as 1848 was bombarded by the Austrians for two days, in consequence of an insurrectionary movement on the part of the inhabitants. The "Bat-

tle of Prague," so celebrated in history, in which the Austrians were defeated by Prince Henry of Prussia, and their whole camp taken, was fought May 6, 1747. Population, 1921 est., 676,000.

Providence, a city, capital of the State of Rhode Island, and county-seat of Providence County; on the Providence River, an arm of Narrangansett Bay, and forty-four miles southwest of Boston. It is the second city of New England in population and wealth, and is built on a rolling plateau. Providence has upward of 2,000 manufacturing establishments, with a combined capital of about $90,000,000, and employing about 40,000 persons. It is noted for its manufactures of cotton and woolen goods, jewelry, and stoves, and is the largest seat of fine jewelry manufacture in the United States. The other industries include silverware, tools, engines, locomotives, boilers, sewing machines, screws, files, general hardware, yarn, calico, laces, braids, worsteds, broadcloth, chemicals, etc. There is an extensive coastwise commerce and shipping industry, especially in the coal, cotton, and wool trade. There is also an important shell-fish industry. In 1636, Roger Williams, a Baptist clergyman, was exiled from Massachusetts because he opposed its theocratic laws. He first settled at What Cheer Rock, on the Seekonk River, and later at the head of the Providence River, where the Indian Chief, Canonicus, granted him a piece of land. In 1643-1644 local government was formed under a royal charter. Providence received its city charter in 1832, and has been enlarged by annexation of territory from adjoining towns. Population, 237,595.

Prussia (*prŭsh'ah*). Formerly the principal kingdom in the German Empire, now the leading state in the new German Republic. Prussia is bounded on the north by the North Sea, Denmark, and the Baltic Sea, on the east by Lithuania and Poland, on the south by Czecho-Slovakia and the states of southern Germany, on the southwest by France, and on the west by Belgium and the Netherlands.

The geographical form of this state is very irregular. Prussia has an extensive seaboard extending along the Baltic. It has, besides, a tract of coast line washed by the North Sea, formed by the Schleswig-Holstein and Hanoverian provinces. The length of the state, taken from east-northeast to west-southwest, is about 700 miles; maximum breadth, 400 miles. The surface is for the most part flat. The principal mountains are those of the Hartz, Brocken, and Riesengebirge. The Baltic seaboard is low and sandy, and forms a number of bays and inlets such as the bays of Swinemunde, Lübeck, and Kiel, the Frisches Haff and the Curisches Haff.

Prussia possesses a large number of navigable rivers in close proximity to each other, viz: the Pregel, Oder, Elbe, Weser, and the Rhine with its numerous tributaries, such as the Moselle and Lahn. The forests are extensive, occupying an area of nearly 10,000 square miles, chiefly consisting of fir. Its minerals consist of iron, copper, lead, alum, niter, zinc, cobalt, sulphur, nickel, arsenic, baryta, amber, several varieties of precious stones, and, to a small extent, silver. Salt from the brine springs of Prussian Saxony is plentiful, as is also coal.

Agriculture and cattle-rearing constitute the chief sources of employment and wealth of the rural population. The western division of Prussia is noted for its excellent fruits and vegetables, and the Rhenish provinces stand preëminent for their wines. There are upwards of 100 mineral springs, such as those of Wiesbaden, Ems, Spa, and Pyrmont. The chief cities are Berlin (the capital), Breslau, Cologne, Königsberg, Frankfort-on-the-Main, Magdeburg, Hanover, Aix-la-Chapelle, Mainz, Frankfort-on-the-Oder. The seaports include Königsberg, Swinemunde, Stettin, Lübeck, Altona, and Cuxhaven. That of Kiel was the principal naval station and arsenal of the former German Empire.

Prussian manufactures consist mainly of silk, woolen, cotton, and linen fabrics; arms, shawls, carpets, leather, pottery, glass, tobacco, and metallic wares. The brewing of beer is a business carried on extensively. The leading exports comprise linens, woolens, hardware, grain, raw wool, timber, pitch, linseed, tobacco, mineral waters; to these may be added horses, horned cattle, salted and dried meats, etc., and from the Rhenish provinces, wine.

Education is compulsory, and its higher branches are provided for at the universities of Berlin, Bonn, Breslau, Königsberg, Halle, and Greifswalde.

Pyramids, The, a name given in preeminence to three rock-built tombs (said by recent authorities to have been used also for astronomical observations and for religious purposes) found in the neighborhood of Ghizeh, near Cairo, on the left bank of the Nile. They are all solid masses of stone or brick, with sepulchral chambers in the center or near the base; and these chambers are reached by a gallery, or passage, which opens from the outside. The first of the Pyramids is said to have been erected by Cheops, an Egyptian King, who lived about 3,000 B. C. It was intended by him, and was used, as his tomb. According to Herodotus, one hundred thousand men were employed for twenty years in building this Pyramid; and ten years were occupied in constructing a causeway by which to convey the stones to the place, and in conveying them there. This Pyramid, called "the Great Pyramid," was originally 480 feet in height, with a base of 764 feet square. At present, it is externally a huge mass, rudely built of rough limestone blocks in steps, and with a platform of considerable area at the top; but it is believed to have been originally covered with a solid marble casing, the stones of which began to be removed about A. D. 1000 for the building or the adornment of Cairo. The second Pyramid is said to have been built by Chephron, the brother and successor of Cheops. Although slightly inferior to the first Pyramid in size, and probably far inferior in quality of masonry, it is still a structure of enormous dimensions, which must have required many years of labor from tens of thousands of workmen. After Chephron, Mycerinus, son of Cheops, ascended the throne. He, too, left a Pyramid, but much inferior in size to his father's, the height of this third Pyramid being only 218 feet, with a base

about 354 feet square. Besides these three principal Pyramids, there are nearly forty others included under the general designation of the Pyramids of Ghizeh, or Jeezeh. There are others in other parts of Egypt and in Nubia; and similar structures are to be found in Mexico, and in other parts of the world.

Pyrenees (*pir'ē-nēz*), a broad chain of lofty mountains running from the Bay of Biscay, 276 miles eastward, to the Mediterranean, form the boundary between France and Spain. They are highest in the center, Mount Maladetta reaching 11,168 feet. The snowline is about 8,000 or 9,000 feet, and there are glaciers on the French side. Valleys run up either side, ending in precipitous "pot-holes," with great regularity. The passes are very dangerous from wind and snow storms. The streams to the north feed the Adour and Garonne; those to the south, the Ebro and Douro. Vegetation in the west is European, in the east sub-tropical. Minerals are few, though both iron and coal are worked. The basis of the system is granite with limestone strata superimposed.

Quebec, the oldest city in Canada and the capital of the province of Quebec, is situated on Cape Diamond, on the left bank of the St. Lawrence, at the confluence of the St. Charles. The cape is a promontory rising to a height of 330 feet, and the city lies on and below the rocky bluff, its impregnable position giving it the name, "Gibraltar of America." The upper town contains the principal residences, buildings, parks and shops. The lower town is the commercial section. The picturesque position of the city and the fact that its historic sites are unaltered give it a peculiar romantic interest. Nearby are the plains of Abraham, the scene of Wolfe's victory in 1759. The upper town lies about the citadel, which covers forty acres and is garrisoned by Canadian militia Outside the walls which enclose the upper town are the houses of Parliament. Laval University, chartered by Queen Victoria and Pope Pius IX, is the largest and most influential Catholic institution of higher education in Canada. Quebec was founded in 1608 by Champlain, who established a small trading post here. It remained in the hands of the French, until captured in 1629, and held by the English for three years, when it was restored to France. England failed several times to take it until 1759, since when it has been in English possession. Population, 1921 census, 94,058.

Rain is the return to the earth, in condensed drops, of the aqueous vapors which are continually rising into the atmosphere by evaporation, the condensation being occasioned by a change in the general temperature, by a collision produced by contrary currents, or by a cloud passing into a cold stratum of air. The power of the air to hold water in solution increases in a much higher ratio than the temperature. Hence, when two masses of air, saturated with moisture and of different temperatures, are mixed, the resulting compound is not capable of holding the whole water in solution, and a part is, in consequence, precipitated as rain. As the whole atmosphere, when saturated, is calculated not to hold in solution more water than would form a sheet five inches in depth, while the mean annual deposit of rain and dew is probably from thirty-five to forty inches, it is obvious that the supply of atmospheric moisture must be renewed many times in the course of a year. The quantity of rain precipitated from the atmosphere depends upon a variety of circumstances — on the previous hygrometric state of the unmixed portions of air, their difference of heat, the elevation of their mean temperature, and the extent of the combination which takes place. When the deposition is slow, and the electricity set free by change of state is not suddenly removed, the very minute aqueous globules remain suspended and form clouds; but if the deposition be rapid and copious, and the electricity is more or less suddenly carried off, those particles conglomerate, and produce, according to the temperature of the medium through which they descend, rain, mist, snow, or hail.

Rainbow, the well-known colored arch so frequently seen when the sun is shining during a shower of rain. Sometimes only one bow is seen, sometimes there are two, the second being broader and fainter, and situated above or outside the first. In both bows alike the colors are the same as those in the spectrum, and they are arranged in the same order. In the lower or primary bow the red is uppermost; in the secondary bow their relative positions are reversed, the violet being uppermost and the red lowest. The formation of the rainbow is due to the refraction and reflection of the sun's light by the rain drops. The rays which make the primary bow have undergone two refractions and one reflection, whilst those that make up the secondary bow have undergone two refractions and two reflections. Rainbows are seen only when the observer has his back to the sun, and looks in the direction in which the rain is falling.

Rangoon, the capital of Lower Burmah, and the chief seaport of Burmah, is situated on the Rangoon River, the eastern branch of the Irawadi, about twenty-one miles from the sea. Since its occupancy by the British, in 1852, Rangoon has undergone such changes that it is practically a new town, and its population has increased fivefold. The principal streets are broad, and contain many large and not a few handsome buildings. There are the law-courts, post-offices, Bank of Bengal, custom-house, Anglican and Roman Catholic churches, St. John's College, the Shwé Dagon pagoda, etc. A large and increasing commerce is carried on with British, Indian, and Chinese ports; and an extensive trade is conducted with inland towns as far as Mandalay. The chief exports are rice, timber, cotton, hides, gums, and resins, mineral oil, ivory, precious stones, the imports being mainly manufactured goods. A number of rice-mills have been erected; there is a government dockyard, and steam tramcars have been introduced. Population, 1921, 339,527.

Rastatt, a fortified town in the German state of Baden, about fifteen miles to the south-west of Carlsruhe. It is chiefly celebrated for two congresses, the one in 1714, which put an end to the War of the Spanish Succession, and the other in 1797–99, to negotiate a peace be-

tween France and the German Empire. After the close of the latter, the French plenipotentiaries were treacherously murdered at a short distance from the town. A monument marks the spot where they fell. Population, 12,222.

Ratisbon (German, *Regensburg*), a city of Bavaria, on the south bank of the Danube, about sixty-five miles northeast of Munich. It was formerly a place of great importance, having been, in the Thirteenth Century, the most populous and flourishing city of Southern Germany. It was the seat of the Germanic Diet from 1663 to 1806. Its most remarkable building is its cathedral, which dates from the Thirteenth Century, and which was restored in 1830–38. The city has some manufactures, and ship-building is carried on. The astronomer Kepler, to whom a monument is erected in the city, died at Ratisbon, and is buried there. Population, 52,520.

Ravenna, a city of Italy, and the capital of a province of the same name, situated near the mouth of the river Montone, about six miles from the Adriatic Sea. It has a cathedral which dates from the Fourth Century, but which was rebuilt early in the Eighteenth Century; it also contains many interesting remains of antiquity, the city having been, in the time of the Romans, one of the most important places in Northern Italy, and at that time a seaport. After the downfall of the Western Empire, Ravenna became the capital of the kingdom of Theodoric, whose mausoleum is still in existence, about a mile outside the city. It also contains the grave of the poet Dante, who died at Ravenna in 1321. The place is now of little importance, except for its antiquities. It has some manufactures in silk, and is connected with the Adriatic by a canal. Population, 74,161.

Red Sea, an extensive inland sea, which lies between Arabia, on the east, and Egypt, Nubia, and Abyssinia, on the west; and which communicates with the Arabian Sea by the Strait of Bab-el-Mandeb and the Gulf of Aden, and with the Mediterranean at Port Said by the Suez Canal. The Red Sea (also called the Arabian Gulf), is about 1,400 miles long, and 230 miles broad at its broadest part. Towards its northern extremity it is divided into two gulfs, the Gulf of Suez (about 180 miles long), and the Gulf of Akabah, or the Elanitic Gulf (about 100 miles long), between which is the Peninsula of Sinai. The sea is remarkable for its coral reefs, which extend generally in long strips parallel with the shore. It is also remarkable for its numerous islands, which cause the navigation to be difficult, and occasionally dangerous, but there are good harbors on either side. Originally the sea was called the Sea of Edom, which the Romans translated into "Mare Rubrum," or Red Sea. The name "Edom" signifies "red," and this is doubtless the origin of the name; but the waters are said to be in some parts tinged with red, which is due to the presence of certain marine plants. The average depth of the sea is about 100 fathoms; its greatest depth (between Jeddah, in Arabia, and the opposite coast) is over 1,000 fathoms.

Rheims, or Reims (*Rēms*), a city in the French department of Marne; on the Vesle, 100 miles east-northeast of Paris. It is well built, and from the prevalence of the older style of domestic architecture, has a picturesque appearance. Under the Frank rule it was a place of much importance, and it acquired a deeply religious interest from its having been the scene in 496 of the baptism of Clovis and his chief officers by the bishop, St. Remy (438–533). In the Eighth Century it became an archbishopric, and from 1179, when Philip Augustus was solemnly crowned here, it became the place for the coronation of the kings of France. Joan of Arc brought the dauphin hither, and the only sovereigns in the long series, down to 1825, not crowned at Rheims were Henry IV., Napoleon I., and Louis XVIII. In 1830 the ceremony of coronation at Rheims was abolished. The cathedral, one of the finest specimens of Gothic architecture, was destroyed by the Germans during the war of nations, 1914. It was built between 1212 and 1430. The Romanesque Church of St. Remy (mainly 1160–1180), with the saint's shrine, is nearly of equal size, but of less architectural pretension. Rheims is one of the principal entrepôts for the wines of Champagne, and the hills which surround the town are planted with vineyards. Population, 1911, 115,178.

Rhine (German, *Rhein*), the finest river of Germany, and one of the most important rivers of Europe, its direct course being 460 miles, and its indirect course 800 miles (about 250 miles of its course being in Switzerland, 450 in Germany, and 100 in Holland); while the area of its basin is 75,000 square miles. It is formed in the Swiss canton Grisons by two main streams called the Vorder and Hinter Rhein. The Vorder Rhein rises in the Lake of Toma, on the southeast slope of the St. Gothard, at a height of 7,690 feet above the sea, near the source of the Rhone, and at Reichenau unites with the Hinter Rhein, which issues from the Rheinwald Glacier, 7,270 feet above sea-level. Beyond Reichenau the united streams take the common name of Rhine. Generally speaking, it pursues a northern course till it enters Holland, below Emmerich, when it divides into a number of separate branches, forming a great delta, and falling into the sea by many mouths. That which retains the name of Rhine, a small stream, passes Leyden and enters the North Sea. In the German part of its course the chief tributaries are the Ill, Nahe, Moselle, Ahr, and Erft, Neckar, Main, Lahn, Sieg, Ruhr, and Lippe. In Switzerland its tributaries are short and unimportant, and this part of its course is marked by the Falls of the Rhine at Schaffhausen, where the river is precipitated in three leaps over a ledge of rocks forty-eight to sixty feet in height, and by the cataracts of Lauterberg and the rapids of Rheinfelden. It is navigable without interruption from Basel to its mouth, a distance of 550 miles. Large sums are spent every year in keeping the channel in order, and in the erection or repair of river harbors, both in Germany and Holland. The Rhine is distinguished by the beauty of its scenery, which attracts many tourists.

Rhodesia, the name given to that part of South Africa which was ceded in 1888 by the King of Matabele to the great imperialist, Cecil John Rhodes. Area, 439,575 square miles; population, about 2,000,000. The territory

is administered by the British South Africa Company, which was given a royal charter in October, 1889. The River Zambezi flows through it, cutting the region into two portions — Southern and Northern Rhodesia.

Southern Rhodesia consists of the two provinces of Matabeleland and Mashonaland. The capital and the seat of government is Salisbury, with a white population, 1921 census, of 5134. The other principal townships are New Umtali, Melsetter, and Enkeldoorn. A railway has been built, running inland from Beira, placing Salisbury in direct communication with the sea over a line 382 miles in length. Matabeleland lies between the Limpopo and middle Zambezi rivers. The principal town, and the chief commercial center in Rhodesia, is Bulawayo, with a white population of 6535. The extension of the Cape government west railway system through Kimberley and Vryburg to Bulawayo was completed in October, 1897. The distance from Cape Town to Bulawayo is 1,360 miles. Northern Rhodesia consists of the whole of the British sphere north of the Zambezi, lying between Portuguese East Africa, Tanganyika, the Belgian Congo, and Angola, with the exception of the strip of territory forming the Nyasaland Protectorate, which is under direct imperial administration. North of the Zambezi the country has as yet been little prospected. Coal has been found on the shore of Lake Nyassa. There are 5,250 square miles of gold fields in Rhodesia.

Richmond, a city of the United States, capital of Virginia, is finely situated on the north side of James River, at the head of tidewater, 100 miles southwest of Washington. The streets are generally wide and well-built, and mostly intersect each other at right angles. There are many fine buildings, including the capitol, governor's house, city hall, federal buildings, buildings of Richmond College, churches, schools, asylums, etc. The State House or capitol contains Houdon's celebrated marble statue of Washington, and in the capitol grounds are Foley's bronze statue of General T. J. ("Stonewall") Jackson and Crawford's bronze statue of Washington, twenty-five feet high, on a pedestal forty-two feet high, surrounded by other bronze statues. Water-power is almost unlimited, and the various mills and factories give employment to numerous workmen. The trade staples are tobacco, iron, grain, and flour. The first occupation of any part of its site was by English settlers in 1609; the city was formally founded in 1742, and became the seat of government in 1779. During the Civil War it was the seat of the Confederate Government. It was invested by the federal armies, and surrendered on April 3, 1865. Population, 1920 census, 171,667.

Riga, the capital and chief city of the newly formed republic of Latvia, and a leading seaport of the Baltic, situated on the Dwina River, seven miles from the mouth of the river, and 350 miles southwest of Petrograd. The old town has narrow streets and mediæval houses and stores; but the suburbs are laid out in broad streets with handsome buildings. The chief edifices are the cathedral built in 1204, burned down in 1547, but rebuilt; St. Peter's Church (1406), with a steeple 440 feet high; the castle of the old Knights of the Sword, built 1494–1515, the former residence of the grandmaster of the order; and several old guild houses and Hanseatic halls. Riga was founded in 1201 by Albert, Bishop of Livonia, and soon became a first-rate commercial town, and member of the Hanseatic League. In 1710 was annexed to Russia. Population, 569,100.

Rio de Janeiro, a city and seaport, capital of Brazil and of the province of the same name, one of the largest and most important cities of South America; on the west side of one of the finest bays in the world, eighty miles west of Cape Frio. The city stands on a tongue of land close to the shore, on the west side of the bay, at the foot of several high mountains which rise behind it. The houses are generally built of stone or brick. The streets are straight, well paved, and have excellent footpaths. The convents and churches are numerous, but none of them can be called fine buildings. Parallel with the beach runs the main street, called Rua de Direita, from which the minor streets branch off at right angles and are intersected by others at regular distances. The imperial palace skirts the beach, and is seen to great advantage from the landing place, which is within sixty yards of its entrance. The other public buildings are the naval and military arsenal, a public hospital, a national library containing about 286,000 volumes. The entrance into it from the sea does not exceed a mile from point to point; it afterward widens to about three or four miles. This city is the chief mart of Brazil. Population, 1920 census, 1,157,873.

Rio de la Plata, a river, or rather an estuary, on the South American coast, between the Argentine Republic and Uruguay. The estuary itself is about 185 miles long, and 130 miles broad, at its entrance. It is formed by the confluence of the Paraguay, the Pilcomayo, the Parana, the Uruguay, and several other rivers; the total length of the stream, measured from the source of the Parana, being estimated at upwards of 2,950 miles. The estuary of the La Plata is not deep; and it has a number of submarine banks all around its coasts, which, along with its strong irregular currents, render navigation difficult. The waters of the estuary are so turbid that they tinge the sea visibly for a distance of 200 miles from its mouth. About 150 miles from the mouth of the estuary, on its southern side, is the city of Buenos Ayres; on the opposite side of the estuary, but nearer the Atlantic, is the city of Monte Video. The area of the basin of the La Plata, from its source to its mouth, is estimated at 1,250,000 square miles.

Rivers, Longest of the World

Name of River	Length
Amazon,	3,300
Amur,	2,700
Arkansas,	2,000
Brahmaputra,	1,800
Camboja,	2,600
Colorado,	2,000
Columbia,	1,400
Congo,	2,500
Danube,	1,800
Dnieper,	1,400
Don,	1,104
Dwina,	700

Name of river	Length
Elbe,	700
Euphrates,	1,750
Ganges,	1,500
Hoang-Ho,	2,600
Hudson,	300
Indus,	2,000
Irawadi,	1,500
Lena,	2,750
Loire,	620
Mackenzie,	2,400
Martaban,	2,152
Missouri and Mississippi,	4,200
Murray,	1,500
Nelson,	400
Niger,	2,600
Nile,	3,700
Obi,	2,500
Ohio and Allegheny,	1,265
Orange,	1,152
Orinoco,	1,500
Parana,	2,750
Potomac,	400
Red River,	1,200
Rhine,	800
Rhone,	550
Rio de la Plata,	2,950
Rio Grande,	1,800
Rio Madeira,	2,300
Rio Negro,	1,400
São Francisco,	1,800
Saskatchewan,	1,200
Seine,	497
St. Lawrence,	700
Thames,	250
Tiber,	260
Ural,	1,400
Vistula,	598
Volga,	2,300
Yang-tse,	3,000
Yenesei,	3,322
Yukon,	2,000
Zambezi,	1,800

Riviera (*rē-vē-ā′rä*), an Italian term for coast-land flanked by mountains, especially applied to the strip of land lying around the Gulf of Genoa from Nice to Leghorn, which is divided by Genoa into the Western and Eastern Riviera, the former the more popular as a health resort; but the whole coast enjoys an exceptionally mild climate, and is replete with beautiful scenery.

Rochester, a city and county-seat of Monroe County, N. Y.; on the Genesee River, 229 miles west of Albany. In the center of the city are the Upper Falls of the Genesee, a perpendicular cataract of ninety-six feet. Rochester is built on a plateau on both sides of the river, 263 feet above Lake Ontario. The city is the trade center of a large and rich agricultural region. In the Genesee River there are three falls, ninety-six, twenty-six, and eighty-three feet respectively, giving abundant water-power for manufacturing. There are over 1,900 industrial establishments, employing upward of 40,000 persons, with a combined capital of about $70,000,000, and an output of about $80,000,000. The most important of these are flour mills, india-rubber goods, photographic materials, cigarettes, shoes, etc. In the suburbs is an extensive nursery, including two great plants for the packing and shipment of garden and farm seeds. Rochester is the seat of the University of Rochester, and the Rochester Theological Seminary. The most remarkable structure in the city and county is the aqueduct which carries the Erie Canal across the Genesee River. It is of cut stone, 848 feet long, with a channel forty-five feet wide, and is supported by nine arches. Population, 1920 census, 295,750.

Rocky Mountains, a name indefinitely given to the whole of the extensive system of mountains which covers a great portion of the western half of North America, but more properly applied to the eastern border of this mountain region, commencing in New Mexico in about 32° 30′ north latitude, and extending throughout the continent to the Polar Sea; terminating west of the Mackenzie River, in latitude 69° north, longitude 135° west. The Rocky Mountains in the United States are divided into two parts in Southern Wyoming by a tract of elevated plateaus. The chief group of the southern half are the Front or Colorado Range, which in Wyoming has a mean elevation of 9,000 feet (at Evan's Pass, where it is crossed by the Union Pacific Railway, 8,269 feet). In Colorado it increases to a mean height of 13,000 feet, its highest points being Gray's Peak (14,341 feet), Long's Peak (14,271 feet), and Pike's Peak (14,108 feet). The Sawatch Range, south of the Arkansas River, has its highest peak in Mount Harvard (14,375 feet), with passes at an elevation of from 12,000 to 13,000 feet. "Parks" of Colorado are high mountain valleys, known as North, Middle, South, and San Luis parks, with an elevation of from 6,000 to 10,000 feet, surrounded by ranges 3,000 to 4,000 feet higher. The west border of the San Luis Park is formed by the San Juan Range with at least a dozen peaks over 14,000 feet, and between one and two hundred above 13,000 feet. On the northeastern side this park is bounded by the Sangre de Cristo Range, in which is Blanca Peak (14,390 feet). The Uintah Range, directly west of North Park, has several points above 13,000 feet; and the Wahsatch Range, which forms the western limit of the southern division of the Rocky Mountains, rises to a height of 12,000 feet just east of Salt Lake City. The northern division of the Rocky Mountains, with the exception of the Wind River Range and the Yellowstone region, is lower and has less impressive scenery than the southern. In Idaho and Montana the groups are more irregular in outline than in the south, and the division into ranges more uncertain. Of these the Bitter Root Mountains in part of their course form the divide between the Missouri and the Columbia. There two ranges reach altitudes of upwards of 9,000 feet, and are crossed by a number of passes at elevations of from 5,500 to 6,500 feet. The Northern Pacific Railway crosses at Mullan's Pass (5,548 feet) through a tunnel 3,850 feet long. The Crazy Mountains, north of the Yellowstone, reach a height of 11,000 feet; other groups are the Big Horn Mountains and the Black Hills, whose highest point is Mount Harvey (9,700 feet). In Canada the highest known peaks are Mount Logan (19,500 feet), and Mount Hooker (15,700 feet), lying about 53° north latitude; the general altitude of this part of the range varying from 10,000 to 14,000 feet. The pass leading between Mount Brown and Mount Hooker, called the Athabasca Portage, has a height of 7,300 feet. The Rocky Mountains contain some of the finest scenery in the world, and are specially rich in deposits of gold, silver, iron, copper, etc., which are worked extensively.

Rome, the capital of Italy, as formerly of the Roman Empire, republic, and kingdom, and

long the religious center of Western Christendom, is one of the most ancient and interesting cities of the world. It stands on both sides of the Tiber, about fifteen miles from the sea. The city is tolerably healthy during most of the year, but in late summer and early autumn malaria prevails to some extent. It has been greatly improved in cleanliness and healthfulness since it became the capital of modern Italy.

The streets of ancient Rome were crooked and narrow, till after the fire that took place in Nero's reign, when the new streets were made both wide and straight. In the reign of Augustus the population is believed to have amounted to about 1,300,000 and in that of Trajan was not far short of 2,000,000.

Ancient Rome was adorned with a vast number of splendid buildings, including temples, palaces, public halls, theaters, amphitheaters, baths, porticoes, monuments, etc., of many of which we can now form only a very imperfect idea. The oldest and most sacred temple was that of Jupiter Capitolinus on the Capitoline Hill. The Pantheon, a temple of various gods (now Church of S. Maria Rotonda), is still in excellent preservation. It is a great circular building with a dome roof of stone 140 feet wide and 140 feet high, a marvel of construction, being two feet wider than the great dome of St. Peter's. The interior is lighted by a single aperture in the center of the dome. Other temples were the Temple of Apollo, which Augustus built of white marble, on the Palatine, containing a splendid library, which served as a place of resort to the poets; the Temple of Minerva, which Pompey built in the Campus Martius, and which Augustus covered with bronze; the Temple of peace, once the richest and most beautiful temple in Rome, built by Vespasian, in the Via Sacra, which contained the treasures of the temple of Jerusalem, a splendid library, and other curiosities, but was burned during the reign of Commodus; the temple of the Sun, which Aurelian erected to the east of the Quirinal; and the magnificent temple of Venus, which Cæsar caused to be built to her as the origin of his family. The principal palace of ancient Rome was the Palatium or imperial palace, on the Palatine Hill, a private dwelling house enlarged and adopted as the imperial residence by Augustus. Succeeding emperors extended and beautified it. Among the theaters, those of Pompey, Cornelius Balbus, and Marcellus were the most celebrated. That of Pompey, in the Campus Martius, was capable of containing 40,000 persons. The most magnificent of the amphitheaters was that of Titus, completed A. D. 80, now known as the Coliseum or Colosseum. Though only one-third of the gigantic structure remains, the ruins are still stupendous. The principal of the circuses was the Circus Maximus, between the Palatine and Aventine, which was capable of containing 260,000 spectators. With slight exception its walls have entirely disappeared, but its form is still distinctly traceable. The public baths or thermæ in Rome were also very numerous. The largest were the Thermæ of Titus, part of the substructure of which may still be seen on the Esquiline Hill; the Thermæ of Caracalla, even larger, extensive remains of which still exist in the southeast of the city; and the Thermæ of Diocletian, the largest and most magnificent of all, part of which is converted into a church. Of the triumphal arches the most celebrated are those of Titus (A. D. 81), Severus (A. D. 203), and that of Constantine (A. D. 311), all in or near the Forum and all well preserved structures. It was not till the Seventeenth Century that the modern city was extended to its present limits on the right bank, by a wall built under the pontificates of Urban VIII. (1623–1644) and Innocent X. (1644–1655), and inclosing both the Janiculum and the Vatican hills. The boundary wall on the left or east bank of the river follows the same line as that traced by Aurelian in the Third Century, and must in many parts be identical with the original structure. The walls on both banks are built of brick, with occasional portions of stone work, and on the outside are about fifty-five feet high. The greater part dates from A. D. 271 to 276. The city is entered by twelve gates (several of those of earlier date being now walled up) and several railway accesses. Since Rome became the capital of United Italy great changes have taken place in the appearance of the city, many miles of new streets being built, and much done in the way of paving, drainage, and other improvements. It has thus lost much of its ancient picturesque appearance, and is rapidly acquiring the look of a great modern city with wide straight streets of uniform-looking tenements having little distinctive character. The three finest streets, the Corso and the strade del Babbuino and di Ripetta, diverge from the piazza del Popolo near the north gate. The city is divided into 14 *rioni* or quarters, twelve of which are on the left bank and two on the right bank of the river. The latter two are the rione Trastevere, the ancient Janiculum, and the rione di Borgo, containing the castle of Sant' Angelo, the citadel, now chiefly used as a state prison, and the Vatican. Besides the great collection of the Vatican, there are ten or eleven public libraries. There are in the city about 360 churches. Preëminent among the Christian temples of the world is St. Peter's church. The chief church in point of antiquity and ecclesiastical dignity is the church of St. John Lateran. Among the principal palaces are the palazzi Doria, Ruspoli, Corsini, Orsini, Giustiniani, Altieri, Cicciaporci, Farnese, Barberini, and Colonna. The Quirinal, formerly the pope's ordinary residence, is now the royal palace, the pope residing in the Vatican. On the Capitoline hill are three palaces appropriated for the assemblies of the magistrates, the observatory, and the fine art collections. There are several palaces which, from being surrounded by extensive gardens, are called villas. Of these the principal is the villa Borghese, the gardens of which form the most fashionable promenade in Rome. There are many squares and fountains in the city. Among the most curious remains of ancient Rome are the catacombs. The Ghetto, the quarter in which the Jewish inhabitants were formerly confined, is a relic of the Middle Ages.

Till the establishment of the Italian kingdom, Rome was the capital of the states of the Church; and it was, at a much earlier period, the capital

of the Roman Empire. According to tradition it was founded by Romulus about 753 B. C. At first only a small castle on the summit of Mount Palatinus, it had grown by the time of Servius Tullius, the sixth of its kings, who died 534 B. C., large enough to occupy the "seven hills of Rome" ("Palatinus," "Capitolinus," "Quirinalis," "Cælius," "Aventinus," "Viminalis," "Esquilinus"), and was hence called "the city of the seven hills." About 728 the city of Rome became independent under the popes, and it remained (with the exception of vicissitudes) the seat of the Papal Court till the abolition of the temporal power of the popes in 1870. Since then, Rome has been the capital of the kingdom of Italy, only the Vatican being under the sovereignty of the pope. The city is the seat of a university, founded in 1244. It is rich in libraries the most famous and valuable of which are: the Vatican library, 250,000 volumes; the Biblioteca (library) Nazionale Centrale, 350,000 volumes; the Biblioteca Casanatense, 112,000 volumes; the Biblioteca Angelica, 150,000 volumes; the libraries of the Barberini and Corsini palaces and the medical Biblioteca Lancisiana. Pop., 1915, 590,960.

Rotterdam, the chief port and second city of Holland, situated at the junction of the Rotte with the Maas, nineteen miles from the North Sea and forty-five miles southwest of Amsterdam; the town is cut in many parts by handsome canals, which communicate with the river and serve to facilitate the enormous foreign commerce; the quaint old houses, the stately public buildings, broad tree-lined streets, canals alive with fleets of trim barges, combine to give the town a picturesque and animated appearance. Boymans' Museum has a fine collection of Dutch and modern paintings, and the Groote Kerk is a Gothic church of imposing appearance; there is also a large zoölogical garden; shipbuilding, distilling, sugar-refining, machine and tobacco factories are the chief industries. Population, 1920 census, 506,067.

Rumania, a kingdom of southeastern Europe, bounded by Jugoslavia, Hungary, Czecho-Slovakia, Poland, Ukraine, Bulgaria, and the Black Sea. It includes Old Rumania, Bessarabia, Bukovina, Transylvania. Crisana, Maramuresh, and Banat, with a total area of about 122,000 square miles and a population exceeding 17,000,000. The capital and largest city is Bucharest, pop., 1921 est., 800,000; other important towns are Chisinau, Cernauti, Jassy, Galatz, and Braila.

The surface is mainly occupied by undulating and well-watered plains of great fertility, gradually sloping upwards to the Carpathians on the north and west borders, where the summits range from 2,650 to 8,800 feet above sea level. Nearly the entire kingdom is in the basin of the Danube, which has a course of 595 miles in Rumania, forming the boundary with Bulgaria nearly the whole way. The Danube forms a number of marshy lakes as it approaches the alluvial region of the Dobrudja, through which it discharges itself into the Black Sea by the St. George, Sulina, and Kilia Channels. The climate is much more extreme than at the same latitude in other parts of Europe; the summer is hot and rainless, the winter sudden and very intense; there is almost no spring, but the autumn is long and pleasant.

Rumania is an essentially agricultural and pastoral state, fully 70 per cent. of the inhabitants being directly engaged in husbandry. The chief cereal crops are maize, wheat, barley, rye, and oats; tobacco, hemp, and flax are also grown; and wine is produced on the hills at the foot of the Carpathians. Cattle, sheep, and horses are reared in large numbers. The country is rich in minerals of nearly every description, but salt, petroleum, and lignite are the chief minerals worked. Manufactures are still in a rudimentary state. Trade is fairly active, but almost entirely in the hands of foreigners; the internal trade is chiefly carried on by Jews. The chief exports are grain (especially maize), cattle, timber, and fruit; the chief imports, manufactured goods and coal.

Three-fourths of the population are peasants, most of whom, until 1864, were kept in virtual serfdom by the boiars or nobles. In that year upward of 400,000 peasant families were made proprietors of small holdings averaging ten acres, at a price to be paid back to the state in fifteen years.

Of the total population of Rumania in 1918, about 9,700,000 belonged to the Orthodox Church, 1,460,000 were Greek Catholics, 1,485,000 Roman Catholics, 1,345,000 Protestants, 835,000 Jews, and 75,000 Unitarians. Full liberty of religion is assured to all creeds and sects. Education is free and compulsory wherever there are schools, and conditions in this respect are improving. There are four universities: Bucharest, 4600 students, Jassy, 950 students, Cluj (Kolozsvar), in Transylvania, 2000 students, and Cernauti (Czernowitz), founded in 1920.

Russia, one of the greatest countries of the world, second only in extent to the British Empire, and third as regards population, the British Empire ranking first, the Chinese republic second. Previous to the World War it embraced most of eastern Europe and all of northern Asia. In 1915 the total area was officially estimated at 8,764,586 square miles and the population as follows:

Russia in Europe,	131,796,800
Poland,	12,247,600
Caucasus,	13,229,100
Siberia,	10,377,900
Central Asian Provinces,	11,254,100
Finland,	3,277,100
	182,182,600

Following the soviet revolution of 1917 several independent governments were set up in various parts of the crumbling domain. The boundaries of those created from former Baltic provinces, as Finland, Esthonia, Latvia, Lithuania, and Poland, were in part defined by the Peace Conference, 1919, and in part by later agreements. The boundaries of those formed in eastern Europe and in Asia, including the Ukraine, the Don, Azerbaijan, Georgia, Kuban, Bashkir, Taurida, Terkek, Turkestan, and Yakutsk, were left very much in doubt. By reason of these vast reductions in the area of the former Empire, it was estimated, in 1920, that

soviet Russia controlled a total area of less than 5,000,000 square miles, embracing a population of only 108,000,000.

European Russia consists almost wholly of immense plains, the Valdai Hills, between Petrograd and Moscow, averaging 500 feet and never exceeding 1200 feet above sea level, forming the only elevated region of the interior and an important watershed. The mountains include: the Caucasus, running from the Black Sea to the Caspian, reach to the height of 18,500 feet; the Urals, stretching from the Caspian to the Arctic Ocean and separating European from Asiatic Russia, have their greatest height below 7000 feet. Beyond the Urals are the vast Siberian plains. The whole of the vast empire is watered by numerous rivers, some running a course of thousands of miles. Altogether Russia has some 40,000 miles of navigable rivers. Asiatic Russia has also a number of very large rivers, as the Obi, Yenisei, and Lena in Siberia, and the Amur toward the Chinese frontier. This complete river system is of incalculable value to Russia, as by its means internal communication is carried on. Canals connect the navigable rivers, so as to form continuous waterways; there being 500 miles of canals and 717 of canalized rivers.

As may be expected from its vastness, Russia offers soils and climates of almost every variety. Extreme cold in winter and extreme heat in summer are, however, a general characteristic of Russian climates. While rich in minerals and possessing boundless forests, agriculture is the chief pursuit of the inhabitants. The most productive portion of Russia is that between the Gulf of Finland and the Volga, on the north and east; Poland and Rumania on the west; and the Black Sea on the south. It has, generally speaking, a soft, black mold of great depth, mostly on a sandy bottom, easily wrought, and very fertile. The more southern portion of Siberia, as far east as the river Lena, has, for the most part, a fertile soil, and produces, notwithstanding the severity of the climate, nearly all kinds of grain.

Prior to the accession of Peter the Great, Russia had no manufactures; he started them, and under the more or less fostering care of his successors and Russia's protective policy they grew steadily until disrupted by the soviet government following the revolution of 1917. Two-fifths of the entire production formerly came from the two capitals, Petrograd and Moscow. The various manufactures ranked approximately as follows: sugar, cottons, yarns, flour, tobacco, foundry products, flax, linen, leather, woolen cloth, iron, machinery, beer, soap, timber, paper, oil, glass, chemicals, and agricultural implements.

The chief exports previous to the World War were: grain (about one-half of entire exports), flax, linseed, timber, hemp, wool, butter and eggs, spirits, bristles, and furs, in the order indicated. The chief imports were cotton, wool, tea, machinery, coal and coke, cotton yarn, metal goods, wine, olive oil, raw silk, herrings, textile goods, fruit, coffee, tobacco. The import trade was heaviest with Germany, Great Britain, France, Austria-Hungary, and Belgium, in the order named. In the export trade Great Britain took the lead, Holland, France, and Germany following. In 1895 the Siberian railway was completed to Vladivostok on the Pacific, some 5700 miles from Petrograd.

Salt Lake City, the capital of Utah, near the Jordan river, 12 miles southeast of Great Salt Lake. It is situated in a wide valley, about 4,300 feet above the sea, and surrounded by mountains. The city has an area of about 51 square miles, is laid out on a grand scale with broad shaded streets and with irrigation ditches lining the thoroughfares. Salt Lake City is a distributing center for a vast mining, stock raising, and farming country and recently has established important manufactories. Near the center of the city is the Temple Block, or square, containing the temple, tabernacle, and assembly hall which together form the official seat of the Latter-Day Saints, generally known as the Mormon church. The temple, which is the most beautiful of Mormon edifices, was begun in 1853 and finished in 1893 at a cost of $4,000,000. The elliptical tabernacle is noted for its large self-supporting arched roof, grand organ, and remarkable acoustic properties. The auditorium seats 8,000 persons. A new state capitol, costing $2,500,000, was completed in 1915. The university of Utah, a state normal school, and various other educational institutions, together with several libraries, are located in Salt Lake City. It was founded in 1847 by Mormons under Brigham Young and has since been the headquarters of the Latter-Day Saints, although less than half the inhabitants now are Mormons. Population, 1920 census, 118,110.

San Francisco, an important city of California, and a leading trade center of the Pacific coast of America, is situated on San Francisco Bay. The bay, which is fifty miles long by five miles wide, makes one of the grandest harbors in the world, and the principal one on the Pacific coast. The mean altitude is 130 feet above the sea. There are in all 750 miles of streets, of which 192 miles are paved, and the sewer system covers 308 miles. The annual cost of maintaining the city government exceeds $7,000,000. The Golden Gate Park, named after the popular name of the entrance to San Francisco Bay, is the most important park in the city, comprising 1,043 acres. It extends from the city to the ocean. About half of it is beautifully laid out in promenades, drives, and lawns. It was here that the Midwinter Exposition was held in 1894. The park contains a magnificent conservatory, and monuments of Francis Scott Key, President Garfield, General Halleck, and Thomas Starr King. Hill Park, a half mile east of Golden Gate Park, affords a fine view from its highest point, which is 570 feet above the sea. The Presidio, or Government Military Reservation, extends along the Golden Gate for about four miles, and has an area of 1,500 acres. The city proper was almost destroyed by earthquake and fire in 1906 with a loss of nearly $250,000,000; the city was rapidly rebuilt on a magnificent scale. The Panama-Pacific International Exposition was held at San Francisco in 1915. Population, 1920 census, 506,676.

Scotland, the northern division of the island of Great Britain. The greatest length,

from north-northeast to south-southwest, between Dunnet Head and the Mull of Galloway, is 287 miles. The breadth varies from 140 miles to less than thirty, the latter in the north, between Dornoch Firth and Loch Broom. The chief cities are: Glasgow, Edinburgh, Dundee, and Aberdeen.

The islands of Scotland number altogether nearly 800. On the east coast they are few and small; but on the northeast coast are the two large groups of the Orkneys and Shetlands; while on the west coast the islands are large and numerous. The west coast of the mainland is generally a wild, deeply indented mountain wall, presenting a series of inlets or sea lochs, while toward the middle the coast is cleft by two great inlets opening to the southwest, the Firth of Lorn and its continuation Loch Linnhe, and the Firth of Clyde. The east coast is sometimes low and sandy, but is often formed of steep, rocky cliffs of considerable elevation, the chief inlets being the Firth of Forth and Tay, Moray Firth and Cromarty Firth.

Both from the configuration of the surface and the geological structure, the country naturally divides into the Highlands in the north, Central Lowlands, and Southern Uplands. The Highland division is remarkable for its mountain-masses, many of the summits being over 4,000 feet high. The best known are the Grampians, which form a system covering a large area, and culminating on the west coast in Ben Nevis, 4,406 feet high; while fifty-five miles to the northeast rises a remarkable cluster of summits reaching in Ben Macdhui the height of 4,296 feet. The Grampians and their connections are separated from the mountains farther to the north by Glenmore or the Great Glen of Scotland, a remarkable depression stretching from sea to sea, and forming, by the series of lakes occupying it and the Caledonian Canal connecting them, a waterway from the west coast to the east. The Southern Uplands are also essentially a mountainous region, summits of over 2,000 feet being frequent, though none exceed 3,000 feet above the sea. The Central region, though much less elevated than the other two divisions, has none of the monotony usual in flat countries. Though only a sixth of the whole area, the fertility of the soil and its mineral treasures make this part by far the wealthiest and most populous.

The chief rivers flow (roughly speaking) to the east, and enter the North Sea, the largest being the Tweed, Forth, Tay, South Esk, North Esk, Dee, Don, Deveron, Spey, and Findhorn; those entering the sea on the west are the Clyde, Ayr, Doon, Dee, Nith, Annan, and Esk. The Tay carries to the sea a larger quantity of water than any other river in Britain, but neither it nor most of the others, except when they form estuaries, are of much use for navigation. The Clyde, however, in its lower course carries a vast traffic, this being made possible chiefly by dredging. A striking feature of the country is the great number of lakes, varying in size from Loch Lomond (twenty-eight square miles) to the pool-like mountain tarns. In the Northern Highlands almost every glen has its lake and every mountain hollow is filled by a stream or spring. Among the more noted are Lochs Lomond, Katrine, Tay, Earn, Rannoch, Awe, Shiel, Laggan, Lochy, Ness, Maree, Shin, in the Western and Northern Highlands; Loch Leven, in the Central Lowlands; and St. Mary's Loch, Lochs Ken, Dee, and Doon in the Southern Uplands.

Seattle, the largest city and chief seaport of Washington, is built on the east shore of Puget sound, 864 miles by water north of San Francisco. The city occupies a commanding site between the Cascade and Olympic mountain ranges, with Puget sound forming the west front, and with Lake Washington lying to the east. The park and boulevard system comprises over 1,800 acres, 20 improved playgrounds, and 21 miles of scenic boulevards. The campus of the university of Washington, the leading institution for higher education in the Northwest, covering 335 acres, situated between Lakes Union and Washington, lies wholly within the city. Notable buildings are the cathedral of St. James, Providence hospital, the public library, the university of Washington group, and the Smith building 38 stories high. With a tributary region rich in timber, fisheries, mineral and agricultural resources and with exceptional facilities for transportation, Seattle has become one of the foremost cities of the Pacific coast. It is a terminal point for several transcontinental railroads and there is regular steamship connection with all parts of the world by the Panama canal and the transpacific routes. In addition to other fine harbor facilities, a ship canal, wholly within the city, 8½ miles long, connects Puget sound with Lake Union and Lake Washington. The canal, built at a cost exceeding $3,000,000, is of sufficient width and depth to accommodate the largest merchant and war vessels. The total commerce of the port for 1915 exceeded $250,000,000. Manufacturing and shipbuilding are increasingly important. The city is also an important center for the receipt and shipment of gold. Seattle was settled in 1852, incorporated in 1865, and became connected with the East by rail in 1883. The first gold from Alaska was received in 1897. Population, 1920 census, 315,312.

Shanghai, a city and seaport of China, in the province of Kiangsu; near the junction of the Hwang-pu and the Wusung rivers. The Chinese city proper is inclosed within walls twenty-four feet high, the streets being narrow and dirty, and the buildings low, crowded, and for the most part unimportant. In 1843 Shanghai was opened as one of the five treaty ports, and an important foreign settlement is now established (with a separate government) outside the city walls. Shanghai has water communication with about a third of China, and its trade has become very extensive. The chief imports are cottons, metals, wool, and opium; and the exports, silk, tea, rice, and raw cotton. The largest part of the foreign trade is in the hands of British and American merchants. Population, 1918 est., 1,000,000.

Sophia, Church of St., in Constantinople, the most celebrated ecclesiastical edifice of the Greek Church, now used as a mosque. It was built by the Emperor Justinian, and

dedicated in 558. It is in the Byzantine style of architecture, has a fine dome rising to the height of 180 feet, and is richly decorated in the interior. The mass of the edifice is of brick, but is overlaid with marble; the floor is of mosaic work, composed of porphyry and verd antique. The great piers which support the dome consist of square blocks of stone bound with hoops of iron. The numerous pillars supporting the internal galleries, etc., are of white and colored marbles, porphyry, and granite, and have capitals of various peculiar forms.

South Africa, Union of, a British dominion occupying the southern extremity of the continent of Africa, and embracing the four provinces of Cape of Good Hope, Natal, the Transvaal, and the Orange Free State, which were the scene of the South African war. The Union was constituted in 1909 by act of the British Parliament. United South Africa extends across the continent along the southern boundaries of South-West Africa, Bechuanaland, Rhodesia, and Portuguese East Africa, has an area of 473,100 square miles and a population in 1921 of 6,922,813, of whom about one-fifth are of European (white) extraction, and the remainder natives or other (colored) races. This region is chiefly table-land of a temperate and salubrious climate, and is admirably adapted to European settlement. It is principally a pastoral country, but large districts are well suited to agriculture. Its mineral resources, particulary gold and diamonds, are enormous, and the future development of the country is likely to be very great.

Spain, a kingdom in the southwest of Europe, forming with Portugal the great southwest peninsula of Europe. It is separated from France on the northeast by the chain of the Pyrenees, and is otherwise bounded by Portugal and the Atlantic and Mediterranean. In greatest breadth north and south it measures 540 miles; greatest length east and west, 620 miles. The coast line is not much broken, but sweeps round in gentle curves. The interior is considerably diversified, but its characteristic feature is its central table-land, which has an elevation of from 2,200 to 2,800 feet, and a superficial extent of not less than 90,000 square miles. It descends gradually on the west toward Portugal; on the east are the provinces of Catalonia and Valencia; on the north are the Asturian and Cantabrian Mountains, reaching an elevation of about 8,500 feet, and on the south is the Sierra Morena. Besides these ranges, there is the chain of the Pyrenees, which, though partly belonging to France, presents its boldest front to Spain and has its loftiest summits within it. The whole country teems with mineral wealth, including gold, silver, quicksilver, lead, copper, iron, zinc calamine, antimony, tin, coal, etc. The exploitation of the minerals has, however, in recent times been mostly accomplished by foreign capital, while most of the ore is exported to foreign countries in its raw state. About one-sixth of the acreage is under wood, the more remarkable trees being the Spanish chestnut and several varieties of oak, and in particular the cork oak. Fruits are extremely abundant, and include, in addition to apples, pears, cherries, plums, peaches, and apricots, the almond, date, fig, orange, citron, olive, and pomegranate; and in the lower districts, the pineapple and banana. The culture of the vine is general, and great quantities of wine are made, both for home consumption and for exportation. The more important farm crops are wheat, rice, maize, barley, and legumes. In the south, cotton and sugar cane are grown. Hemp, flax, esparto, the mulberry for rearing silk worms, saffron, licorice are also to be mentioned.

Spokane, a city in eastern Washington, on the Spokane river, 339 miles east of Seattle. The city is built in a beautiful natural park, surrounding Spokane fall, a noted cataract now in the heart of the city's business district. Spokane is the mining center of the Pacific northwest with tributary mines producing upwards of $35,000,000 annually in gold, silver, copper, zinc, and lead. It is also the trade center of a productive cereal belt and contains important manufacturing industries. The growth of Spokane dates from 1881 when the Northern Pacific railway was completed to this point. Population, 1920 census, 104,437.

St. Lawrence, one of the largest rivers in the world, which rises under the name of the St. Louis, and drains the great chain of North American lakes. In different parts of its course it is known by different names. From the sea to Lake Ontario it is called St. Lawrence; between Lakes Ontario and Erie it is called Niagara River; between Lakes Erie and St. Clair, Detroit River; between Lakes St. Clair and Huron, St. Clair River; between Lakes Huron and Superior, St. Mary's River or the Narrows, forming thus an uninterrupted waterway of upwards of 1,030 miles. It receives the Ottawa, its principal auxiliary, at Montreal, as also the St. Maurice, the Saguenay, and numerous other large rivers from the north. The river is navigable for Atlantic steamers to the city of Montreal, 600 miles up, and from Montreal upwards by river and lake steamers. Between Montreal and Quebec its average breadth is about two miles. The rapids between Montreal and Lake Ontario are passed by means of canals, and Niagara Falls by the Welland Canal. In part of its course it forms the boundary between the United States and Canada.

St. Louis, chief city of Missouri, on the west bank of the Mississippi River, twenty miles south of the mouth of the Missouri, is the sixth city in the United States in population, and the commercial metropolis of the Mississippi Valley. The city is built on rising ground, comprising three terraces, the highest of which is 200 feet above the level of the river. The city owns an extensive water-works system, costing $20,000,000. St. Louis has a park system which constitutes one of its most attractive features. The total area is 2,268 acres. Forest Park, which comprises 1,370 acres, is the largest and probably the most beautiful of the parks. Tower Grove Park, covering 276 acres, was the donation of Henry Shaw, who also gave the city the Missouri Botanical Garden. The fair grounds, with 137 acres, contain a one-mile race track, an amphitheater seating 40,000 people, many halls, etc. Carondelet and Lafayette Parks

are small but fine specimens of landscape gardening. The principal public buildings are the massive post-office and custom-house, costing more than $6,500,000; the city hall, built at a cost of $2,000,000; the court-house; the union railroad station with a train house covering thirty tracks, and used by twenty-one railroad companies, erected at a cost of $6,500,000; and the Chamber of Commerce building, costing $2,000,000. The St. Louis bridge, a massive structure, was completed in 1874 at a cost of over $10,000,000. It consists of three spans, the center one being 520 feet long, and the other two 500 feet each. The piers upon which these spans rest are built of limestone carried down to bed rock. The main passage for pedestrians is fifty-four feet wide, and below this are two lines of rails. The merchant's bridge, three miles north, was completed in 1890 at a cost of $3,000,000. It is used exclusively for railroad traffic. The favorable location of St. Louis in the heart of the vast and fertile Mississippi Valley makes it one of the greatest commercial cities in the United States. There is an immense trade in breadstuffs, grain, provisions, lumber, hides, fur, agricultural products, manufactured articles, etc. There are about 7,000 manufacturing establishments, with a combined capital of about $150,000,000, and employing upward of 100,000 persons. It is one of the largest tobacco manufacturing cities in the world. The city has direct communication with more than 6,000 miles of rivers. A considerable amount of its foreign trade is entered and cleared at New Orleans. St. Louis is the seat of Washington University. Population, 772,897.

Stockholm, the capital of Sweden; on several islands and the adjacent mainland, between a bay of the Baltic and Lake Malar; in a situation that is accounted one of the most picturesque in Europe. The nucleus of Stockholm is an island in mid-channel called "The Town"; on it stand the imposing royal palace (1697–1754); the principal church (St. Nicholas), in which the kings are crowned; the House of the Nobles (1648–1670), in which that class hold their periodical meetings; the town house; the ministries of the kingdom; and the principal wharf, a magnificent granite quay, fronting east. Immediately west of the central island lies the Knights' Island; it is almost entirely occupied with public buildings, as the houses of parliament; the old Franciscan Church, in which all the later sovereigns of Sweden have been buried; the royal archives; and the chief law courts of the kingdom. There is considerable industry in the making of sugar, tobacco, silks and ribbons, candles, linen, cotton, and leather, and there are large iron foundries and machine shops. The water approaches to the city are in general rendered inaccessible by ice during three or four months every winter; but to remedy this defect it is proposed to build a new harbor at Nynas on the Baltic shore, thirty miles to the south. Stockholm is the seat of a large trade every year, principally grain (wheat and rye), rice, flour, herrings, oils and oilcake, cork, groceries, metals, and wine and spirits (imports). Exports consist chiefly of iron and steel, oats and tar. Though Stockholm was founded by Birger Jarl in 1255, it was not made the capital of Sweden till comparatively modern times. Since then, however, it has grown rapidly. Population, 1920, 415,201.

St. Paul's Cathedral, London, is situated on Ludgate Hill, an elevation on the north bank of the Thames. The site of the present building was originally occupied by a church erected by Ethelbert, King of Kent, in 610. This was destroyed by fire in 1087, and another edifice, Old St. Paul's, was shortly afterwards commenced. The structure was in the Gothic style, in the form of a Latin cross, 690 feet long, 130 feet broad, with a lead-covered wooden spire rising to the height of 520 feet. The middle aisle was termed Paul's Walk, from its being frequented by idlers, as well as money-lenders and general dealers. Old St. Paul's was much damaged by a fire in 1137, by lightning in 1444, again by fire in 1561, and was utterly destroyed by the great fire in 1666. The ruins remained for about eight years, when the rebuilding was taken in hand by the government of Charles II. (1675–1710). The whole building was completed at a total cost of $7,500,000, under one architect (Sir Christopher Wren), one master-mason (Thomas Strong), and one Bishop of London (Dr. Henry Compton). The building is of Portland stone, in the form of a cross. Its length is 500 feet; the width from north to south portico 282 feet; the general height is 100 feet. The whole is surmounted by a great dome raised on eight arches. Above the dome is a lantern or gallery terminated above by a ball and gilded cross, 404 feet from the pavement beneath. The elevated portico, forming the grand entrance, consists of twelve Corinthian columns, with an upper series of eight pillars of the composite order, supporting a pediment; the front being flanked by two bell-towers, 120 feet in height. The entablature represents in relief the conversion of St. Paul, a work of Francis Bird. Upon the south front, which corresponds with the north, is a phœnix rising from the flames, with the motto, "Resurgam" (I shall rise again). The pavement of the interior is composed of slabs of black and white marble. The crypt under the nave contains the burying-places of many illustrious personages, and some interesting relics of old St. Paul's. Among the numerous monuments and statues to the illustrious dead may be noted those of John Howard and Dr. Johnson, by Bacon; statues of Nelson, Earl Howe, and Sir Joshua Reynolds, by Flaxman; Bishop Heber, by Chantrey; and monuments to Lord Rodney, Lord Heathfield, Admiral Collingwood, General Abercrombie, etc., by Rossi, Westmacott, and others. The monument to the Duke of Wellington, by Alfred Stevens, is accounted the finest work of its kind in England. It consists of a rich marble sarcophagus and canopy, elaborately ornamented with bronze sculptures. It is thirty feet in height and cost upwards of $150,000. Various decorative, structural, and other improvements have recently been made on the interior of the cathedral.

St. Peter's, the Cathedral of Rome, the largest and one of the most magnificent churches in Christendom. It is a cruciform building in the Italian style, surmounted by a lofty dome,

built on the legendary site of St. Peter's martyrdom; the foundation stone was laid on the 18th of April, 1506. Michael Angelo was appointed architect in 1546. He nearly completed the dome and a large portion of the building before his decease (1564). The nave was finished in 1612, the façade and portico in 1614, and the church was dedicated by Urban VIII., November 18, 1626. The interior diameter of the dome is 139 feet, the exterior diameter 195½ feet; its height from the pavement to the base of the lantern, 405 feet; to the top of the cross outside, 448 feet. The length of the cathedral within the walls is 613½ feet; the height of the nave near the door, 152½ feet; the width, 87½ feet. The width of the side aisles is 33¾ feet; the entire width of the nave and side aisles, including the piers that separate them, 197¾ feet. The circumference of the piers which support the dome is 253 feet. The floor of the cathedral covers nearly five acres. Its cost is estimated to have exceeded $50,000,000.

St. Petersburg (now **Petrograd**), formerly the capital of Russia, situated on the Gulf of Finland at the mouth of the Neva. When a strong wind blows from the sea, the river rises several feet, and the poorer parts of St. Petersburg are flooded every year; but when the overflow exceeds ten feet nearly the whole city is inundated. Peter I. laid the foundations of his capital in 1703 on one of the islands of the delta, and dreamed to make of it a new Amsterdam. The connection between Russia and its capital was established through the Neva, which, since it was connected by canals with the upper Volga, became the real mouth of the immense basin of the chief river of Russia and its numberless tributaries. Foreign trade and the centralization of all administration in the residence of the emperor made St. Petersburg a very populous city covering forty-two square miles.

The Great Neva, the chief branch of the river, which has within the city itself a width of from 400 to 700 yards, is so deep that large ships can lie alongside its granite embankments. Cronstadt, built on an island sixteen miles to the west of St. Petersburg, is both the fortress and the port of the capital. Two-thirds of the foreign vessels unload within the city itself. The main body of the city, containing more than one-half of its inhabitants as well as all the chief streets, stands on the mainland, on the left bank of the Neva; and a beautiful granite quay, with a long series of palaces and mansions, stretches for two and one-half miles. Only two permanent bridges cross the Neva; the other two, built on boats, are removed in autumn and spring. The island Vasilievsky, between the Great and Little Nevas, has at its head the Stock Exchange, surrounded by spacious storehouses, and a row of scientific institutions, all facing the Neva. On the Peterburgsky Island, between the Little Neva and the Great Neva, stands the old fortress of St. Peter and St. Paul, facing the Winter Palace, and containing the mint and the cathedral. It has behind it the arsenal, and a series of wide streets bordered by small, mostly wooden houses, chiefly occupied by the poorer civil service functionaries. Farther up the mainland on the right bank of the Neva is covered by the poorer parts of the city, but contains some public buildings and a great number of factories. Numerous islands, separated from each other by small branches into which both Nevas subdivide, and connected together by a great number of wooden bridges, are covered with beautiful parks and summer houses, to which most of the wealthier and middle-class population repair in the summer. The main part of St. Petersburg has for its center the Old Admiralty. Near the Admiralty are the chief public buildings of the city. The principal churches (which are generally distinguished by prominent cupolas) are St. Isaac's Cathedral, the most costly of all, and one of the largest churches of Europe, modeled on St. Peter's, Rome, built of granite and Finland marble, and with a profusely decorated interior; the cathedral of St. Peter and St. Paul, the resting-place of the emperors, with a conspicuous pyramidal spire (302 feet); the cathedral of Our Lady of Kazan, with an image of the Virgin enriched with precious stones and pearls; the Smolni Cathedral, a white marble edifice; and the Memorial Church, built on the spot where the Czar, Alexander II., was assassinated, one of the most splendid of the many sacred edifices in the city. Among the many palaces are the Winter Palace, now used only for ceremonial purposes, one of the largest and most luxurious in Europe; the marble Palace, so-called; the Michael Palace, now used as the School of Military Engineers; and the Hermitage Palace, containing a fine library and one of the richest collections of French, Flemish, Dutch, Italian, Spanish, Russian, and other paintings, the private property of the czars, besides engravings, coins, gems, antiquities, etc. The cottage in which Peter the Great lived while superintending the construction of St. Petersburg is still preserved. Other buildings of importance are: the Admiralty, a vast parallelogram of brick, with a naval and natural history museum and library; the arsenal, containing a museum of artillery; the palaces of the general staff and of the senate; the custom-house, the exchange, and imperial bank; the fortress of Petropavlovsk (the Russian bastile); the Academy of Sciences, with extensive museum and library; and the imperial library, with over two and a half million volumes and large collections of manuscripts. There are numerous hospitals and charitable institutions, a university, founded in 1819, many special academies, and four theaters maintained by the state. Of the monuments, the colossal equestrian statue of Peter the Great, erected by Catharine II. (1782), and the monolithic Doric column of granite, one hundred and fifty-five feet high, erected by Nicholas to the memory of Alexander I., take first rank.

Peter the Great founded his new capital immediately after he had succeeded in wresting its unfavorable site from the Swedes. The forced construction of a city in a site apparently forbidden by nature, cost the lives, according to various accounts, of from 100,000 to 200,000 peasants, collected from all parts of the Russian Empire. It was at first built entirely of wood, and without a proper street system, but the extensive fires of 1736 and 1737 facilitated the reconstruction on an

improved plan. Improvements by Catherine II, Nicholas I, and Alexander II made it one of the finest capitals in Europe. After the revolution of 1917 the city greatly deteriorated. In 1918 the soviet government, under Lenine and Trotzky, transferred the capital to Moscow. As a result of famine and misrule the population of Petrograd, officially placed at 2,318,645 in 1915, was reduced, according to estimates made in 1920, to 1,000,000.

Suez Canal, a great artificial channel cutting the isthmus of Suez, and thus forming a waterway between the Mediterranean and the Red Sea. It was planned and undertaken by the French engineer De Lesseps, through whose untiring efforts a company was formed and the necessary capital raised; occupied ten years in the construction (1859–69), and cost some twenty million pounds. From Port Said on the Mediterranean to Suez at the head of the Red Sea the length is about 100 miles, a portion of which lies through Lakes Menzaleh, Ballah, Timsah, and the Bitter Lakes. As widened and deepened from time until 1915 it has a minimum depth of thirty feet, and varies from 120 to 300 feet in width; traffic is facilitated by electric light during the night, and the passage occupies about sixteen hours. It has been neutralized and exempted from blockade, vessels of all nations in peace or war being free to pass through; now the highway to India and the East, shortening the voyage to India by 7,600 miles. Three-fourths of the ships passing through are English; an annual toll is drawn of over four million pounds.

Superior, Lake, the extreme west and most extensive of the Great Lakes of North America, being the largest body of fresh water in the entire world. Its length, east to west, is about 400 miles, with a mean breadth of about eighty miles, so that its area may be taken at about 31,500 square miles. The maximum depth thus far reached is 1,008 feet and the height of its surface is about 602 feet above the Atlantic. It receives upward of fifty rivers, but none is of much importance except the St. Louis which enters at its southwest extremity, and the Riviere au Grand Portage. During the melting of the snow, these and the other rivers sweep into the lake vast quantities of sand, boulder stones, and drift timber. It discharges itself at its eastern extremity into Lakes Huron and Michigan, by the river and falls of St. Mary. This lake embosoms many large and well-wooded islands, the chief of which is Isle Royal. Toward each extremity the lake contracts in width, and at the lower end terminates in a bay which falls into the outlet, the St. Mary's River, at the two opposite headlands of Gros Cape on the north and Point Iroquois on the south. Thence to the mouth of the St. Mary's at Lake Huron is about sixty miles. The navigation of this river is interrupted twenty miles below its source at the Falls of St. Mary, or, as the place is commonly called, Sault Ste. Marie. Here the river descends in a succession of rapids extending three-fourths of a mile, from eighteen to twenty-one feet, the fall varying with the stage of the water in Lake Superior.

A ship canal has been constructed past the falls by the United States Government, so that now the lake is accessible to vessels from the Atlantic Ocean. The water of Lake Superior, remarkable for its coldness, purity, and transparency, is inhabited by many kinds of fish, among which are the delicious white fish and the gray trout.

Sweden (Swedish, *Sverige*), a kingdom of Northern Europe, comprising, with Norway and Lapland, the whole of the Scandinavian Peninsula, of which it forms the east, south, and most important portion; having northeast, Russian Finland; east and south, the Gulf of Bothnia and the Baltic; southwest, the Sound, Cattegat, and Skagerrack; and west and north, Norway, from which it is, for the most part, divided by the great mountain chain of Scandinavia. Length, north to south, 950 miles; average breadth about 190 miles; area, 172,963 square miles; population, 1910, 5,522,403. The capital is Stockholm.

Sweden is divided into three principal regions: Gœthland (Gothia) in the south; Sweden proper, occupying the center; and Norland (by far the largest part), comprising the remainder. These three regions are again subdivided into twenty-four lans, or districts. Sweden is mountainous in the west, but, in general, flat; and it is remarkable that along the whole road, from Gottenburg in the west to Stockholm in the east, there is not a single acclivity of consequence till within a few miles of the latter.

The climate is less severe than might be expected in so high a latitude. The summers are hot, and spring is almost unknown. In the north snow covers the ground for five or six months in the year; and the west coasts are milder and more humid than the east.

The domestic animals are the same as those of North America. The others are hares and foxes, beavers, wolves, and, in the cold provinces of the north, bears, the leming, and the reindeer. Water fowl are abundant and the mosquitoes are as troublesome as they are in tropical countries.

Only about a fiftieth part of the country is cultivated. Agriculture is in a very backward state, but has been recently much improved. Apple, pear, and cherry trees grow but languidly, while berries of many different kinds are produced spontaneously and spread luxuriantly. Wheat succeeds only in the southern provinces; barley is raised more generally, and in larger quantities; but rye and oats are the kinds of grain most frequently met with. The manufacturing industries include those connected with iron, steel, wooden goods, woolens, cottons, silks, refined sugar, leather, paper, spirits, etc. The greater part of the trade is with Great Britain and Germany.

Switzerland, a west-central republic of Europe, bounded on the north by Baden, Würtemberg, and Bavaria, east by the Tyrol, south by Italy, and west and northwest by France. Maximum length from east to west, 210 miles; breadth, 140 miles. This, the most mountainous country in Europe, has the Alps forming the whole of its southern and eastern frontiers, besides extending its ramified chains over the greater part of its interior. The most level

tracts of surface are found in the northwestern cantons of Berne, Basle, and Zurich, where they form a series of mountain-locked vales, backed by the Jura Range on the French border. The chief valley is that of the Rhone in the south embracing the canton of Valais, with rich tillable tracts and fertile pastures extending on either hand towards the bases of the Bernese and Pennine Alps. The principal rivers, all rapid and unnavigable, are the Rhone, Rhine, Ticino, Reuss, and Aar, with their affluents. The Swiss lakes, notably numerous and picturesquely located, as well as of great depth, comprise those of Geneva, Constance, Lucerne, Neufchâtel, Zurich, Thun, Bienne, Wallenstadt, and Brienz. Forests cover about one-sixth of the entire surface of Switzerland. Agriculture is carried on chiefly in the valleys, where the cereals, along with flax, hemp, and tobacco, are raised. The mountain slopes, occupying fully two-fifths of the territorial area, afford excellent pasturage, and furnish dairy produce, tallow, and hides, in quantities sufficient for exportation. Fruits of the hardier varieties grow well and profitably. In the western cantons, the vine flourishes; while the orchards of the Thurgau and other northern districts supply ample material for the manufacture of cider, and of Kirschenwasser and other liquors. The national industry (other than rural) is largely developed in important manufactures, of which those of textile fabrics, leather goods, pottery, sugar, watches, and jewelry constitute the staple items. The chief cities and towns are: Geneva, Zurich, Berne, the capital, Basle, Lausanne, La Chaux de Fonds, St. Gall, Lucerne, Neufchâtel, and Freiburg.

Tacoma, a seaport situated on Puget Sound, Washington, 28 miles south of Seattle. The city is built upon an attractive site rising about 300 feet above sea level. The Olympic mountains on the west, the Cascade mountains on the east, together with Mt. Rainier, also known by the Indian name Tacoma (14,408 ft.), only 60 miles to the southeast, furnish notable mountain views. Tacoma is the terminus of the Northern Pacific railway, and three other transcontinental lines enter the city. Numerous steamship lines, including several transpacific lines, make it a port. Excellent transportation facilities by both sea and land and a productive tributary country have made Tacoma a prominent business center, with a large wholesale trade, manufacturing industries, and a growing coastwise and foreign commerce. The present city of Tacoma was organized in 1883 by the consolidation of Old Tacoma, founded in 1868, and New Tacoma, founded in 1874. Population, 1920 census, 96,965.

Taj Mahal, or **Mehal** ("Gem of Buildings"), a famous mausoleum, erected at Agra, India, by Shah Jehan for his favorite wife. It is 186 feet square with the corners cut off, the whole surmounted by a dome fifty-eight feet in diameter and about 210 feet in height, flanked by four octagonal kiosks. The interior is divided into four domed chambers in the corners, and a large central arcaded octagon, all connected by corridors. The central octagon contains two cenotaphs surrounded by a very noticeable openwork marble rail. The only light admitted enters through the delicately pierced marble screens of the windows. The decoration is especially noticeable for the stone mosaics of flower themes and arabesques, much of them in agate, jasper, and bloodstone. The entire structure stands on a white marble platform eighteen feet high and 313 feet square, with tapering cylindrical minarets 133 feet high at the corners. The whole Koran is said to be written in mosaics of precious stones on the interior walls. In the construction of this magnificent building, which, as Bayard Taylor says, alone repays a visit to India, 20,000 men were employed twenty years. Although the labor cost nothing, over $20,000,000 were expended in its construction. The doors are of solid silver, and an enormous diamond was placed upon the tomb itself.

Thames, the most important river of Great Britain; usually said to rise about three miles southwest of Cirencester in Gloucestershire, near a bridge over the Thames and Severn Canal, called Thameshead Bridge, but is more properly formed by the Isis, Churn, Colne, and Leach, which have their sources on the east side of the Cotswold Hills, and unite near Lechlade. Its total course is estimated at 250 miles. Its tributaries include the Windrush, Cherwell, Thame, Colne, Brent, Lea, and Roding, on the left; the Kennet, Loddon, Wey, and Mole, on the right. Thameshead Bridge is 376 feet above sea level; the junction of the Colne above Lechlade is 243 feet. At London Bridge the width of the river is 266 yards, at Woolwich, 490 yards, at Gravesend, 800 yards, and three miles below, 1,290 yards. The depth of the river in the fairway above Greenwich to London Bridge is twelve to thirteen feet, while its tides have a mean range of seventeen feet and an extreme rise of twenty-two feet. By means of numerous canals immediate access is given from its basin to those of all the great rivers of England.

Tiber, a river of Italy celebrated in ancient Roman history, rises in the Apennines, in the province of Arezzo, Tuscany; rapid and turbid in its upper course, but navigable 100 miles upwards from its mouth; flows generally in a southern direction, and after a course of about 260 miles enters the Mediterranean about fifteen miles below Rome.

Tides, the rising and falling of the water of the sea which occurs periodically, as observed at places on the coasts. The tide appears as a general wave of water, which gradually elevates itself to a certain height, then as gradually sinks till its surface is about as much below the medium level as it was before above it. From that time the wave again begins to rise; and this reciprocating motion of the waters continues constantly, with certain variations in the height and in the times of attaining the greatest degree of height and of depression. The alternate rising and falling of the tide-wave are observed to take place generally twice in the course of a lunar day, or of twenty-four hours, forty-nine minutes of mean solar time, on most of the shores of the ocean, and in the

greater part of the bays, firths, and rivers which communicate freely with it. The tides form what are called a flood and an ebb, a high and a low water. The whole interval between high and low water is often called a tide. The water is said to flow and to ebb; the rising is called the flood tide and the falling the ebb tide. The rise or fall of the waters, in regard to elevation or depression, is exceedingly different at different places, and is also variable everywhere. The interval between two succeeding high-waters is also variable. It is shortest about new and full moon, being then about twelve hours, nineteen minutes; about the time of the moon's quadratures it is twelve hours, thirty minutes. But these intervals are somewhat different at different places. Tides are caused by the attraction which the sun and moon exert over the water of the earth. The moon is the nearest of the heavenly bodies to the earth, and the mobile nature of water leads it to yield readily to the attractive influence. Those parts of the waters directly under the moon's vertical path in the heavens are drawn out towards the moon. At the same time the moon attracts the bulk of the earth, and, as it were, pulls the earth away from the water on the surface farthest from it, so that here also the water is raised, although not quite so much as on the nearer side. The waters being thus heaped up at the same time on these two opposite parts of the earth, and the waters situated half-way between them being thus necessarily depressed, two high and two low tides occur in the period of a little more than one revolution of the earth on its axis. The sun's influence upon the tides is evidenced in its either increasing or diminishing the lunar tide, according as the sun's place in the heavens coincides with the line of the moon's attraction, or the reverse. It is this difference which produces what are known as spring tides and neap tides. Spring tides occur at new and full moon, and are the result of the gravitating influence of both sun and moon; neap tides occur when the moon is in her quarters, and are not so high as the spring tides, the lunar influence being lessened by the sun's force acting in a direction at right angles to it. The interference of coasts and irregularities in the ocean beds cause the great variations as to time and range in the actual tides observed at different places. In some places, as in the German Ocean at a point north of the Strait of Dover, a high tide meets low water, and thus maintains perpetual mean tide. In the case cited, high water transmitted through the Strait of Dover encounters low water transmitted round the north of Scotland, and vice versa. The interval of time at any place between noon and the time of high water on the day of full or new moon is called the establishment of the port.

Tokyo, formerly called Yeddo, the capital of Japan, and chief residence of the Emperor; on a bay of the same name; on the southeast coast of Hondo, the largest of the Japanese Islands, and connected by rail with Yokohama and Kanagawa. The bulk of the houses are of wood, but there are many new buildings of brick and stone, and an imperial palace has been erected near the center, as also public offices, etc. The greater part of the town is flat, and intersected by numerous canals crossed by bridges. The streets are generally narrow and irregular. Gas and electricity have been introduced, and the sanitary arrangements have been improved. Education is well organized, and there are nearly 700 private and elementary schools. Tokyo contains the imperial university, and it may be considered the center of the political, commercial, and literary activity of Japan. Population, 1920 census, 2,173,162.

Toronto, capital of the province of Ontario, Canada, on Lake Ontario. Its site is low, but rises gently from the water's edge to a height of about 100 feet. The Bay of Toronto, an arm of Lake Ontario, on the south of the city, affords a commodious and excellent harbor, capable of receiving the largest lake vessels. Toronto has various manufacturing interests, including several engineering plants and iron foundries, soap works, an immense distillery, a number of breweries, rolling mills, car shops, tanneries, carriage factories, machine shops, cabinet factories, spice mills, car wheel works, pork packing plants, boot and shoe establishments, sash and door and sewing machine factories, etc. The city has large facilities for an extensive lake traffic. There is regular steamboat connection with all lake ports as well as with those on the St. Lawrence River, making the city one of great commercial importance. Toronto was founded in 1794 by Governor Simcoe. The town was captured in 1813 by the Americans under General Pike, who was killed during the attack. Since that period it has made steady progress as a commercial, educational, and residential center. Population, 1921, 519,290.

Turkey, or the Ottoman empire, a country primarily Asiatic, of which, however, the capital, Constantinople, together with a small tract of adjacent territory, is in Europe. The limits of European Turkey were greatly curtailed in 1878 by the treaty of Berlin, and again in 1908 by the proclamation of the independence of Bulgaria, including Eastern Rumelia, and by the annexation by Austria-Hungary of Bosnia and Herzegovina. At the beginning of the Balkan war in 1912, Turkey in Europe extended across the Balkan peninsula from the Black to the Adriatic and Ionian seas, and from the southern boundaries of Montenegro, Bosnia, Servia and Bulgaria southward to Greece and the Ægean. This region embraced an area of 65,350 square miles. The population was over 6,000,000, of whom about 70% were Turks, Greeks and Albanians in nearly equal numbers, and the remainder a mixture of various racial elements, Serbs, Bulgarians, Rumanians, Armenians, Magyars, Gypsies, Jews, and Circassians. The chief towns were Adrianople, Salonika, Monastir, Scutari, and Janina. At the close of the Balkan war in 1913, Turkey lost all her possessions in Europe west of a line from Enos on the Ægean sea to Midia on the Black sea, except Albania. Turkey in Europe was thus reduced to an area of about 5,000 square miles. Adrianople passed to Bulgaria, Salonika was restored to the Greeks, while Monastir and Scutari were captured by Servia and Montenegro respectively.

The surface of Turkey in Europe is mountainous, the whole region being traversed by numerous high mountain chains, separated by long and narrow valleys running from northwest to southeast. The elevated plateaus found among the mountain chains are mostly fruitful and well populated, and some of them inclose lakes. The climate is healthful and moderate, and the soil for the most part fertile. For the production of the ordinary cereals no part of the world is more admirably adapted. The principal grains are maize, corn, barley, rye, and oats. The cultivation of tobacco is very general. The olive is cultivated extensively and exported on a considerable scale; wine is an important product in many districts. The mountains are said to be rich in minerals, but this source of wealth is practically unexplored. There are few manufactures except in Constantinople and these are of little importance.

Previous to the World War, Turkey in Asia included Anatolia, otherwise known as Asia Minor, the country intersected by the Euphrates and the Tigris, the mountainous region of Armenia north from those rivers towards the Black Sea, the ancient lands of Syria and Palestine, and the coast strips of Arabia along the Red Sea and Persian Gulf. Omitting Arabia, the country consisted mainly of: (1) a high plateau traversed by the mountains of Taurus and Anti-Taurus, and stretching from the Archipelago to the borders of Persia. (2) A plateau of less elevation and extent (Syria and Palestine) traversed by the double range of Lebanon. (3) The extensive plain of Mesopotamia on the lower Tigris and Euphrates. The combined area of these former Turkish possessions in Asia was about 700,000 square miles. The population, which totalled about 20,000,000, was of very diverse nationality. The Osmanli Turks, who, as the dominant race, were diffused over the country, formed a large and important element. There were some four million Arabs, besides Grecks, Syrians, Circassians, Armenians, Jews, and many other races.

By the Treaty of Sèvres, 1920, Turkey in Europe was reduced to an area of about 1500 square miles, with a population of about 1,300,000. Turkey in Asia was likewise greatly diminished. Part of the vilayet of Aidin (Smyrna) was assigned to Greece; Konia, to Italy; and part of Syria to France; while Turkish Armenia, Kurdistan, Syria, Great Lebanon, Mesopotamia, Palestine, Haifa, and Arabia were declared independent of Turkish rule. Turkey was also dispossessed of various islands. The area of the Asiatic possessions remaining to Turkey is estimated at 175,000 square miles, with a population approximating 8,000,000.

Ural Mountains form part of the boundary between Europe and Asia, and separate European Russia on the west from Siberia on the east. The chain extends south from the Kara Sea, an arm of the Arctic Ocean, to the middle course of the Ural River, and is 1,333 miles long, with a width varying from sixteen to sixty-six miles. Although the Ural Mountains form really a single uninterrupted chain, geographers have agreed to consider them as divided into three sections—the North, Middle, and South Ural. The Middle Ural, commonly called *Roudnoi* (metalliferous), the principal seat of the mineral riches of the whole chain, comprises the highest peaks, as the Kanjakovski Kamen, rising to 5,000 feet. The chain is composed chiefly of crystalline and metamorphic rocks, granite, gneiss, porphyry, chloritic and micaceous schists. The Ural Mountains, especially the middle and the north part of the South Ural (the governments of Perm and Orenburg), abound in mines of gold, platinum, copper, and iron. Among the precious stones the most notable are the emerald, amethyst, and diamond.

Vatican, The, the palace of the pope in Rome and one of the largest in the world; contains a valuable collection of works of art, and is one of the chief attractions in the city; it is as well a storehouse of literary treasures and documents of interest bearing on the history of the Middle Ages.

Venice (Italian, *Venezia*), a city of Italy, the capital of a province of the same name, on the Gulf of Venice, about 155 miles east of Milan. The city is built on a number of low islands, chiefly upon the island of Rialto, and is intersected by numerous canals. Many of the palaces and other public buildings of the city are very fine, especially the Cathedral of St. Mark, dating from the Eleventh Century, which is remarkable for its five cupolas, its five hundred marble columns, and its rich mosaics; the palace of the Doges, built in the Fourteenth Century, is now used for ceremonies of state. From the palace of the Doges to the prisons on the opposite side of the canal called the Rio Palazzo stretches the famous Bridge of Sighs; at some distance in front of the cathedral stands the also famous campanile, or bell tower, of St. Mark, which was first completed in the Sixteenth Century, and rebuilt in 1904–09, after its collapse in 1902, due to the giving way of the artificial foundation. Population, 1915 census, 168,038.

Vesuvius, Mount (*vē-sū′-vĭ-ŭs*). A famous volcano of South Italy, six miles east of Naples. Its base commands a circuit of thirty miles; its height is 4,260 feet above sea level; its crater, 350 feet in depth, has a circumference of two miles at its outer place, with a level plain at the bottom a half mile in diameter. It towers above a smiling pastoral country, dotted with towns and vineyards, which has time after time been the scene of its devastating eruptions. The earliest known of the latter occurred in 79 A. D., when the cities of Pompeii, Herculaneum, and Stabiæ were overwhelmed beneath the mass of mud and ashes it disgorged. The most remarkable of later eruptions have been those of 1036, 1779, 1822, 1839, 1855, 1872, and 1906. The last-named eruption considerably altered the shape of the cone, lowering it in height, and created widespread devastation.

Victoria Nyanza, a lake in East Central Africa, on the equator, almost equally divided between British East Africa and German East Africa, at an elevation of 3,775 feet above the sea level; discovered by Captain Speke in 1858, and circumnavigated by Stanley in 1875; is regarded as the head-source of the Nile, the waters

of it flowing through Albert Nyanza eighty miles to the north, between which two lakes lies the territory of Uganda.

Vienna, the capital of the Austrian Republic, is situated on the right bank of the Danube and comprises the Inner City, surrounded by the magnificent Ringstrasse and the municipal districts of the outer or newer city. St. Stephan's cathedral is a noted example of Gothic architecture. Other imposing structures are the modern Votivkirche, the new Rathhaus, the parliament and university buildings, and the museums. Vienna is the great emporium and metropolis of Austria. It was a place of importance even in Roman times and from 1282 to 1918 was the capital of the Habsburgs. Population, 1920 census, 1,842,005.

Virgin Islands of the United States. A group of West Indian islands situated about 100 miles east of Porto Rico, acquired in 1917 from Denmark by a payment of $25,000,000. There are three chief islands, with a total population of 26,051: St. Thomas, 33 sq. mi., 10,191; St. Croix, 84 sq. mi., 14,901; St. John, 21 sq. mi., 959. The principal industry is the cultivation of sugar. Charlotte Amalie in St. Thomas, pop. 7,747, is the chief town and possesses one of the finest harbors in the West Indies. Its location is of great strategic value as a naval base. Situated 1,400 miles from New York, 480 miles from La Guaira, and 1,020 miles from Colon, the Atlantic entrance to the Panama Canal, it commands the easternmost gateway to the Caribbean Sea. Other leading towns are Frederiksted, pop. 3,144, and Christiansted, pop. 4,574, in St. Croix. The Virgin Islands were discovered by Columbus, 1494, and the first settlement was made in St. Thomas by the Dutch, 1657.

Volcanoes, Greatest of the World

Name of Volcano	Location	Height (feet)
Aconcagua,	Chile,	23,083
Altar,	Ecuador,	17,710
Antisana,	Ecuador,	19,335
Ararat,	Turkey,	16,950
Arequipa,	Peru,	20,320
Baker,	Washington,	10,837
Cayambi,	Ecuador,	19,255
Chimborazo,	Ecuador,	20,498
Cotopaxi,	Ecuador,	19,613
Demavend,	Persia,	18,500
Elbruz,	Caucasus,	18,470
Etna,	Sicily,	10,738
Fujiyama,	Japan,	12,390
Hecla,	Iceland,	5,110
Hood,	Oregon,	11,225
Huascaran,	Peru,	22,812
Ixtaccihuati,	Mexico,	16,960
Jorullo,	Mexico,	4,265
Kenia,	Africa,	19,000
Kilauea,	Hawaii,	4,400
Kilima-Njaro,	Africa,	19,700
Lassen,	California,	10,577
Llullaillaco,	Chile,	21,000
Mauna Kea,	Hawaii,	13,953
Mauna Loa,	Hawaii,	13,600
Misti,	Peru,	20,015
Orizaba,	Mexico,	18,250
Pelée,	Martinique, W. I.,	4,300
Pico, Peak of,	Azores,	7,500
Popocatepetl,	Mexico,	17,520
Rainier,	Washington,	14,526
Sahama,	Bolivia,	21,000
San Francisco,	Arizona,	12,794
Sangai,	Ecuador,	17,400
San José,	Chile,	20,020
Shasta,	California,	14,380
St. Helen's, Mt.,	Washington,	10,000
Stromboli,	Lipari Islands,	3,090
Tahiti, Peak of,	Friendly Islands,	7,400
Teneriffe,	Canary Islands,	12,190
Tolima,	Colombia,	18,400
Toluca,	Mexico,	14,950
Vesuvius,	Italy,	4,260
Wrangell,	Alaska,	17,500

Volga, the most important river of Russia, and the longest in Europe, has its origin in a marshy plain among the Valdai Hills, in the government of Tver. Its source is 550 feet above ordinary sea level and 646 above the Caspian; its length, 2,300 miles.

Wales, a principality in the southwest of the island of Great Britain, which, since Edward I., gives the title of Prince of Wales to the heir-apparent of the British Crown; area, 7,470 square miles; population included in that of England. It is very mountainous, particularly in the north, where Snowdon, the culminating point of South Britain, rises 3,571 feet; and it is intersected by beautiful valleys, traversed by numerous streams, including, among others, the large River Severn. It is rich in minerals, particularly coal, iron, copper, and even gold, and to these Wales owes its chief wealth. The coal trade is most extensive, and Cardiff is the largest coal port in the world. In 1898 about 24,000,000 tons of coal were produced in Wales. Iron, steel, and copper works are also on a large scale. Besides the mineral industries, there are considerable woolen manufactures, especially of flannel, coarse cloth, and hosiery. The Welsh have many strange customs and peculiar superstitions. They are remarkably fond of poetry and music, and their language is said to be peculiarly adapted to poetical effusions. Their ancient language is, however, fast falling into disuse throughout the principality, more especially the southern part. Family distinction is held in great estimation. The aboriginal Celtic race still inhabits some parts of the country. Llewellyn ap Gryffydd was the last prince who exerted himself for the independence of Wales. In 1282 he was subdued by Edward I. From that time Wales has been annexed to the English Crown; but the union was not complete till Henry VIII., when the government and laws were assimilated with those of England.

Warsaw, previous to the World War the chief city of Russian Poland, and now the capital and metropolis of the new Republic of Poland. It is situated on the left bank of the Vistula, about 320 miles east of Berlin. It possesses a cathedral which dates from the Thirteenth Century, and a large number of palaces and other imposing buildings, situated in broad and handsome squares; but the chief modern buildings are in the suburbs, with one of which, Praga, on the opposite side of the Vistula, the city is connected by a bridge of boats. The whole city is overawed by a vast citadel, erected by the Russians, under the Emperor Nicholas. Warsaw is the residence of an archbishop, who is primate of Poland. Its university, founded in 1816, was suppressed after the insurrection of 1830, but was reopened in 1869. The city is the principal seat of both the manufactures and the trade of Poland. Its annual fairs are much frequented, and it carries on a large commercial intercourse, not only with Cracow and Dantzic

by the Vistula, but with Petrograd and Vienna by rail. During the World War Warsaw was captured by the Germans, August 5, 1915. Population, 1920, about 1,000,000.

Washington, capital of the United States; population, 437,571; co-extensive with the District of Columbia; at the confluence of the Potomac and the Anacostia, or East Branch, rivers, and on the Pennsylvania, the Baltimore & Ohio, the Southern, the Chesapeake & Ohio, and the Richmond, Fredericksburg & Potomac railroads; 136 miles southwest of Philadelphia; 226 miles southwest of New York; forty miles southwest of Baltimore, and 185 miles west of the Atlantic Ocean. The site of the city is an admirable one, surrounded by a circle of hills and comprising a rolling plain, with here and there irregular eminences which provide beautiful and advantageous positions for the various public buildings. The city was laid out expressly for the National Capital and on a scale indicating that it was expected to grow into a vast metropolis. The United States and the District of Columbia own an extensive waterworks system, costing $10,000,000. The reservoirs have a storage capacity of 76,000,000 gallons, and the water is distributed through 381 miles of mains. The consumption averages 55,000,000 gallons a day.

Besides streets running east and west, which are named by the letters of the alphabet, and streets running north and south, which are numbered, there are avenues named for various states. The streets are irregularly laid out; the width of the avenues is from 120 to 160 ft. and the width of the streets from 80 to 120 ft. Pennsylvania avenue is the principal street of the city, having on or near it many of the leading hotels, theaters, stores, etc. Other business streets of importance are 7th, 9th, 14th, and F streets. More than one-half the area of the city is comprised in its streets, avenues, and public parks.

The city contains many magnificent structures. The Capitol, crowning Capitol Hill, is one of the most beautiful public edifices in the world. It is built in pure classic style, with two immense wings of white marble, extending from a central structure constructed of light yellow freestone, painted white. The main front facing east is beautified with three splendid porticoes adorned by Corinthian pillars. The central portico contains noted groups of statuary, and on the esplanade immediately in front stands Greenough's famous colossal statue of Washington. The entrance to the rotunda is by the celebrated bronze door, designed by Randolph Rogers and made by Von Muller in Munich. It is seventeen feet high by nine feet wide, and cost $28,000. The relief work on the door commemorates the discovery of America by Columbus. The walls of the interior of the rotunda, which is 180 feet high and ninety-six feet in diameter, are ornamented with eight panels containing paintings of scenes in American history. America is depicted with Indian and eagle, standing with History, who records on her tablet the progress of events. The canopy overhanging the eye of the dome, at a height of 180 feet above the rotunda floor, is 65 feet in diameter, and gives a field of 4,640 square feet for Brumidi's allegorical fresco. The lofty central dome of iron is surmounted by a statue of liberty, giving a total height to the capitol of 307½ feet. The structure covers three and one-half acres, and cost over $13,000,000. It accommodates the two Houses of Congress, United States Supreme Court, and until recently also held the Library of Congress.

The new Congressional Library is built just east of the capitol, in a square comprising about ten acres. It is three stories high, 470 feet long by 340 wide, is constructed of white New Hampshire granite in the Italian Renaissance style and cost $6,347,000. The building contains an octagonal reading room, 100 feet in diameter. There are many magnificently carved marble arches. The library is constructed around four spacious inner courts and in all has over 2,000 windows, which make it the best-lighted building of its kind in the world. Besides the reading room, there are a lecture hall, copyright record rooms, a large art gallery, a map room, etc. The whole library could be made to accommodate 6,000,000 volumes. It is now the sixth library in point of size in the world, and in 1916 contained 2,363,873 books, and many pamphlets and other articles.

The United States Treasury building is one and one-fourth miles west of the capitol. It is constructed of granite in the Ionic style, and cost $6,000,000. It is three stories high and 468 feet long by 264 wide. An Ionic colonnade, modeled after the Temple of Minerva in Athens, is built on the east front. On the west front is a magnificent central entrance with eight colossal monolithic columns. There are in all about 200 rooms, including the cash room, which is finished with rich marble and occupies two stories; the gold room, containing millions of dollars in gold coin; the Redemption Division; counterfeit room, etc. All of the United States notes, bonds, etc., are made here.

The building of the State, War, and Navy Departments is one of the largest public edifices in Washington. It is built of granite in the Roman Doric style, is four stories high, 567 feet long by 342 feet wide, covers four and one-half acres, and cost $11,000,000. In the north and east wings are the War and Navy Departments; in the south portion is the State Department. The building contains in all 566 rooms, including the Hall of the Secretary of State, the Ambassador's Room, and the library with 60,000 volumes. In the latter apartment the Declaration of Independence is preserved.

The building of the Patent Office, also known as the Department of the Interior, is located in the central part of the city. It is 453 feet long by 351 feet wide, and is constructed of granite, marble, and freestone, in the Doric style. The main entrance faces F Street, and is reached by a broad stairway of granite steps. The portico has sixteen enormous Doric columns supporting a classic pediment. The building contains besides offices and other rooms, the model room, in which there are great numbers of models, representing every department of mechanical art. The length of the floor in the latter room is 1,350 feet, or over one-fourth of a mile. The offices of the Secretary of the Interior, of the Commissioner of Patents, and of the Indian Bureau are on the second floor.

The building of the Land Office, formerly occupied by the Post-office Department, and costing $1,700,000, is of white marble, in the Italian or modified Corinthian style, and is 300 feet long by 204 feet wide. It is three stories high, and on the Eighth Street side has sculptures illustrating the telegraph and railroad.

The Pension building is constructed in the Renaissance style. It borders on Judiciary Square, covers 80,000 square feet, is seventy-five feet high, and 400 feet long by 200 feet wide. On the exterior and on a level with the second floor is a notable band of sculpture in terra-cotta, three feet in height, and 1,200 feet in length. It represents an army in campaign, supported by sailors and boats of the navy.

The Smithsonian Institution is a magnificent structure, erected of red sandstone in the Romanesque style. It is 477 feet long by 150 feet wide, and has nine towers from seventy-five to 150 feet in height. It was established by James Smithson. The remaining noteworthy buildings include the Bureau of Education, Department of Agriculture, Army Medical Museum and Library, building of the Commission of Fish and Fisheries, the United States Naval Observatory, Executive Mansion or "White House," a National Soldiers' Home, etc. The buildings of note not belonging to the government include the Corcoran Gallery of Art, the Masonic Temple, Odd Fellows' Hall, "Evening Star" building, the "Baltimore Sun" building, Washington Market, the court-house, New Willard, Raleigh, Shoreham, Arlington, and Gordon hotels, and the Cosmos, Army and Navy, Washington, and Metropolitan clubs.

Monuments.—These include the Washington Monument, the Naval Monument, in honor of the officers, sailors and marines who were killed in the Civil War, the Lafayette Monument, with statues of Lafayette, Rochambeau, D'Estaing, De Grasse, and Duportail, statues of Washington, Franklin, Webster, two of Lincoln, General Rawlins, Admiral Farragut, Martin Luther, Admiral Dupont, President Garfield, and Chief-Justice Marshal, and equestrian statues of General Winfield Scott, Nathanael Greene, George H. Thomas, W. S. Hancock, John B. McPherson, and Andrew Jackson.

Education.— The city has 125 buildings used for school purposes. The white and negro pupils are provided with separate schools. The institutions for higher education are the George Washington University, Howard University, Gallaudet College, Georgetown University, the Catholic University of America, Gonzaga College, American University, National University Law and Medical Schools. The centennial of Washington was fitly celebrated December 12, 1900.

Washington Monument, a magnificent monument erected by the American people, in honor of George Washington. It stands in the Mall, a public park on the banks of the Potomac and Tiber Creek, Washington, D. C. The corner stone was laid by President Polk, July 4, 1848, and December 6, 1884, the cap stone was set in position. The foundations are 126½ feet square and 36 feet 8 inches deep. The base of the monument is 55 feet 1½ inches square, and the walls 15 feet ¼ inch thick. At 505 feet 5⅛ inches, where the pyramidal top begins, the shaft is 34 feet 5½ inches square and the walls are 18 inches thick. The monument is made of blocks of marble two feet thick, and it is said there are over 18,000 of them. The height above the ground is 555 feet 5½ inches. The pyramidal top terminates in an aluminum tip, which is 9 inches high and weighs 100 ounces. The mean pressure of the monument is five tons per square foot, and the total weight, foundation and all, is nearly 81,000 tons. The door at the base, facing the capitol, is 8 feet wide and 16 feet high, and enters a room 25 feet square. An immense iron framework supports the machinery of the elevator, which is hoisted with steel wire ropes 2 inches thick. At one side begins the stairs, of which there are 50 flights, containing 18 steps each. Five hundred and twenty feet from the base there are 8 windows, 18 x 24 inches, two on each face. The area at the base of the pyramidal top is 1,187¼ feet, space enough for a six-room house, each room to be 12 x 16 feet. The Washington Monument is the highest monument in the world; total cost, $1,500,000.

Wellington, a city and capital of New Zealand; on Port Nicholson, an islet of Cook's Strait; on the southwest extremity of the provincial district of Wellington, North Island. Its harbor is six miles long and five wide. The provincial district of Wellington has an area of 11,003 square miles. It has an equable and healthy climate, but is subject to earthquake shocks. It is intersected by several mountain ranges, but there are many fine agricultural and pastoral districts. Gold was found in 1881. Population, 1921 census, 107,428.

Westminster Abbey, the coronation church of the sovereigns of England, and one of the chief ornaments of London. It is a magnificent Gothic pile, situated near the Thames, and adjoining the Houses of Parliament. In 1065 a church was built here in the Norman style by Edward the Confessor. Part of this structure still remains in the pyx house and the south side of the cloisters; but the main building, as it now stands, was begun in 1220 by Henry III., and was practically completed by Edward I. Various additions, however, were made, down to the time of Henry VII., who built the chapel which bears his name.

The extreme length of the church, including Henry VII.'s chapel, is 531 feet; breadth of transepts, 203 feet; height of roof, 102 feet; height of tower, 225 feet. The coronation ceremony takes place in the choir, where the coronation stone brought by Edward I. from Scotland is situated beside the coronation chairs of the English sovereigns. Westminster Abbey is distinguished as the burial place of a large number of English kings from Edward the Confessor to George II.; the north transept is occupied chiefly by monuments to warriors and statesmen, while in the south transept is situated the "Poets' Corner," the burial and memorial place of most of England's great writers from Chaucer to John Ruskin.

Westminster Hall, the hall of the old palace of Westminster, was erected by Richard II. (1397–99) on the foundations of a structure

built by William Rufus. It has a fine porch, and its hammer-beam roof of carved timber is considered the most notable of its kind; length of the building, 290 feet, breadth 68 feet, and height 110 feet. This building is closely associated with many stirring events in English history; but it is chiefly remarkable as the place where were held such great state trials as those of the Chancellor More, Lady Jane Grey, the Earl of Strafford, King Charles I., and Warren Hastings, and as the center of the highest English courts of law till these were removed to the new buildings recently erected for their accommodation. The hall now serves as a fine vestibule to the Houses of Parliament.

Westphalia, the name given at different periods to (1) one of the circles of the old German Empire, (2) one of Napoleon's kingdoms (1807–13), conferred upon his brother Jerome; and (3) now to a province of Prussia. The latter is bounded by Rhenish Prussia, Holland, Hanover, Brunswick, Hesse, and Nassau. Its area is 7771 square miles. The surface in the south and northeast is generally mountainous; the northwest spreads out into extensive and often marshy plains, and belongs to the basin of the Ems; the northeast and a small part of the east to the basin of the Weser; the remainder, constituting the far larger portion of the whole, belongs to the basin of the Rhine, whose chief tributaries are the Ruhr and Lippe. Besides iron and coal in abundance the minerals include copper, lead, zinc, and salt; and the manufactures are varied and important. The province is divided into the three governments of Münster, Minden, and Arnsberg. Münster is the capital.

Wind. The movement of the air in currents from one place to another. Speaking generally, all winds are caused by the variations taking place continually in the condition of the air as respects heat and moisture, and, therefore, as respects rarity. When the air over a given place becomes rarefied, that is, when the atmospheric pressure there becomes relatively small, that region at once becomes a center towards which inflowing air-currents direct themselves. According to the nature, extent, and continuance of this diminution of pressure, the nature of the resulting air-currents varies within very wide limits. The causes which produce storms, tempests, hurricanes, etc., are very obscure. It is difficult to arrive at general laws regarding them, since it is not easy to obtain an exact knowledge of the various circumstances which accompany them. Storms are violent and destructive in the torrid zone; they are comparatively insignificant in temperate, and are scarcely known in polar regions. It was formerly supposed that a storm was merely a wind blowing in a certain direction at the rate of 100 or 120 miles an hour; but it has been recently found to be far more complicated in its nature. There is reason to believe that, in the northern hemisphere, the great body of the storm whirls in a horizontal circuit round a vertical or somewhat inclined axis of rotation which is carried forward with it, and that to a spectator placed in the center the rotation is always from right to left. Storms travel in a direction differing from the actual movement of the wind at the time. When the storm progresses westward the wind, at the commencement, is from a northern quarter, and towards the end from a southern. When the progressive motion is eastward, the phenomena are reversed; southern storms are subject to the same modification as northern, but in a reversed order. In all latitudes, the barometer sinks during the first half of the storm in every part of its track, and rises during the second.

Yang-tse-kiang (*yäng'-tse-kē-äng'*), one of the two great rivers of China, is formed by two streams rising in Eastern Tibet, and after flowing east and then south enters the Chinese province of Yumman. Pursuing a very tortuous course much of it through most fertile and densely-populated regions, it reaches the great city of Nanking, 200 miles from the sea, where it widens gradually into the vast estuary which connects it with the Yellow Sea. Its whole course, under various names, is 3,000 miles, and the area of its basin is computed to be 680,000 square miles. It is connected by the Grand Canal with the Hoang-ho or Yellow River, and is navigable for vessels of considerable draught for 1,200 miles from its mouth. By the treaty of Tientsin the Lower Yang-tse was opened to European trade; and 700 miles from its mouth is the treaty-port of Hankow, the great commercial port of Mid-China. The highest port on the river at present open to foreign trade is Ichang, 1,000 miles from its mouth.

Yarmouth, or, as it is more strictly called, Great Yarmouth, an English seaport, important fishing station, watering place, and municipal and parliamentary borough, in the county of Norfolk, twenty miles east of Norwich. It is situated on a large and narrow tongue of land running from north to southward between the German Ocean and the estuary of the Yare. The town is connected by a bridge with Little Yarmouth, or South Town, in Suffolk. Along the sea frontage stretches a promenade and carriage drive for three miles, with two piers. Parallel with the north and south quays, extending for nearly a mile and a quarter, are the principal streets, crossed by numerous narrow lanes called "rows." The parish church of St. Nicholas, founded in 1101, and of late years completely restored, is one of the largest in the kingdom. Yarmouth has a naval lunatic asylum, the only one in the kingdom. It is the great seat of the English herring and mackerel fishery, and also furnishes large quantities of white-fish. The curing of herring as "Yarmouth bloaters" is an important industry. The coast is dangerous, but Yarmouth Roads, between the shore and a range of sandbanks, offers a safe anchorage. Population, 60,710.

Yellow Sea (Chinese, *Whang-hai*), an arm of the Pacific Ocean, on the northeast coast of China; length, about 620 miles; greatest breadth, about 400 miles. It is very shallow, and obtains its name from the lemon yellow color of its water near the land, caused by mud suspended in the water from the inflow of the Rivers Hoang-ho and Yang-tse-kiang.

Yellowstone National Park, a region mainly in Wyoming, United States, which in 1872 was withdrawn from settlement by the United States Government to become a park or tract for the recreation of the people. Its area,

as fixed by Act of Congress in 1892, is about 5,000 square miles. It is readily accessible by a branch of the Northern Pacific Railway. Its surface is mainly an undulating plain, diversified, however, by great mountain ranges, one of which, the Absaraka, a range separating the waters of the Yellowstone River from those of the Big Horn, contains some of the grandest scenery in the United States. The whole region exhibits an endless variety of wild volcanic scenery — hot springs, mud volcanoes, geysers, cañons, waterfalls, etc. The geysers are more remarkable than those of Iceland, and the Grand Geyser in Firehole Basin is the most magnificent natural fountain in the world. The Yellowstone Lake, one of many, is a magnificent sheet of water, with an area of 150 square miles. A large part of the park is covered with forest. Stringent legislation protects the game, with the result that elk, deer, antelope, bear, and bison have taken refuge in it.

Yokohama, the chief port of entry in Japan, and the headquarters of foreign shipping companies, banks, consulates, and commerce generally. Yokohama is a poorly-laid-out town with narrow, winding streets. The Bluff, however, conceded for residence in 1867, is a beautiful spot, commanding fine views of Fuji-san and of Yokohama Bay. The bay is beautiful. Work on a large harbor was carried out in 1889–1896; it is enclosed by two breakwaters one and one-fourth miles long, and an iron pier, 1,900 feet long. The foreign community here is the largest in the country. Silk represents three-fifths of the exports, the rest being other tissues, tea, rice, copper, curios, etc.; the imports are cottons and woolens, raw sugar, oils, metals, chemicals, arms, and ammunition, watches, etc. The annual exports from Yokohama are valued at $73,000,000, the imports at $94,000,000. Population, 1920 census, 422,942.

York (British, *Caer Effroc*, or *Ebroc;* Latin, *Eborācum*), a cathedral city and archbishop's see, a municipal and parliamentary borough, and capital of Yorkshire, 188 miles north of London by rail, is situated at the confluence of the Foss and the Ouse. The city proper, embracing a circuit of nearly three miles, was inclosed by walls, restored by Edward I., the portions of which still remaining have been converted into promenades, commanding a prospect of the surrounding country. There are many quaint, old-fashioned houses in the narrow streets of its older portion. The great object of attraction, however, is the minster or cathedral, the finest in England. York was the capital of Roman Britain. It was made an archiepiscopal see by Edwin of Northumbria in 624. It still ranks second among English cities, its archbishop having the title of Primate of England, and its chief magistrate takes the title of Lord-mayor. It was incorporated by Henry I., and the city boundaries were extended in 1884. The trade is local, and the industries unimportant. Population, 1921 census, 84,052.

York Minster, one of the chief English cathedrals, was erected at different periods, and on the site of former buildings. The first Christian church erected here, which appears to have been preceded by a Roman temple, was built by Edwin, King of Northumbria, of wood, in 625, and of stone about 635. It was damaged by fire in 741, and was rebuilt by Archbishop Albert about 780. It was again destroyed by fire in the year 1069, and rebuilt by Archbishop Thomas. It was once more burnt down in 1137, with St. Mary's Abbey, and thirty-nine parish churches in York. Archbishop Roger began to build the choir in 1171; Walter Gray added the south transept in 1227; John de Romayne, the treasurer of the cathedral, built the north transept in 1260. His son, the archbishop, laid the foundation of the nave in 1291. In 1330, William de Melton built the two western towers, which were finished by John de Birmingham in 1342. Archbishop Thoresby, in 1361, began to rebuild the choir, in accordance with the magnificence of the nave, and he also rebuilt the lantern tower. Thus, by many hands, and many contributions of multitudes on the promise of indulgences, this magnificent fabric was completed. It was first set on fire by Jonathan Martin, a lunatic, and the roof of the choir and its internal fittings destroyed, February 2, 1829; the damage, estimated at $300,000, was repaired in 1832. An accidental fire broke out, which in one hour reduced the belfry to a shell, destroyed the roof of the nave, and much damaged the edifice, May 20, 1840.

Yosemite (*yō-sĕm′-ĭ-tē*) **Valley,** one of the greatest natural wonders of North America, is in Mariposa County, California, about 140 miles southeast of San Francisco and midway between the eastern and western bases of the Sierra Nevada. It is a narrow valley at an elevation of 4,000 feet above the sea, and is itself nearly level, about six miles in length, and varying in width from one-half mile to a mile. On each side rise enormous domes and almost vertical cliffs of granite, one of them called the Half Dome, being 4,737 feet higher than the River Merced at its base, while the more important waterfalls are the Yosemite and the Bridal Veil. This valley has been added by Congress to the State of California, on condition that it shall be kept as a public park or free domain "inalienable for all time."

Yukon, a great river of Alaska, rises in British territory, and, after a course of 2,000 miles, falls, by a number of mouths forming a delta, into the Bering Sea; it is navigable nearly throughout, and its waters swarm with salmon three months in the year, some of them from eighty to 120 pounds in weight, and from five to six feet long.

Zambezi, one of the four great African rivers, and the fourth largest as regards both the volume of its waters and the area it drains, the other three being the Nile, the Congo, and the Niger. It waters a rich pastoral region, and it falls into the Indian Ocean after a course of nearly 1,800 miles, in which it drains 600,000 square miles of territory, or an area three times larger than that of France. Owing to cataracts and rapids it is only navigable in different stretches. At 900 miles from its mouth it plunges in a cataract known as the Victoria Falls, 1,860 yards across and having a height of 400 feet, which rivals in grandeur those even of Niagara.

POPULATION OF THE LEADING CITIES OF THE UNITED STATES

City	Pop. 1920	% of Inc. 1910-20	City	Pop. 1920	% of Inc. 1910-20	City	Pop. 1920	% of Inc. 1910-20
Akron, Ohio,	208,435	201.8	Hartford, Conn.,	138,036	39.6	Pensacola, Fla.,	31,035	35.0
Albany, N. Y.,	113,344	13.1	Haverhill, Mass.,	53,884	22.1	Peoria, Ill.,	76,121	13.7
Allentown, Pa.,	73,502	41.6	Hazelton, Pa.,	32,277	26.8	Perth Amboy, N. J.,	41,707	29.8
Altoona, Pa.,	60,331	15.7	Highland Park, Mich.,	46,499	1,028.6	Petersburg, Va.,	31,012	28.5
Amsterdam, N. Y.,	33,524	7.2	Hoboken, N. J.,	68,166	−3.1	Philadelphia, Pa.,	1,823,779	17.7
Anderson, Ind.,	29,767	32.4	Holyoke, Mass.,	60,203	4.3	Pittsburgh, Pa.,	588,343	10.2
Atlanta, Ga.,	200,616	29.6	Houston, Tex.,	138,276	75.5	Pittsfield, Mass.,	41,763	30.0
Atlantic City, N. J.,	50,707	9.9	Huntington, W. Va.,	50,177	61.0	Pontiac, Mich.,	34,273	135.8
Auburn, N. Y.,	36,192	4.4	Indianapolis, Ind.,	314,194	34.5	Portland, Me.,	69,272	18.3
Augusta, Ga.,	52,548	28.0	Jackson, Mich.,	48,374	53.9	Portland, Ore.,	258,288	24.6
Aurora, Ill.,	36,397	22.1	Jacksonville, Fla.,	91,558	58.7	Portsmouth, Ohio,	33,011	40.6
Austin, Tex.,	34,876	16.8	Jamestown, N. Y.,	38,917	24.3	Portsmouth, Va.,	54,387	63.9
Baltimore, Md.,	733,826	31.4	Jersey City, N. J.,	298,103	11.3	Poughkeepsie, N. Y.,	35,000	25.3
Battle Creek, Mich.,	36,164	43.1	Johnstown, Pa.,	67,327	21.3	Providence, R. I.,	237,595	5.9
Bay City, Mich.,	47,554	5.3	Joliet, Ill.,	38,442	10.9	Pueblo, Colo.,	43,050	3.1
Bayonne, N. J.,	76,754	38.2	Joplin, Mo.,	29,902	−6.8	Quincy, Ill.,	35,978	−1.7
Beaumont, Tex.,	40,422	95.8	Kalamazoo, Mich.,	48,487	22.9	Quincy, Mass.,	47,876	46.7
Berkeley, Calif.,	56,036	38.6	Kansas City, Kans.,	101,177	22.9	Racine, Wis.,	58,593	54.2
Bethlehem, Pa.,	50,358	292.3	Kansas City, Mo.,	324,410	30.6	Reading, Pa.,	107,784	12.2
Binghamton, N. Y.,	66,800	37.9	Kenosha, Wis.,	40,472	89.4	Richmond, Va.,	171,667	34.5
Birmingham, Ala.,	178,806	34.8	Knoxville, Tenn.,	77,818	114.1	Roanoke, Va.,	50,842	45.8
Boston, Mass.,	748,060	11.6	Kokomo, Ind.,	30,067	76.8	Rochester, N. Y.,	295,750	35.6
Bridgeport, Conn.,	143,555	40.7	La Crosse, Wis.,	30,421	——	Rockford, Ill.,	65,651	44.6
Brockton, Mass.,	66,254	16.5	Lakewood, Ohio,	41,732	174.9	Rock Island, Ill.,	35,177	44.6
Brookline, Mass.,	37,748	35.8	Lancaster, Pa.,	53,150	12.5	Sacramento, Calif.,	65,908	47.5
Buffalo, N. Y.,	506,775	19.6	Lansing, Mich.,	57,327	83.6	Saginaw, Mich.,	61,903	22.6
Butte, Mont.,	41,611	6.2	Lawrence, Mass.,	94,270	9.8	St. Joseph, Mo.,	77,939	0.7
Cambridge, Mass.,	109,694	4.6	Lewiston, Me.,	31,791	21.1	St. Louis, Mo.,	772,897	12.5
Camden, N. J.,	116,309	23.0	Lexington, Ky.,	41,534	18.3	St. Paul, Minn.,	234,698	9.3
Canton, Ohio,	87,091	73.4	Lima, Ohio,	41,326	35.5	Salem, Mass.,	42,529	−2.7
Cedar Rapids, Iowa,	45,566	38.9	Lincoln, Neb.,	54,948	25.0	Salt Lake City, Utah,	118,110	27.3
Charleston, S. C.,	67,957	15.5	Little Rock, Ark.,	65,142	41.8	San Antonio, Tex.,	161,379	67.0
Charleston, W. Va.,	39,608	72.2	Long Beach, Calif.,	55,593	212.2	San Diego, Calif.,	74,683	88.7
Charlotte, N. C.,	46,338	36.2	Lorain, Ohio,	37,295	29.1	San Francisco, Calif.,	506,676	21.5
Chattanooga, Tenn.,	57,895	29.8	Los Angeles, Calif.,	576,673	80.7	San José, Calif.,	39,642	37.0
Chelsea, Mass.,	43,184	33.1	Louisville, Ky.,	234,891	4.9	Savannah, Ga.,	83,252	28.0
Chester, Pa.,	58,030	50.6	Lowell, Mass.,	112,759	6.1	Schenectady, N. Y.,	88,723	21.8
Chicago, Ill.,	2,701,705	23.6	Lynchburg, Va.,	30,070	2.0	Scranton, Pa.,	137,783	6.1
Chicopee, Mass.,	36,214	42.6	Lynn, Mass.,	99,148	11.0	Seattle, Wash.,	315,312	32.9
Cicero, Ill.,	44,995	209.1	Macon, Ga.,	52,995	30.3	Sheboygan, Wis.,	30,955	17.3
Cincinnati, Ohio,	401,247	10.4	McKeesport, Pa.,	46,781	9.6	Shreveport, La.,	43,874	56.7
Cleveland, Ohio,	796,841	42.1	Madison, Wis.,	38,378	50.3	Sioux City, Iowa,	71,227	48.9
Colorado Springs, Colo.,	30,105	3.5	Malden, Mass.,	49,103	10.6	Somerville, Mass.,	93,091	20.5
Columbia, S. C.,	37,524	42.6	Manchester, N. H.,	78,384	11.9	South Bend, Ind.,	70,983	32.2
Columbus, Ga.,	31,125	51.4	Medford, Mass.,	39,038	68.6	Spokane, Wash.,	104,437	——
Columbus, Ohio,	237,031	30.6	Memphis, Tenn.,	162,351	23.8	Springfield, Ill.,	59,183	14.8
Council Bluffs, Iowa,	36,162	23.5	Meriden, Conn.,	29,867	9.5	Springfield, Mass.,	129,614	45.8
Covington, Ky.,	57,121	7.2	Miami, Fla.,	29,571	440.5	Springfield, Mo.,	39,631	12.6
Cumberland, Md.,	29,837	36.6	Milwaukee, Wis.,	457,147	22.3	Springfield, Ohio,	60,840	29.7
Dallas, Tex.,	158,976	72.6	Minneapolis, Minn.,	380,582	26.3	Stamford, Conn.,	35,096	39.6
Danville, Ill.,	33,776	21.2	Mobile, Ala.,	60,777	18.0	Stockton, Calif.,	40,296	73.3
Davenport, Iowa,	56,727	31.8	Moline, Ill.,	30,734	27.0	Superior, Wis.,	39,671	−1.8
Dayton, Ohio,	152,559	30.9	Montgomery, Ala.,	43,464	14.0	Syracuse, N. Y.,	171,717	25.1
Decatur, Ill.,	43,818	40.7	Mount Vernon, N. Y.,	42,726	38.2	Tacoma, Wash.,	96,965	15.8
Denver, Colo.,	256,491	20.2	Muncie, Ind.,	36,524	52.2	Tampa, Fla.,	51,608	36.6
Des Moines, Iowa,	126,468	46.4	Muskegon, Mich.,	36,570	52.0	Taunton, Mass.,	37,137	8.4
Detroit, Mich.,	993,678	113.3	Muskogee, Okla.,	30,277	19.8	Terre Haute, Ind.,	66,083	13.6
Dubuque, Iowa,	39,141	1.7	Nashville, Tenn.,	118,342	7.2	Toledo, Ohio,	243,164	44.3
Duluth, Minn.,	98,917	26.1	Newark, N. J.,	414,524	19.3	Topeka, Kans.,	50,022	14.8
East Chicago, Ind.,	35,967	88.3	New Bedford, Mass.,	121,217	25.4	Trenton, N. J.,	119,289	23.2
Easton, Pa.,	33,813	18.5	New Britain, Conn.,	59,316	35.1	Troy, N. Y.,	72,013	−6.2
East Orange, N. J.,	50,710	47.5	Newburgh, N. Y.,	30,366	9.2	Utica, N. Y.,	94,156	26.5
East St. Louis, Ill.,	66,767	14.0	Newcastle, Pa.,	44,938	23.9	Waco, Tex.,	38,500	45.7
El Paso, Tex.,	77,560	97.5	New Haven, Conn.,	162,537	21.7	Waltham, Mass.,	30,915	11.1
Elizabeth, N. J.,	95,783	30.5	New Orleans, La.,	387,219	14.2	Washington, D. C.,	437,571	32.2
Elmira, N. Y.,	43,393	22.1	Newport, R. I.,	30,255	11.4	Waterbury, Conn.,	91,715	25.4
Erie, Pa.,	93,372	40.4	Newport News, Va.,	35,596	76.2	Waterloo, Iowa,	36,230	35.7
Evanston, Ill.,	37,234	49.1	New Rochelle, N. Y.,	36,213	25.4	Watertown, N. Y.,	31,285	17.0
Evansville, Ind.,	85,264	22.4	Newton, Mass.,	46,054	15.7	West Hoboken, N. J.,	40,074	13.2
Everett, Mass.,	40,120	19.8	New York, N. Y.,	5,620,048	17.9	West New York, N. J.,	29,926	120.7
Fall River, Mass.,	120,485	1.0	Niagara Falls, N. Y.,	50,760	66.7	Wheeling, W. Va.,	56,208	35.0
Fitchburg, Mass.,	41,029	8.5	Norfolk, Va.,	115,777	71.6	Wichita, Kans.,	72,217	37.7
Flint, Mich.,	91,599	137.6	Norristown, Pa.,	32,319	15.9	Wichita Falls, Tex.,	40,079	388.8
Fort Wayne, Ind.,	86,549	35.4	Oakland, Calif.,	216,261	44.0	Wilkes-Barre, Pa.,	73,833	10.0
Fort Worth, Tex.,	106,482	45.2	Oak Park, Ill.,	39,858	105.0	Williamsport, Pa.,	36,198	13.6
Fresno, Calif.,	45,086	81.1	Ogden, Utah,	32,804	28.2	Wilmington, Del.,	110,168	26.0
Galveston, Tex.,	44,255	19.7	Oklahoma City, Okla.,	91,295	42.2	Wilmington, N. C.,	33,372	29.6
Gary, Ind.,	55,378	229.6	Omaha, Neb.,	191,601	54.4	Winston-Salem, N. C.,	48,395	113.2
Grand Rapids, Mich.,	137,634	22.3	Orange, N. J.,	33,268	12.3	Woonsocket, R. I.,	43,496	14.1
Green Bay, Wis.,	31,017	22.9	Oshkosh, Wis.,	33,162	0.3	Worcester, Mass.,	179,754	23.1
Hamilton, Ohio,	39,675	12.5	Pasadena, Calif.,	45,354	49.7	Yonkers, N. Y.,	100,176	25.5
Hammond, Ind.,	36,004	72.1	Passaic, N. J.,	63,841	16.6	York, Pa.,	47,512	6.2
Hamtramck, Mich.,	48,615	1,266.0	Paterson, N. J.,	135,875	8.2	Youngstown, Ohio,	132,358	67.4
Harrisburg, Pa.,	75,917	18.3	Pawtucket, R. I.,	64,248	24.5	Zanesville, Ohio,	29,569	5.5

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THE SUPREME COURT OF THE UNITED STATES

BUTLER BRANDEIS SUTHERLAND SANFORD

VAN DEVANTER MCKENNA TAFT (CH. J.) HOLMES MCREYNOLDS

GOVERNMENT AND POLITICS

Abyssinia. The system of government is monarchical, and each large province is under a Ras or feudal chief, the more important of whom form a Council of State, while under them are the governors of districts and the chiefs of villages. In October, 1907, a decree was issued announcing the formation of a cabinet on European lines, and ministers of justice, finance, commerce, war, and foreign affairs were appointed. Each Ras has a standing force as garrison and at call in case of war, and a considerable number of retainers not embodied. The regular forces united are estimated at 250,000 men.

Afghanistan. The government of Afghanistan is monarchical under one hereditary prince, called the Ameer, whose power varies with his own character and fortune. The dominions are politically divided into the four provinces of Kabul, Turkistan, Herat, and Kandahar, Badakhshan being now under Turkistan. Each province is under a *hâkim* or governor (called *Nâib*), under whom nobles dispense justice after a feudal fashion. Spoliation, exaction, and embezzlement are almost universal. Three classes of chiefs—sirdas or hereditary nobles, khans or representatives of the people, and mullahs of Mohammedan religion—form the council of the monarch. This council or durbar comprises two bodies, the Durbar Shahi or royal assembly, and the Kharawanin Mulkhi or commons. The Ameer has a subsidy of eighteen lakhs (£120,000) per annum from the Indian government. By the treaty of 1893, confirmed in 1905, the Ameer accepts the advice of the British government in regard to his relations with foreign powers, and is guaranteed against unprovoked aggression on his dominions. A standing army is maintained, and service is obligatory, but rests lightly upon the population, about one man in eight being called upon to serve.

Alabama was organized as a Territory in 1817, and admitted into the Union as a State in 1819. The Legislature consists of a Senate of thirty-five members and a House of Representatives of one hundred six members, each being elected for four years. The chief executive officer of the State is the governor, elected for four years. He is commander-in-chief of the militia, has a limited veto in legislation, and exercises the powers usually entrusted to State governors. Other elective officers are the lieutenant-governor, auditor, attorney-general, treasurer, and superintendent of education.

Argentina, Republic of. By the provisions of the Constitution of 1853, as variously amended, the executive power is left to a president, elected for six years by representatives of the fourteen provinces, equal to double the number of senators and deputies combined; while the legislative authority is vested in a national congress, consisting of a senate and a house of deputies, the former numbering thirty, two from the capital and from each province, elected by a special body of electors in the capital, and by the legislatures in the provinces; and the latter, 120 members elected by the people. By the constitution there should be one deputy for every 33,000 inhabitants. A deputy must be 25 years of age, and have been a citizen for four years. The deputies are elected for four years, but one-half of the house must retire every two years. Senators must be 30 years of age, have been citizens for six years. One-third of the senate is renewed every three years. The two chambers meet annually from May 1st to September 30th. The members of both the senate and the house of deputies each receive 18,000 pesos per annum. A vice-president, elected in the same manner and at the same time as the president, fills the office of chairman of the senate, but has otherwise no political power. The president is commander-in-chief of the troops, and appoints to all civil, military, and judicial offices, and has the right of presentation to bishoprics; with the ministry, he is responsible for all executive acts. Neither the president nor the vice-president can be reëlected.

Arizona was organized as a Territory in 1863, and became a State in 1912. It has a Federal representation of two senators and one congressman at large. Under the constitution, the legislative authority is vested in a Senate comprising nineteen members, and a House of Representatives of thirty-five members. Any measure permissible under the constitution, or an amendment to the constitution, may be made either by initiative or by referendum. Legislators must be citizens of the United States at least twenty-five years of age, and residents of Arizona at least one year preceding the election. A majority of all members elected to each house is necessary to pass any bill. The executive department consists of the governor, secretary of state, state auditor, state treasurer, attorney-general, and superintendent of public instruction, who are elected for two years. The governor is commander-in-chief of military forces, may grant pardons, and has the ordinary limited veto power, except he cannot veto a bill passed by the legislature and referred to the people for vote thereon. The judicial power is vested in a supreme court, superior courts, justices of the peace, and other inferior courts provided by law. The Constitution was amended in 1912 to give women the right to vote and to extend the recall to all state officers, including judges; under constitutional amendment of 1914 state-wide prohibition went into effect Jan. 1, 1915.

Arkansas. The Constitution of 1836 was followed by those of 1864, 1868, and 1874: the last is still in force. In 1910 the initiative and referendum were adopted. Amendments proposed in either house of the Legislature, approved by a majority of the members of each house and by a "majority voting at the said election" in the prescribed manner, became part of the Constitution. Legislative power is vested in the General Assembly, consisting of a Senate of thirty-five members, elected for four years, partially renewed every two years, and a house of Repre-

sentatives of 100 members elected for two years. Any bill may originate in either house. The House of Representatives has the right to impeach; the Senate tries cases of impeachment. Senators and Representatives must be citizens, the former 25 years of age and the latter 21, and both must have resided in the State two years, and in the county or district one year next before election. The chief executive officer of the State is the governor, elected for two years. He is commander-in-chief of the militia; he can appoint to executive offices which have become vacant, has unlimited pardoning power (but not in cases of impeachment), and may call special sessions of the Legislature. He has a veto which may be overridden by a two-thirds majority of the members of each house. Other officials elected for two years are the treasurer, auditor, attorney-general, superintendent of public instruction, and commissioner of mines, manufactures and agriculture.

Articles of Confederation. While the Declaration of Independence was under consideration in the Continental Congress, and before it was finally agreed upon, measures were taken for the establishment of a constitutional form of government; and on the 11th of June, 1776, it was "*Resolved*, That a committee be appointed to prepare and digest the form of a confederation to be entered into between these Colonies"; which committee was appointed the next day, June 12, and consisted of a member from each Colony, namely: Mr. Bartlett, Mr. S. Adams, Mr. Hopkins, Mr. Sherman, Mr. R. R. Livingston, Mr. Dickinson, Mr. McKean, Mr. Stone, Mr. Nelson, Mr. Hewes, Mr. E. Rutledge, and Mr. Gwinnett. On the 12th of July, 1776, the committee reported a draught of the Articles of Confederation, which was printed for the use of the members under the strictest injunctions of secrecy.

This report underwent a thorough discussion in Congress, from time to time, until the 15th of November, 1777; on which day, "Articles of Confederation and Perpetual Union" were finally agreed to in form, and they were directed to be proposed to the legislatures of all the United States, and if approved by them, they were advised to authorize their delegates to ratify the same in the Congress of the United States; and in that event they were to become conclusive. On the 17th of November, 1777, the Congress agreed upon the form of a circular letter to accompany the Articles of Confederation, which concluded with a recommendation to each of the several legislatures "to invest its delegates with competent powers, ultimately, and in the name and behalf of the State, to subscribe articles of confederation and perpetual union of the United States, and to attend Congress for that purpose on or before the 10th day of March next." This letter was signed by the President of Congress and sent, with a copy of the articles, to each State legislature.

On the 26th of June, 1778, Congress agreed upon the form of a ratification of the Articles of Confederation, and directed a copy of the articles and the ratification to be engrossed on parchment; which, on the 9th of July, 1778, having been examined and the blanks filled, was signed by the delegates of New Hampshire, Massachusetts Bay, Rhode Island and Providence Plantations, Connecticut, New York, Pennsylvania, Virginia, and South Carolina. Congress then directed that a circular letter be addressed to the States whose delegates were not present, or being present, conceived they were not authorized to sign the ratification, informing them how many and what States had ratified the Articles of Confederation, and desiring them, with all convenient dispatch, to authorize their delegates to ratify the same. Of these States, North Carolina ratified on the 21st and Georgia on the 24th of July, 1778; New Jersey on the 26th of November following; Delaware on the 5th of May, 1779; Maryland on the 1st of March, 1781; and on the 2d of March, 1781, Congress assembled under the new form of government.

ACT OF CONFEDERATION OF THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME, WE THE UNDERSIGNED DELEGATES OF THE STATES AFFIXED TO OUR NAMES, SEND GREETING.

Whereas the Delegates of the United States of America in Congress assembled did on the 15th day of November in the Year of our Lord One Thousand Seven Hundred and Seventy seven, and in the Second Year of the Independence of America agree to certain articles of Confederation and perpetual Union between the states of Newhampshire, Massachusetts-bay, Rhodeisland and Providence Plantations, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina and Georgia in the Words following, viz.

"ARTICLES OF CONFEDERATION AND PERPETUAL UNION BETWEEN THE STATES OF NEWHAMPSHIRE, MASSACHUSETTS-BAY, RHODEISLAND AND PROVIDENCE PLANTATIONS, CONNECTICUT, NEW YORK, NEW JERSEY, PENNSYLVANIA, DELAWARE, MARYLAND, VIRGINIA, NORTH CAROLINA, SOUTH CAROLINA AND GEORGIA.

ARTICLE I. The Stile of this confederacy shall be "The United States of America."

ARTICLE II. Each State retains its Sovereignty, freedom and independence, and every Power, Jurisdiction and right, which is not by this confederation expressly delegated to the United States in Congress assembled.

ARTICLE III. The said states hereby severally enter into a firm league of friendship with each other, for their common defence, the security of their Liberties, and their mutual and general welfare, binding themselves to assist each other, against all force offered to, or attacks made upon them, or any of them, on account of religion, sovereignty, trade, or any other pretence whatever.

ARTICLE IV. The better to secure and perpetuate mutual friendship and intercourse among the people of the different states in this union, the free inhabitants of each of these states, paupers, vagabonds and fugitives from Justice excepted, shall be entitled to all privileges and immunities of free citizens in the several states; and the people of each state shall have free ingress and regress to and from any other state, and shall enjoy therein all the privileges of trade and commerce, subject to the same duties, impositions and restrictions as the inhabitants thereof respectively, provided that such restrictions shall not extend so far as to prevent the removal of property imported into any state, to any other state of which the Owner is an inhabitant; provided also that no imposition, duties or restriction shall be laid by any state, on the property of the united states, or either of them.

If any Person guilty of, or charged with treason, felony, or other high misdemeanor in any state, shall flee from Justice, and be found in any of the united states, he shall upon demand of the Governor or executive power, of the state from which he fled, be delivered up and removed to the state having jurisdiction of his offence.

Full faith and credit shall be given in each of these states to the records, acts and judicial proceedings of the courts and magistrates of every other state.

ARTICLE V. For the more convenient management of the general interest of the united states, delegates shall be annually appointed in such manner as the legis-

lature of each state shall direct, to meet in Congress on the first Monday in November, in every year, with a power reserved to each state, to recal its delegates, or any of them, at any time within the year, and to send others in their stead, for the remainder of the Year.

No state shall be represented in Congress by less than two, nor by more than seven Members; and no person shall be capable of being a delegate for more than three years in any term of six years; nor shall any person, being a delegate, be capable of holding any office under the united states, for which he, or another for his benefit receives any salary, fees or emolument of any kind.

Each state shall maintain its own delegates in a meeting of the states, and while they act as members of the committee of the states.

In determining questions in the united states, in Congress assembled, each state shall have one vote.

Freedom of speech and debate in Congress shall not be impeached or questioned in any Court, or place out of Congress, and the members of congress shall be protected in their persons from arrests and imprisonments, during the time of their going to and from, and attendance on congress, except for treason, felony, or breach of the peace.

Article vi. No state without the Consent of the united states in congress assembled, shall send any embassy to, or receive any embassy from, or enter into any conference, agreement, alliance or treaty with any King, prince or state; nor shall any person holding any office of profit or trust under the united states, or any of them, accept of any present, emolument, office or title of any kind whatever from any king, prince or foreign state; nor shall the united states in congress assembled, or any of them, grant any title of nobility.

No two or more states shall enter into any treaty, confederation or alliance whatever between them, without the consent of the united states in congress assembled, specifying accurately the purposes for which the same is to be entered into, and how long it shall continue.

No state shall lay any imposts or duties, which may interfere with any stipulations in treaties, entered into by the united states in congress assembled with any king, prince or state, in pursuance of any treaties already proposed by congress to the courts of France and Spain.

No vessels of war shall be kept up in time of peace by any state, except such number only, as shall be deemed necessary by the united states in congress assembled, for the defence of such state, or its trade; nor shall any body of forces be kept up by any state, in time of peace, except such number only, as in the judgment of the united states, in congress assembled, shall be deemed requisite to garrison the forts necessary for the defence of such state; but every state shall always keep up a well regulated and disciplined militia, sufficiently armed and accoutred, and shall provide and constantly have ready for use, in public stores, a due number of field-pieces and tents, and a proper quantity of arms, ammunition and camp equipage.

No state shall engage in any war without the consent of the united states in congress assembled, unless such state be actually invaded by enemies, or shall have received certain advice of a resolution being formed by some nation of Indians to invade such state, and the danger is so imminent as not to admit of a delay, till the united states in congress assembled can be consulted: nor shall any state grant commissions to any ships or vessels of war, nor letters of marque or reprisal, except it be after a declaration of war by the united states in congress assembled, and then only against the kingdom or state and the subjects thereof, against which war has been so declared, and under such regulations as shall be established by the united states in congress assembled, unless such state be infested by pirates, in which case vessels of war may be fitted out for that occasion, and kept so long as the danger shall continue, or until the united states in congress assembled shall determine otherwise.

Article vii. When land-forces are raised by any state for the common defence, all officers of or under the rank of colonel, shall be appointed by the legislature of each state respectively by whom such forces shall be raised, or in such manner as such state shall direct, and all vacancies shall be filled up by the state which first made the appointment.

Article viii. All charges of war, and all other expences that shall be incurred for the common defence or general welfare, and allowed by the united states in congress assembled, shall be defrayed out of a common treasury, which shall be supplied by the several states, in proportion to the value of all land within each state, granted to or surveyed for any Person, as such land and the buildings and improvements thereon shall be estimated according to such mode as the united states in congress assembled, shall from time to time direct and appoint.

The taxes for paying that proportion shall be laid and levied by the authority and direction of the legislatures of the several states within the time agreed upon by the united states in congress assembled.

Article ix. The united states in congress assembled, shall have the sole and exclusive right and power of determining on peace and war, except in the cases mentioned in the sixth article — of sending and receiving embassadors — entering into treaties and alliances, provided that no treaty of commerce shall be made whereby the legislative power of the respective states shall be restrained from imposing such imposts and duties on foreigners, as their own people are subjected to, or from prohibiting the exportation or importation of any species of goods or commodities whatsoever — of establishing rules for deciding in all cases, what captures on land or water shall be legal, and in what manner prizes taken by land or naval forces in the service of the united states shall be divided or appropriated — of granting letters of marque and reprisal in times of peace — appointing courts for the trial of piracies and felonies committed on the high seas and establishing courts for receiving and determining finally appeals in all cases of captures, provided that no member of congress shall be appointed a judge of any of the said courts.

The united states in congress assembled shall also be the last resort on appeal in all disputes and differences now subsisting or that hereafter may arise between two or more states concerning boundary, jurisdiction or any other cause whatever; which authority shall always be exercised in the manner following: Whenever the legislative or executive authority or lawful agent of any state in controversy with another shall present a petition to congress stating the matter in question and praying for a hearing, notice thereof shall be given by order of congress to the legislative or executive authority of the other state in controversy, and a day assigned for the appearance of the parties by their lawful agents, who shall then be directed to appoint by joint consent, commissioners or judges to constitute a court for hearing and determining the matter in question: but if they cannot agree, congress shall name three persons out of each of the united states, and from the list of such persons each party shall alternately strike out one, the petitioners beginning, until the number shall be reduced to thirteen; and from that number not less than seven, nor more than nine names as congress shall direct, shall in the presence of congress be drawn out by lot, and the persons whose names shall be so drawn or any five of them, shall be commissioners or judges, to hear and finally determine the controversy, so always as a major part of the judges who shall hear the cause shall agree in the determination: and if either party shall neglect to attend at the day appointed, without showing reasons, which congress shall judge sufficient, or being present shall refuse to strike, the congress shall proceed to nominate three persons out of each State, and the secretary of congress shall strike in behalf of such party absent or refusing; and the judgment and sentence of the court to be appointed, in the manner before prescribed, shall be final and conclusive; and if any of the parties shall refuse to submit to the authority of such court, or to appear or defend their claim or cause, the court shall nevertheless proceed to pronounce sentence, or judgment, which shall in like manner be final and decisive, the judgment or sentence and other proceedings being in either case transmitted to congress, and lodged among the acts of congress for the security of the parties concerned: provided that every commissioner, before he sits in judgment, shall take an oath to be administered by one of the judges of the supreme or superior court of the state, where the cause shall be tried, "well and truly to hear and determine the matter in question, according to the best of his judgment, without favour, affection or hope of reward:" provided also that no state shall be deprived of territory for the benefit of the united states.

All controversies concerning the private right of soil claimed under different grants of two or more states, whose jurisdictions as they may respect such lands, and the states which passed such grants are adjusted, the said grants or either of them being at the same time claimed to have originated antecedent to such settlement of jurisdiction, shall on the petition of either party to the congress of the united states, be finally determined as near as may be in the same manner as is before prescribed for deciding disputes respecting territorial jurisdiction between different states.

The united states in congress assembled shall also have the sole and exclusive right and power of regulating the alloy and value of coin struck by their own authority, or by that of the respective states — fixing the standard of weights and measures throughout the united states — regulating the trade and managing all affairs with the Indians, not members of any of the states, provided that the legislative right of any state within its own limits be not infringed or violated — establishing and regulating post-offices from one state to another, throughout all the united states, and exacting such postage on the papers passing thro' the same as may be requisite to defray the expences of the said office — appointing all officers of the land forces, in the service of the united states, excepting regimental officers — appointing all the officers of the naval forces, and commissioning all officers whatever in the service of the united states — making rules for the government and regulation of the said land and naval forces, and directing their operations.

The united states in congress assembled shall have authority to appoint a committee, to sit in the recess of congress, to be denominated "A Committee of the States," and to consist of one delegate from each state; and to appoint such other committees and civil officers as may be necessary for managing the general affairs of the united states under their direction — to appoint one of their number to preside, provided that no person be allowed to serve in the office of president more than one year in any term of three years; to ascertain the necessary sums of Money to be raised for the service of the united states, and to appropriate and apply the same for defraying the public expences — to borrow money, or emit bills on the credit of the united states, transmitting every half year to the respective states an account of the sums of money so borrowed or emitted, — to build and equip a navy — to agree upon the number of land forces, and to make requisitions from each state for its quota, in proportion to the number of white inhabitants in such state; which requisitions shall be binding, and thereupon the legislature of each state shall appoint the regimental officers, raise the men and cloath, arm and equip them in a soldier like manner, at the expence of the united states; and the officers and men so cloathed, armed and equipped shall march to the place appointed, and within the time agreed on by the united states in congress assembled: But if the united states in congress assembled shall, on consideration of circumstances judge proper that any state should not raise men, or should raise a smaller number than its quota, and that any other state should raise a greater number of men than the quota thereof, such extra number shall be raised, officered, cloathed, armed and equipped in the same manner as the quota of such state, unless the legislature of such state shall judge that such extra number cannot be safely spared out of the same, in which case they shall raise officer, cloath, arm and equip as many of such extra number as they judge can be safely spared. And the officers and men so cloathed, armed and equipped, shall march to the place appointed, and within the time agreed on by the united states in congress assembled.

The united states in congress assembled shall never engage in a war, nor grant letters of marque and reprisal in time of peace, nor enter into any treaties or alliances, nor coin money, nor regulate the value thereof, nor ascertain the sums and expences necessary for the defence and welfare of the united states, or any of them, nor emit bills, nor borrow money on the credit of the united states, nor appropriate money, nor agree upon the number of vessels of war, to be built or purchased, or the number of land or sea forces to be raised, nor appoint a commander-in-chief of the army or navy, unless nine states assent to the same: nor shall a question on any other point, except for adjourning from day to day be determined, unless by the votes of a majority of the united states in congress assembled.

The Congress of the united states shall have power to adjourn to any time within the year, and to any place within the united states, so that no period of adjournment be for a longer duration than the space of six Months, and shall publish the Journal of their proceedings monthly, except such parts thereof relating to treaties, alliances or military operations, as in their judgment require secrecy; and the yeas and nays of the delegates of each state on any question shall be entered on the Journal, when it is desired by any delegate; and the delegates of a state, or any of them, at his or their request shall be furnished with a transcript of the said Journal, except such parts as are above excepted, to lay before the legislatures of the several states.

ARTICLE X. The committee of the states, or any nine of them, shall be authorized to execute, in the recess of congress, such of the powers of congress as the united states in congress assembled, by the consent of nine states, shall from time to time think expedient to vest them with; provided that no power be delegated to the said committee, for the exercise of which, by the articles of confederation, the voice of nine states in the congress of the united states assembled is requisite.

ARTICLE XI. Canada acceding to this confederation, and joining in the measures of the united states, shall be admitted into, and entitled to all the advantages of this union: but no other colony shall be admitted into the same, unless such admission be agreed to by nine states.

ARTICLE XII. All bills of credit emitted, monies borrowed and debts contracted by, or under the authority of congress, before the assembling of the united states, in pursuance of the present confederation, shall be deemed and considered as a charge against the united states, for payment and satisfaction whereof the said united states, and the public faith are hereby solemnly pledged.

ARTICLE XIII. Every state shall abide by the determinations of the united states in congress assembled, on all questions which by this confederation are submitted to them. And the Articles of this confederation shall be inviolably observed by every state, and the union shall be perpetual; nor shall any alteration at any time hereafter be made in any of them; unless such alteration be agreed to in a congress of the united states, and be afterwards confirmed by the legislatures of every state.

AND WHEREAS it hath pleased the Great Governor of the World to incline the hearts of the legislatures we respectively represent in congress, to approve of, and to authorize us to ratify the said articles of confederation and perpetual union. KNOW YE that we the undersigned delegates, by virtue of the power and authority to us given for that purpose, do by these presents, in the name and in behalf of our respective constituents, fully and entirely ratify and confirm each and every of the said articles of confederation and perpetual union, and all and singular the matters and things therein contained: And we do further solemnly plight and engage the faith of our respective constituents, that they shall abide by the determinations of the united states in congress assembled, on all questions, which by the said confederation are submitted to them. And that the articles thereof shall be inviolably observed by the states we respectively represent, and that the union shall be perpetual.

IN WITNESS whereof we have hereunto set our hands in Congress. DONE at Philadelphia in the state of Pennsylvania the ninth Day of July in the Year of our Lord one Thousand seven Hundred and Seventy-eight, and in the third year of the independence of America.

On the part and behalf of the State of New Hampshire.

JOSIAH BARTLETT, JOHN WENTWORTH, JUNR. August 8, 1778.

On the part and behalf of the State of Massachusetts Bay.

JOHN HANCOCK, FRANCIS DANA,
SAMUEL ADAMS, JAMES LOVELL,
ELBRIDGE GERRY, SAMUEL HOLTEN.

On the part and in behalf of the State of Rhode Island and Providence Plantations.

WILLIAM ELLERY, JOHN COLLINS.
HENRY MARCHANT,

On the part and behalf of the State of Connecticut.

ROGER SHERMAN, TITUS HOSMER,
SAMUEL HUNTINGTON, ANDREW ADAMS.
OLIVER WOLCOTT,

On the part and behalf of the State of New York.

JAS DUANE, WILLIAM DUER,
FRAS LEWIS, GOUVR MORRIS.

On the part and in behalf of the State of New Jersey.

JNO WITHERSPOON, NATHL SCUDDER, Nov. 26, 1778.

On the part and behalf of the State of Pennsylvania.

ROBT. MORRIS, WILLIAM CLINGAN,
DANIEL ROBERDEAU, JOSEPH REED, July 22nd,
JONA BAYARD SMITH, 1778.

On the part and behalf of the State of Delaware.

JOHN DICKINSON, May 5, 1779, THO. M'KEAN, Feb. 12, 1779.
NICHOLAS VAN DYKE,

On the part and behalf of the State of Maryland.

JOHN HANSON, March 1, 1781,
DANIEL CARROLL, Do.

On the part and behalf of the State of Virginia.
RICHARD HENRY LEE, JNO. HARVIE,
JOHN BANISTER, FRANCIS LIGHTFOOT LEE.
THOMAS ADAMS,

On the part and behalf of the State of North Carolina.
JOHN PENN, July 21, 1778, JNO. WILLIAMS.
CORNS. HARNETT,

On the part and behalf of the State of South Carolina.
HENRY LAURENS, RICHARD HUTSON,
WILLIAM HENRY DRAYTON, THOS. HEYWARD, JUNR.
JNO. MATHEWS,

On the part and behalf of the State of Georgia.
JNO. WALTON, 24th July, 1778, EDWD. LANGWORTHY.
EDWD. TELFAIR,

Austria, Republic of. The Republic of Austria was first proclaimed November 12, 1918. A National Assembly took charge of the new government, appointed a temporary cabinet, and proceeded to enact laws. On February 16, 1919, a National Constitutional Assembly was chosen on the basis of universal and proportional suffrage. At this election every Austrian subject, male and female, if 20 years of age, had a vote, and, if 24 years of age, was eligible for election to the Assembly.

The Constitution, adopted October 1, 1920, and effective November 10, 1920, declares Austria to be a democratic Republic in which all special privileges are abolished, and equal rights are granted to all citizens. The Constitution provides for a President, to be chosen by the two Houses of Parliament in joint session, for a term of four years, and eligible for re-election once only. The Houses of Parliament consist of an Assembly (*Nationalrat*), elected for four years by popular vote, and of a First Chamber (*Bundesrat*), chosen by the Provincial diets in proportion to their population. The Bundesrat possesses only advisory powers.

Besides the city of Vienna, which holds a special position with reference to local government, the Republic of Austria is composed of seven provinces, formerly parts of Austria-Hungary, namely, Lower Austria, Upper Austria, Salzburg, Styria, Carinthia, Tyrol, and Vorarlberg. Moreover, by the terms of the Treaty of St. Germain, German West Hungary (*Burgenland*) is to become a part of the Austrian Republic. In every province there is a Provincial Assembly (*Landesversammlung*). This consists of a single chamber elected on the same suffrage basis as the National Assembly.

Belgium is a kingdom of Europe, and by the constitution of 1831, following on the secession from the Netherlands in 1830, declared to be a constitutional representative and hereditary monarchy. Belgium is a neutral power, her neutrality being guaranteed under the Treaty of London, 1831, by Great Britain, Austria, Prussia, and Russia. The executive power is vested in the king and his ministers, the legislative power jointly in king, senate, and chamber of deputies. All citizens over 25, who have lived at least a year in the same commune, have a vote. An additional vote is accorded them if they are either (1) 35 years of age, married, with legitimate offspring, and pay a tax of at least five francs to the state; or (2) are 25 years old and own immovable property to the value of at least 2,000 francs, or have a corresponding income from such property, or for two years have received at least 100 francs a year from Belgium funds. Two additional votes are given to citizens of 25 years of age who possess a diploma of higher education or have filled a public or private position implying the possession of such education. No citizen can have more than three votes; failure to vote is a misdemeanor. From this electorate both houses of the legislature are chosen, save for those senators who are elected indirectly. The senate of 120 members is elected for eight years. The number of members elected directly, ninety-three, is equal to half the number of deputies. The indirectly elected senators are chosen by the provincial councils, two for each province with less than 500,000 inhabitants; three for each with a population up to 1,000,000; and four for each with over 1,000,000. The deputies are elected for four years, in the proportion of one to every 40,000 inhabitants, and number 186. One-half retire every two years. Senators must be 40, and deputies 25 years of age. Each deputy receives 4,000 francs yearly, and travels free.

Bolivia. The constitution of the Republic of Bolivia bears date October 28, 1880. By its provisions the executive power is vested in a president, elected for a term of four years by direct popular vote, and not eligible for reëlection at the termination of his period of office; while the legislative authority rests with a congress of two chambers, called the senate and the chamber of deputies. The suffrage is possessed by all who can read and write. There are sixteen senators (two for each department) elected for six years, and seventy deputies elected for four years. Both senators and deputies are elected by direct vote of the people. Of the senators one-third retire every two years; of the deputies one-half retire every two years. Senators receive a salary of 500 bolivianos (about 195 dollars) per month during the sittings, which, as a rule, last for sixty days, but may be extended to ninety days. Extraordinary sessions may be held for special purposes. There are a president, two vice-presidents and a ministry, divided into six departments: foreign relations and worship; finance; government and fomento; justice and industry; war and colonization; education and agriculture.

Brazil. A republic on the east coast of Central South America, which, until 1889, was an empire under Emperor Pedro II., of the house of Braganza. A revolution then, however, broke out, and a new constitution was adopted in February, 1891. The chief feature of this was the establishment of the old provinces as twenty-one separate states, self-governed except for federal purposes, but with all fiscal matters, the maintenance of order, the defense of the country, the currency, reserved to the federal government. The executive authority is in the hands of the president, elected for four years only by the people directly. Legislative authority is exercised by the national congress, composed of a senate of sixty-three members, directly elected by the states for nine years, one-third retiring every three years, and a chamber of deputies of 212 members. Deputies and senators are paid.

The former must have been citizens for four and the latter for six years. Deputies are elected directly, with provision for minority representation, for three years, one member being chosen for every 70,000 of the population.

British Empire. The United Kingdom of Great Britain and Ireland, the nucleus around which the British Empire has been built, was perfected in 1603, when the crowns of England and Scotland were united. The executive power of the empire is vested in the sovereign, through his ministers. The real power of the empire, however, is to be found in Parliament, a body which not only has complete legislative power, but which exercises, through the Lower House, much authority in executive matters. Parliament consists of an Upper House of Lords and a Lower House of Commons. It lasts five years or until dissolved by the sovereign, and it usually meets annually for a term of about six months. The members of the House of Lords are peers, who hold office either by hereditary right or by crown appointment to the peerage. In 1914 there were 641 peers. The House of Commons consists of members elected from counties, boroughs, and universities—670 in all in 1915.

The Colonies proper form three classes:—(1) The *Crown Colonies*, which are entirely controlled by the home government; (2) those possessing *Representative Institutions*, in which the Crown has no more than a veto on legislation, but the home government retains the control of public officers; (3) those possessing *Responsible Government*, in which the home government has no control over any public officer, though the Crown appoints the governor and still retains a veto on legislation.

The established Church of England is the Protestant Episcopal Church, of which the king is the supreme head; but all religions are tolerated and are equal at law. Public instruction is not compulsory, but the national board of education maintains control of the school boards and requires that accommodations be provided for all children between the ages of five and fourteen years. Secondary education is not controlled by the government, but the university system is, perhaps, more perfectly developed in England than in any other country. England, Ireland, Scotland, and Wales each has its system of courts of justice.

The Parliament.—The present form of Parliament, divided into two houses, the Lords and the Commons, dates from the middle of the Fourteenth Century. The members of the House of Commons are elected by popular vote, about one-sixth of the population being electors, and the election must be by secret vote by ballot. The House of Lords is composed of peers, who hold their seats by hereditary right, by creation of the sovereign, by virtue of office (the bishops), by election for life (Irish peers), and by election for the term of Parliament (Scottish peers).

No one under 21 years of age can be a member of Parliament. All clergymen of the Church of England, ministers of the Church of Scotland, and Roman Catholic clergymen, and all government contractors and sheriffs or returning officers are disqualified. No English or Scottish peer can be elected to the House of Commons; but non-representative Irish peers are eligible for membership.

Important alterations were made in the Constitution by the Parliament Act, 1911. Under this Act, all money bills (so certified by the Speaker of the House of Commons), if not passed by the House of Lords without amendment, may become law without their concurrence on the royal assent being signified. Public bills, other than money bills or a bill extending the maximum duration of Parliament, if passed by the House of Commons in three successive sessions, whether of the same Parliament or not, and rejected each time by the House of Lords, may become law without their concurrence on the royal assent being signified, provided that two years have elapsed between the second reading in the first session of the House of Commons, and the third reading in the third session. All bills coming under this Act must reach the House of Lords at least one month before the end of the session.

The cabinet, prior to December, 1916, consisted of the political chiefs of the principal government departments, under the headship of the prime minister, and exceeded twenty in number. Upon the formation of the coalition ministry, December 11, 1916, the "war cabinet" was reduced in number to five members, which included (1) the prime minister and first lord of the treasury, (2) the lord president of the council and leader of the house of lords, (3) the chancellor of the exchequer and leader of the house of commons, and (4 and 5) two ministers without portfolio. To meet the exigencies of the war other ministers and department heads were appointed from time to time, including ministers of munitions, blockade, and food control, shipping controller, president of the air ministry, and director-general of national service.

The present ruler is "George V., by the Grace of God, of the United Kingdom of Great Britain and Ireland and of the British Dominions Beyond the Seas, King, Defender of the Faith, Emperor of India."

Bulgaria. By the treaty of Berlin, 1878, Bulgaria was constituted an autonomous and tributary principality under the suzerainty of the Porte. In 1885, Eastern Rumelia was united to Bulgaria. In 1908 Prince Ferdinand proclaimed Bulgaria an independent kingdom. The executive power is vested in the king, assisted by a council of ministers, and the legislative power in a single chamber, the Sobranje, or national assembly, elected for four years by manhood suffrage in the proportion of one member to every 20,000 of the population. There is also a Grand Sobranje, consisting of delegates selected in the proportion of one to 10,000 of the population, to which constitutional and other questions, such as a vacancy on the throne or the acquisition of territory, must be referred.

California. A Constitution was framed by a convention of delegates assembled in the pueblo of Monterey in the year 1849, but it did not become effective until the Congress of the United States passed the act of admission, September 9, 1850. In 1862 the Constitution received important amendments, and in 1879

a new Constitution was adopted. Since that year numerous and important amendments have been made. Especially notable is the group of twenty-three amendments adopted in 1911 to provide for more direct popular control. These include the initiative and referendum, the recall, including judges, the extension of the suffrage to women, a larger measure of home rule in cities, state control of railroads and other public utilities, elimination of appeals on technical grounds in criminal cases, extension of impeachment to appellate judges, employers' liability and other radical changes. The effect of these amendments is practically to make the constitution a new instrument. To amend the California Constitution it is necessary only to secure a two-thirds majority in each branch of the Legislature, and a simple majority vote for the amendments at the next popular election. The State Legislature is composed of the Senate, a body of forty members, elected for terms of four years — half the number being elected each two years—and the Assembly, eighty members, elected for two years. The qualifications for eligibility to the Senate or Assembly are citizenship of the State for three years and residence in the district for one year. Neither house of the Legislature possesses any advantage over the other in originating legislation. Certain of the governor's appointments must be submitted to the Senate for approval. In impeachment cases the Assembly brings the impeachment, and it is tried by the Senate. The present Constitution contains numerous specific prohibitions of local and special laws, besides forbidding them in all cases where a general law can be made applicable. Under one of the amendments of 1911 the legislature meets biennially for a divided session. The first thirty days are devoted to the introduction of bills, none being passed except emergency measures. An adjournment for thirty days is then taken, whereupon the legislature reconvenes to pass such bills as meet its approval; but no new measures can be introduced except by three-fourths vote. The term of office of the governor is four years. He possesses supreme executive authority, issues all commissions, is commander-in-chief of the army and navy, and is charged with responsibility to see that all laws are faithfully executed. All State boards and commissions, with two or three exceptions, are filled by his appointment, the concurrence of the Senate being required in certain instances, and in others not. He is empowered to grant pardons, but where a person has been more than once convicted there is required the assent of a majority of the justices of the Supreme Court. The governor is vested with authority to call the Legislature together in extraordinary session. During sessions of the Legislature the governor may veto any bill which has passed, and it does not become law unless it again pass, and by a two-thirds vote in each house. Besides the governor and secretary of state the other officials are the lieutenant-governor, who is presiding officer of the Senate, the State comptroller, the attorney-general, the State treasurer, the State surveyor-general, who is also registrar of the land office, the superintendent of public instruction, and the State printer. The most important State boards and commissions are: The board of education; the board of regents of the university, appointed by the governor for terms of sixteen years; the State board of prison directors, appointed by the governor for terms of ten years, and having entire control of the penitentiaries; the State board of equalization, elected at general elections, and dealing with the assessment of property for revenue purposes; the public utilities commission, with large powers over railroads and other public utilities; the bank commission, the State board of health, the insurance commission, the State engineering department, the State board of charities and corrections, board of agriculture, and the commission in lunacy. The last-named, which is an *ex-officio* commission made up of State officers, controls the hospitals for the insane. California is divided into fifty-eight counties, one of which—San Francisco—has a combined county and city government; the other fifty-seven have county governments distinct from the government of the cities and towns which they contain. Cities are authorized to adopt the commission form of government and to construct and operate public utilities.

Canada. The Dominion of Canada originally consisted of the two provinces—Upper and Lower Canada (now Ontario and Quebec)—but the "British North America Act," which was passed in 1867, not only provided for the consolidation of the Canada of that time with the provinces of Nova Scotia and New Brunswick into one Dominion, but made provision for the admission of British Columbia, Prince Edward Island, the Northwest Territories and Newfoundland, a privilege of which Newfoundland alone has not availed herself. Out of the Northwest Territories have been formed the provinces of Manitoba, Alberta, Saskatchewan, and the district of Yukon. In accordance with this act of consolidation the Constitution of the Dominion is "similar in principle to that of the United Kingdom," and, while the executive authority is vested in the British Sovereign, the legislative power of the Dominion is exercised by a Parliament of two Houses — the Senate and the House of Commons. Each province forming the Dominion has a separate Parliament and administration, a lieutenant-governor being at the head of all provincial bodies. The Senate of the Dominion is composed of ninety-six members, who have been nominated for life. Each must be at least 30 years of age, a born or naturalized subject and possessed of $4,000 worth of property in the province from which he was appointed. The 235 members of the House are elected by the vote of their constituencies. The speaker of the House of Commons has a salary of $6,000 a year, and each member an allowance of $4,000 for the session with a deduction of $15 a day for absences; the opposition leader receives $10,000 in addition to ordinary sessional allowance. The speaker and members of the senate have the same allowances as in the House of Commons. The Governor-General, who receives a salary of $50,000 per annum, is appointed by the British Government for a term of five years, and he is assisted in his functions by a council composed of 17 heads of departments, each of whom receives a salary of $10,000

per annum except the Premier, who has a salary of $15,000 per annum. The heads of departments in 1921 were as follows:

1. *Prime Minister and Minister of External Affairs.*
2. *Minister of Railways and Canals.*
3. *Minister of Soldier Civil Re-establishment.*
4. *Minister of Public Works.*
5. *Minister of Finance.*
6. *President of Privy Council.*
7. *Minister of Customs and Excise.*
8. *Minister of Justice.*
9. *Minister of Trade and Commerce.*
10. *Postmaster-General.*
11. *Secretary of State.*
12. *Minister of Health, Immigration and Colonization.*
13. *Minister of Agriculture.*
14. *Minister of Labor.*
15. *Minister of Naval Service, Marine, and Fisheries.*
16. *Minister of Interior.*
17. *Minister of Militia and Defense.*

Four Ministers without portfolios.

The representation from the several provinces is as follows: There are 96 senators—namely, 24 from Ontario, 24 from Quebec, 10 from Nova Scotia, 10 from New Brunswick, 4 from Prince Edward Island, 6 from Manitoba, 6 from British Columbia, 6 from Alberta, and 6 from Saskatchewan. The House of Commons consists of 235 members—82 for Ontario, 65 for Quebec, 16 for Nova Scotia, 11 for New Brunswick, 15 for Manitoba, 13 for British Columbia, 16 for Saskatchewan, 12 for Alberta, 4 for Prince Edward Island, and 1 for the Yukon Territory.

Provincial Government. By the provisions of the British North America Act each province has full power to regulate its own local affairs and dispose of its own revenue, provided it does not interfere with the policy of the central government. The lieutenant-governor of each province is appointed by the Governor-General, while the other officials are elected by the people. There is a very perfect system of municipal government throughout the Dominion (except in Prince Edward Island where the legislature controls all local matters), the counties and townships having local governments or councils which regulate their local taxation. The administration of justice is based on the English model, except in Quebec Province, where the old French law prevails. The only court that has jurisdiction throughout the Dominion (except the Exchequer and the Maritime Court) is the Supreme Court.

Chile. Chile is a Republic, with laws administered under a Constitution formed in 1833 and subsequently amended. The President is elected for a term of five years by indirect vote, much as the like officer is chosen in the United States. He is assisted by a Cabinet as follows:

Premier and Minister of the Interior.
Minister of Foreign Affairs.
Minister of Justice and Public Instruction.
Minister of Finance.
Minister of War and Marine.
Minister of Industry and Public Works.

He is not eligible for reëlection for a succeeding term. The day of election is June 25th of the last year of the President's term of office, and the inaugural date is September 18th of the same year. Congress consists of two Houses — a Senate and a Chamber of Deputies. Members of the Senate are elected by popular vote for a term of six years, and Deputies are chosen in the same way for a term of three years. The proportion is one Senator for three Deputies. Electors must be 21 years of age and able to read and write. The republic is divided into provinces, which are subdivided into departments. Local government is exercised in the former by Intendentes and in the latter by Gobernadores. The police of Santiago and of the capitals of the provinces is organized and regulated by the President of the Republic.

China. For a period of nearly five thousand years China was an empire. In 1912, by the formal abdication of the child emperor, Pu-yi, the Manchu dynasty, which ruled China for about three centuries, came to an end. No other nation in history maintained one form of government for so long a period of time. The imperial decree was signed by the Empress Dowager for herself and the little emperor, by Yuan Shi-kai as prime minister, and also by the other ministers. The text of the first edict, which embodied the actual abdication, reads as follows: "We, the Emperor of China, have respectfully received today the following edict from the hands of Her Majesty, the Dowager Empress:

" 'In consequence of the uprising of the Republican army, to which the people of the provinces of China have responded, the Empire is seething like a boiling caldron, and the people are plunged in misery.

" 'Yuan Shi-kai was therefore commanded to dispatch commissioners in order to confer with the Republicans with a view to the calling of a National Assembly to decide on the future form of government. Months have elapsed and no settlement is now evident.

" 'The majority of the people are in favor of a republic. From the preference of the people's hearts the will of Heaven is discernible. How could we oppose the desires of millions for the glory of one family?

" 'Therefore, the Dowager Empress and the Emperor hereby vest the sovereignty of the Chinese Empire in the people.

" 'Let Yuan Shi-kai organize to the full the powers of the Provisional Republican Government and confer with the Republicans as to the methods of union, assuring peace in the Empire and forming a great Republic with the union of Manchus, Chinese, Mongols, Mohammedans, and Tibetans.

" 'We, the Empress Dowager and the Emperor, will thus be enabled to live in retirement, free from responsibilities and cares, and enjoying without interruption the nation's courteous treatment.' "

Whether under a constitutional monarchy or a republican form of government, the Chinese as a people have abundantly proved themselves capable of handling their own welfare and of developing in the arts and methods of civilization and progress. In practically every village were

representatives of the democratic aristocracy, who, together with the merchants, formulated the new government. They had all, more or less, absorbed their ideas of political economy in the school of the new world.

Soon after the abdication of the Manchu dynasty, Yuan Shi-kai was elected president of the new government by the National Assembly at Nanking, and March 10, 1912, took the following oath of office as provisional president:

"Since the Republic has been established, many works have to be performed. I shall endeavor faithfully to develop the Republic, to sweep away the disadvantages of absolute monarchism, to observe the constitutional laws, to increase the welfare of the country, and to cement together a strong nation embracing all the five races. When the National Assembly appoints a permanent president, I shall retire. This I swear before the Chinese Republic."

The constitution of 1914 provides that the president shall appoint for his own assistance a secretary of state, who recommends the heads of the different departments of the administration as follows: ministers of foreign affairs, finance, education, war, justice, interior, agriculture, commerce, communications, marine.

After twenty-five changes of dynasty China established a republican government in 1912, again reverted to monarchy in 1915, followed by the restoration of a republic in 1916. There is little concern, however, what the government is called or how organized, if only it affords the people security and does them justice.

In 1914 the administrative council reëstablished Confucianism as a state religion.

Colombia. The Republic of Colombia gained its independence of Spain in 1819, and was officially constituted December 27, 1819. It split up into Venezuela, Ecuador, and the Republic of New Granada, February 29, 1832. The Constitution of April 1, 1858, changed the Republic into a confederation of eight States, under the name of Confederation Granadina. On September 20, 1861, the convention of Bogotá brought out the confederation under the new name of United States of New Granada, with nine states. On May 8, 1863, an improved Constitution was formed, and the States reverted to the old name Colombia—United States of Colombia. The revolution of 1885 brought about another change, and the national council of Bogotá, composed of three delegates from each State, promulgated the Constitution of August 4, 1886. The sovereignty of the States was abolished, and they became simple departments, with governors appointed by the President of the Republic, though they have retained some of their old rights, such as the management of their own finances. A new territorial division of the country was adopted in 1908, twenty-seven circumscriptions or departments being formed. The legislative power rests with a Congress of two Houses, called the Senate and the House of Representatives. The Senate contains thirty-four Senators elected indirectly by electors specially chosen for the purpose. The House of Representatives consists of ninety-two members elected by the people in twenty-four electoral circumscriptions (one for every fifty thousand of population), but in each of the four intendencies appointed by the Intendente, his secretary and three inhabitants chosen by the municipal council of the capital of the intendency. Senators are elected for four years, representatives for two years. The president is elected by direct vote of the people. His term of office is four years; his salary is eighteen thousand gold dollars per annum. Congress elects, for a term of one year, two substitutes, one of whom failing the president during a presidential term fills the vacancy. The ministries are those of the interior, foreign affairs, finance, treasury, war, public instruction, commerce and agriculture, public works.

Colorado. The original Constitution of 1876, as amended, is still in force in Colorado. In 1910 it was amended to provide for the initiative and referendum, and in 1912 to provide for the recall of all public officers and of decisions of the State Supreme Court declaring laws to be unconstitutional. The Legislature, known as the General Assembly, consists of a Senate of thirty-five members elected for four years, one-half retiring every two years, and of a House of Representatives of sixty-five members elected for two years. Sessions are biennial and are limited to ninety days. All bills for raising revenue must originate in the House of Representatives. It is the right of the House of Representatives to impeach; of the Senators, to try and determine impeachments. Amendments to the Constitution proposed by initiative petition, or in either House and receiving the sanction of a two-thirds vote of all the members of each House, become part of the Constitution upon a majority ratification by popular vote. Eligible to either House are all citizens of the United States twenty-five years of age, and twelve months resident in the district for which they seek election. The executive power is vested in a governor elected for two years. He is commander-in-chief of the State militia. It rests with him to nominate and, by and with the advice and consent of the Senate, appoint officers not otherwise provided for by law or the Constitution. He may summon special sessions of the Legislature, and has a limited power to grant reprieves, commutations, and pardons. In legislation he has the power of veto, which may be overridden by a two-thirds vote of each House. The State officials are the governor, secretary of state, a lieutenant-governor, an auditor, a treasurer, an attorney-general, and a superintendent of public instruction, all of whom, with the governor, are elected on a two-year tenure.

Connecticut. The present Constitution of Connecticut was adopted in 1818 and there have been several amendments to it at different times. The Legislative power is vested in the General Assembly, consisting of a Senate and a House of Representatives. The Senate at present consists of thirty-five members, one from each of the senatorial districts into which the State is divided. The House of Representatives consists of 258 members, who must be electors of the towns for which they are elected, each town of over 5,000 inhabitants being entitled to

send two representatives. Members of each House are elected for the term of two years. The supreme executive power is vested in a governor elected for two years by the legal voters. He must be an elector of the State and be over 30 years of age. His duties include the command of the military forces, the adjournment of the Legislature when necessary, the recommendation of legislation, the granting of reprieves until the end of the next session of the General Assembly, and the supervision of the execution of the laws. Every bill passed by both Houses requires the assent of the governor, who may within three days remit it for reconsideration to the House in which it originated; if then the bill be approved by a majority in each House it becomes law. Amendments to the Constitution agreed to by a majority in each House, approved by a two-thirds majority in each House of the Legislature next elected, and approved by the people at special meetings held for the purpose in each town, become part of the Constitution. The State officials are: the governor, secretary of state, treasurer, and the comptroller of public accounts. For local administration the State is divided into eight counties, which are subdivided into cities, boroughs, and townships.

Constitution of the United States of America. In May, 1785, a committee of Congress made a report recommending an alteration in the Articles of Confederation, but no action was taken on it, and it was left to the State Legislatures to proceed in the matter. In January, 1786, the Legislature of Virginia passed a resolution providing for the appointment of five commissioners, who, or any three of them, should meet such commissioners as might be appointed in the other States of the Union, at a time and place to be agreed upon, to take into consideration the trade of the United States, to consider how far a uniform system in their commercial regulations may be necessary to their common interest and their permanent harmony; and to report to the several States such an act, relative to this great object, as, when ratified by them, will enable the United States in Congress effectually to provide for the same. The Virginia commissioners, after some correspondence, fixed the first Monday in September as the time, and the city of Annapolis as the place for the meeting, but only four other States were represented, viz., Delaware, New York, New Jersey, and Pennsylvania; the commissioners appointed by Massachusetts, New Hampshire, North Carolina, and Rhode Island failed to attend. Under the circumstances of so partial a representation, the commissioners present agreed upon a report (drawn by Mr. Hamilton, of New York), expressing their unanimous conviction that it might essentially tend to advance the interests of the Union if the States by which they were respectively delegated would concur, and use their endeavors to procure the concurrence of the other States, in the appointment of commissioners to meet at Philadelphia on the second Monday of May following, to take into consideration the situation of the United States; to devise such further provisions as should appear to them necessary to render the Constitution of the Federal Government adequate to the exigencies of the Union; and to report such an act for that purpose to the United States in Congress assembled as, when agreed to by them and afterwards confirmed by the Legislatures of every State, would effectually provide for the same. Congress, on the 21st of February, 1787, adopted a resolution in favor of a convention, and the Legislatures of those States which had not already done so (with the exception of Rhode Island), promptly appointed delegates. On the 25th of May, seven States having convened, George Washington, of Virginia, was unanimously elected President, and the consideration of the proposed constitution was commenced. On the 17th of September, 1787, the Constitution as engrossed and agreed upon was signed by all the members present, except Mr. Gerry, of Massachusetts, and Messrs. Mason and Randolph, of Virginia. The president of the convention transmitted it to Congress, with a resolution, stating how the proposed Federal Government should be put in operation, and an explanatory letter. Congress, on the 28th of September, 1787, directed the Constitution so framed, with the resolutions and letter concerning the same, to "be transmitted to the several Legislatures in order to be submitted to a convention of delegates chosen in each State by the people thereof, in conformity to the resolves of the convention." On the 4th of March, 1789, the day which had been fixed for commencing the operations of Government under the new Constitution, it had been ratified by the conventions chosen in each State to consider it, as follows: Delaware, December 7, 1787; Pennsylvania, December 12, 1787; New Jersey, December 18, 1787; Georgia, January 2, 1788; Connecticut, January 9, 1788; Massachusetts, February 6, 1788; Maryland, April 28, 1788; South Carolina, May 23, 1788; New Hampshire, June 21, 1788; Virginia, June 26, 1788; and New York, July 26, 1788. The President informed Congress, on the 28th of January, 1790, that North Carolina had ratified the Constitution November 21, 1789; and he informed Congress on the 1st of June, 1790, that Rhode Island had ratified the Constitution May 29, 1790. Vermont, in convention, ratified the Constitution January 10, 1791, and was, by an act of Congress approved February 18, 1791, "received and admitted into this Union as a new and entire member of the United States."

CONSTITUTION OF THE UNITED STATES

PREAMBLE.— We, the people of the United States, in order to form a more perfect Union, establish justice, insure domestic tranquillity, provide for the common defence, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this CONSTITUTION for the United States of America.

ARTICLE I.

SECTION I. All legislative powers herein granted shall be vested in a Congress of the United States, which shall consist of a Senate and House of Representatives.

SECTION II. 1. The House of Representatives shall be composed of members chosen every second year by the people of the several States, and the electors in each State shall have the qualifications requisite for electors of the most numerous branch of the State Legislature.

2. No person shall be a Representative who shall not have attained to the age of twenty-five years, and been

seven years a citizen of the United States, and who shall not, when elected, be an inhabitant of that State in which he shall be chosen.

3. Representatives and direct taxes shall be apportioned among the several States which may be included within this Union according to their respective numbers, which shall be determined by adding to the whole number of free persons, including those bound to service for a term of years, and excluding Indians not taxed, three-fifths of all other persons. The actual enumeration shall be made within three years after the first meeting of the Congress of the United States, and within every subsequent term of ten years, in such manner as they shall by law direct. The number of Representatives shall not exceed one for every thirty thousand, but each State shall have at least one Representative; and until such enumeration shall be made, the State of New Hampshire shall be entitled to choose 3; Massachusetts, 8; Rhode Island and Providence Plantations, 1; Connecticut, 5; New York, 6; New Jersey, 4; Pennsylvania, 8; Delaware, 1; Maryland, 6; Virginia, 10; North Carolina, 5; South Carolina, 5; and Georgia, 3.*

4. When vacancies happen in the representation from any State, the Executive Authority thereof shall issue writs of election to fill such vacancies.

5. The House of Representatives shall choose their Speaker and other officers, and shall have the sole power of impeachment.

SECTION III. 1. The Senate of the United States shall be composed of two Senators from each State, chosen by the Legislature thereof, for six years; and each Senator shall have one vote.

2. Immediately after they shall be assembled in consequence of the first election, they shall be divided as equally as may be into three classes. The seats of the Senators of the first class shall be vacated at the expiration of the second year, of the second class at the expiration of the fourth year, and of the third class at the expiration of the sixth year, so that one-third may be chosen every second year; and if vacancies happen by resignation, or otherwise, during the recess of the Legislature of any State, the Executive thereof may make temporary appointment until the next meeting of the Legislature, which shall then fill such vacancies.

3. No person shall be a Senator who shall not have attained to the age of thirty years, and been nine years a citizen of the United States, and who shall not, when elected, be an inhabitant of that State for which he shall be chosen.

4. The Vice-President of the United States shall be President of the Senate, but shall have no vote unless they be equally divided.

5. The Senate shall choose their other officers, and also a President pro tempore, in the absence of the Vice-President, or when he shall exercise the office of President of the United States.

6. The Senate shall have the sole power to try all impeachments. When sitting for that purpose, they shall be on oath or affirmation. When the President of the United States is tried, the Chief Justice shall preside; and no person shall be convicted without the concurrence of two-thirds of the members present.

7. Judgment in cases of impeachment shall not extend further than to removal from office, and disqualification to hold and enjoy any office of honor, trust, or profit under the United States; but the party convicted shall nevertheless be liable and subject to indictment, trial, judgment, and punishment, according to law.

SECTION IV. 1. The times, places, and manner of holding elections for Senators and Representatives shall be prescribed in each State by the Legislature thereof; but the Congress may at any time by law make or alter such regulations, except as to places of choosing Senators.

2. The Congress shall assemble at least once in every year, and such meeting shall be on the first Monday in December, unless they shall by law appoint a different day.

SECTION V. 1. Each House shall be the judge of the elections, returns, and qualifications of its own members, and a majority of each shall constitute a quorum to do business; but a smaller number may adjourn from day to day, and may be authorized to compel the attendance of absent members in such manner and under such penalties as each House may provide.

2. Each House may determine the rules of its proceedings, punish its members for disorderly behavior, and with the concurrence of two-thirds expel a member.

3. Each House shall keep a journal of its proceedings, and from time to time publish the same, excepting such parts as may in their judgment require secrecy; and the yeas and nays of the members of either House on any question shall, at the desire of one-fifth of those present, be entered on the journal.

4. Neither House, during the session of Congress, shall, without the consent of the other, adjourn for more than three days, nor to any other place than that in which the two Houses shall be sitting.

SECTION VI. 1. The Senators and Representatives shall receive a compensation for their services, to be ascertained by law, and paid out of the Treasury of the United States. They shall in all cases, except treason, felony, and breach of the peace, be privileged from arrest during their attendance at the session of their respective Houses, and in going to and returning from the same; and for any speech or debate in either House they shall not be questioned in any other place.

2. No Senator or Representative shall, during the time for which he was elected, be appointed to any civil office under the authority of the United States which shall have been created, or the emoluments whereof shall have been increased during such time; and no person holding any office under the United States shall be a member of either House during his continuance in office.

SECTION VII. 1. All bills for raising revenue shall originate in the House of Representatives, but the Senate may propose or concur with amendments, as on other bills.

2. Every bill which shall have passed the House of Representatives and the Senate shall, before it become a law, be presented to the President of the United States; if he approve, he shall sign it, but if not, he shall return it, with his objections, to that House in which it shall have originated, who shall enter the objections at large on their journal, and proceed to reconsider it. If after such reconsideration two-thirds of that House shall agree to pass the bill, it shall be sent, together with the objections, to the other House, by which it shall likewise be reconsidered; and if approved by two-thirds of that House it shall become a law. But in all such cases the votes of both Houses shall be determined by yeas and nays, and the names of the persons voting for and against the bill shall be entered on the journal of each House respectively. If any bill shall not be returned by the President within ten days (Sundays excepted) after it shall have been presented to him, the same shall be a law in like manner as if he had signed it, unless the Congress by their adjournment prevent its return; in which case it shall not be a law.

3. Every order, resolution, or vote to which the concurrence of the Senate and House of Representatives may be necessary (except on a question of adjournment) shall be presented to the President of the United States; and before the same shall take effect shall be approved by him, or being disapproved by him, shall be repassed by two-thirds of the Senate and the House of Representatives, according to the rules and limitations prescribed in the case of a bill.

SECTION VIII. 1. The Congress shall have power:

To lay and collect taxes, duties, imposts, and excises, to pay the debts and provide for the common defence and general welfare of the United States; but all duties, imposts, and excises shall be uniform throughout the United States.

2. To borrow money on the credit of the United States.

3. To regulate commerce with foreign nations, and among the several States, and with the Indian tribes.

4. To establish an uniform rule of naturalization and uniform laws on the subject of bankruptcies throughout the United States.

5. To coin money, regulate the value thereof, and of foreign coin, and fix the standard of weights and measures.

6. To provide for the punishment of counterfeiting the securities and current coin of the United States.

7. To establish post-offices and post-roads.

8. To promote the progress of science and useful arts by securing for limited times to authors and inventors the exclusive rights to their respective writings and discoveries.

9. To constitute tribunals inferior to the Supreme Court.

10. To define and punish piracies and felonies committed on the high seas, and offences against the law of nations.

11. To declare war, grant letters of marque and reprisal, and make rules concerning captures on land and water.

12. To raise and support armies, but no appropriation of money to that use shall be for a longer term than two years.

13. To provide and maintain a navy.

*See Article XIV., Amendments.

14. To make rules for the government and regulation of the land and naval forces.

15. To provide for calling forth the militia to execute the laws of the Union, suppress insurrections, and repel invasions.

16. To provide for organizing, arming, and disciplining the militia, and for governing such part of them as may be employed in the service of the United States, reserving to the States respectively the appointment of the officers, and the authority of training the militia according to the discipline prescribed by Congress.

17. To exercise exclusive legislation in all cases whatsoever over such district (not exceeding ten miles square) as may, by cession of particular States and the acceptance of Congress, become the seat of Government of the United States, and to exercise like authority over all places purchased by the consent of the Legislature of the State in which the same shall be, for the erection of forts, magazines, arsenals, dry-docks and other needful buildings.

18. To make all laws which shall be necessary and proper for carrying into execution the foregoing powers, and all other powers vested by this Constitution in the Government of the United States, or in any department or officer thereof.

SECTION IX. 1. The migration or importation of such persons as any of the States now existing shall think proper to admit shall not be prohibited by the Congress prior to the year one thousand eight hundred and eight, but a tax or duty may be imposed on such importation, not exceeding ten dollars for each person.

2. The privilege of the writ of habeas corpus shall not be suspended, unless when in cases of rebellion or invasion the public safety may require it.

3. No bill of attainder or ex post facto law shall be passed.

4. No capitation or other direct tax shall be laid, unless in proportion to the census or enumeration hereinbefore directed to be taken.

5. No tax or duty shall be laid on articles exported from any State.

6. No preference shall be given by any regulation of commerce or revenue to the ports of one State over those of another, nor shall vessels bound to or from one State be obliged to enter, clear, or pay duties in another.

7. No money shall be drawn from the Treasury but in consequence of appropriations made by law; and a regular statement and account of the receipts and expenditures of all public money shall be published from time to time.

8. No title of nobility shall be granted by the United States. And no person holding any office of profit nor trust under them shall, without the consent of the Congress, accept of any present, emolument, office, or title of any kind whatever from any king, prince, or foreign state.

SECTION X. 1. No State shall enter into any treaty, alliance, or confederation, grant letters of marque and reprisal, coin money, emit bills of credit, make anything but gold and silver coin a tender in payment of debts, pass any bill of attainder, ex post facto law, or law impairing the obligation of contracts, or grant any title of nobility.

2. No State shall, without the consent of the Congress, lay any impost or duties on imports or exports, except what may be absolutely necessary for executing its inspection laws, and the net produce of all duties and imposts, laid by any State on imports or exports, shall be for the use of the Treasury of the United States; and all such laws shall be subject to the revision and control of the Congress.

3. No State shall, without the consent of Congress, lay any duty of tonnage, keep troops or ships of war in time of peace, enter into any agreement or compact with another State, or with a foreign power, or engage in war, unless actually invaded, or in such imminent danger as will not admit of delay.

ARTICLE II.

SECTION I. 1. The Executive power shall be vested in a President of the United States of America. He shall hold his office during the term of four years, and, together with the Vice-President, chosen for the same term, be elected as follows:

2. Each State shall appoint, in such manner as the Legislature thereof may direct, a number of electors, equal to the whole number of Senators and Representatives to which the State may be entitled in the Congress; but no Senator or Representative or person holding an office of trust or profit under the United States shall be appointed an elector.

3. [The Electors shall meet in their respective States and vote by ballot for two persons, of whom one at least shall not be an inhabitant of the same State with themselves. And they shall make a list of all the persons voted for, and of the number of votes for each, which list they shall sign and certify and transmit, sealed, to the seat of the Government of the United States, directed to the President of the Senate. The President of the Senate shall, in the presence of the Senate and House of Representatives, open all the certificates, and the votes shall then be counted. The person having the greatest number of votes shall be the President, if such number be a majority of the whole number of electors appointed, and if there be more than one who have such majority, and have an equal number of votes, then the House of Representatives shall immediately choose by ballot one of them for President; and if no person have a majority, then from the five highest on the list the said House shall in like manner choose the President. But in choosing the President, the vote shall be taken by States, the representation from each State having one vote. A quorum, for this purpose, shall consist of a member or members from two-thirds of the States, and a majority of all the States shall be necessary to a choice. In every case, after the choice of the President, the person having the greatest number of votes of the electors shall be the Vice-President. But if there should remain two or more who have equal votes, the Senate shall choose from them by ballot the Vice-President.]*

4. The Congress may determine the time of choosing the electors and the day on which they shall give their votes, which day shall be the same throughout the United States.

5. No person except a natural born citizen, or a citizen of the United States at the time of the adoption of this Constitution, shall be eligible to the office of President; neither shall any person be eligible to that office who shall not have attained to the age of thirty-five years and been fourteen years a resident within the United States.

6. In case of the removal of the President from office, or of his death, resignation, or inability to discharge the powers and duties of the said office, the same shall devolve on the Vice-President, and the Congress may by law provide for the case of removal, death, resignation, or inability, both of the President and Vice-President, declaring what officer shall then act as President, and such officer shall act accordingly until the disability be removed or a President shall be elected.

7. The President shall, at stated times, receive for his services a compensation which shall neither be increased nor diminished during the period for which he shall have been elected, and he shall not receive within that period any other emolument from the United States, or any of them.

8. Before he enter on the execution of his office, he shall take the following oath or affirmation:

"I do solemnly swear (or affirm) that I will faithfully execute the office of President of the United States, and will, to the best of my ability, preserve, protect, and defend the Constitution of the United States."

SECTION II. 1. The President shall be Commander-in-Chief of the Army and Navy of the United States, and of the militia of the several States when called into the actual service of the United States; he may require the opinion, in writing, of the principal officer in each of the executive departments upon any subject relating to the duties of their respective offices, and he shall have power to grant reprieves and pardons for offences against the United States except in cases of impeachment.

2. He shall have power, by and with the advice and consent of the Senate, to make treaties, provided two-thirds of the Senators present concur; and he shall nominate, and by and with the advice and consent of the Senate shall appoint ambassadors, other public ministers and consuls, judges of the Supreme Court, and all other officers of the United States whose appointments are not herein otherwise provided for, and which shall be established by law; but the Congress may by law vest the appointment of such inferior officers as they think proper in the President alone, in the courts of law, or in the heads of departments.

3. The President shall have power to fill up all vacancies that may happen during the recess of the Senate by granting commissions, which shall expire at the end of their next session.

SECTION III. He shall from time to time give to the Congress information of the state of the Union, and recommend to their consideration such measures as he shall judge necessary and expedient; he may, on extra-

*This clause is superseded by Article XII. Amendments.

ordinary occasions, convene both Houses, or either of them, and in case of disagreement between them with respect to the time of adjournment, he may adjourn them to such time as he shall think proper; he shall receive ambassadors and other public ministers; he shall take care that the laws be faithfully executed, and shall commission all the officers of the United States.

SECTION IV. The President, Vice-President, and all civil officers of the United States shall be removed from office on impeachment for and conviction of treason, bribery, or other high crimes and misdemeanors.

ARTICLE III.

SECTION I. The judicial power of the United States shall be vested in one Supreme Court, and in such inferior courts as the Congress may from time to time ordain and establish. The judges, both of the Supreme and inferior courts, shall hold their offices during good behavior, and shall at stated times receive for their services a compensation which shall not be diminished during their continuance in office.

SECTION II. 1. The judicial power shall extend to all cases in law and equity arising under this Constitution, the laws of the United States, and treaties made, or which shall be made, under their authority; to all cases affecting ambassadors, other public ministers, and consuls; to all cases of admiralty and maritime jurisdiction; to controversies to which the United States shall be a party; to controversies between two or more States, between a State and citizens of another State, between citizens of different States, between citizens of the same State claiming lands under grants of different States, and between a State, or the citizens thereof, and foreign States, citizens, or subjects.

2. In all cases affecting ambassadors, other public ministers, and consuls, and those in which a State shall be party, the Supreme Court shall have original jurisdiction. In all the other cases before-mentioned the Supreme Court shall have appellate jurisdiction both as to law and fact, with such exceptions and under such regulations as the Congress shall make.

3. The trial of all crimes, except in cases of impeachment, shall be by jury, and such trial shall be held in the State where the said crimes shall have been committed; but when not committed within any State the trial shall be at such place or places as the Congress may by law have directed.

SECTION III. 1. Treason against the United States shall consist only in levying war against them, or in adhering to their enemies, giving them aid and comfort. No person shall be convicted of treason unless on the testimony of two witnesses to the same overt act, or on confession in open court.

2. The Congress shall have power to declare the punishment of treason, but no attainder of treason shall work corruption of blood or forfeiture except during the life of the person attained.

ARTICLE IV.

SECTION I. Full faith and credit shall be given in each State to the public acts, records, and judicial proceedings of every other State. And the Congress may by general laws prescribe the manner in which such acts, records, and proceedings shall be proved, and the effect thereof.

SECTION II. 1. The citizens of each State shall be entitled to all privileges and immunities of citizens in the several States.

2. A person charged in any State with treason, felony, or other crime, who shall flee from justice, and be found in another State, shall, on demand of the Executive authority of the State from which he fled, be delivered up, to be removed to the State having jurisdiction of the crime.

3. No person held to service or labor in one State, under the laws thereof, escaping into another shall, in consequence of any law or regulation therein, be discharged from such service or labor, but shall be delivered up on claim of the party to whom such service or labor may be due.

SECTION III. 1. New States may be admitted by the Congress into this Union; but no new State shall be formed or erected within the jurisdiction of any other State, nor any State be formed by the junction of two or more States, or parts of States, without the consent of the Legislatures of the States concerned, as well as of the Congress.

2. The Congress shall have power to dispose of and make all needful rules and regulations respecting the territory or other property belonging to the United States; and nothing in this Constitution shall be so construed as to prejudice any claims of the United States, or of any particular State.

SECTION IV. The United States shall guarantee to every State in this Union a republican form of government, and shall protect each of them against invasion, and, on application of the Legislature, or of the Executive (when the Legislature cannot be convened), against domestic violence.

ARTICLE V.

The Congress, whenever two-thirds of both Houses shall deem it necessary, shall propose amendments to this Constitution, or, on the application of the Legislatures of two-thirds of the several States, shall call a convention for proposing amendments, which, in either case, shall be valid to all intents and purposes, as part of this Constitution, when ratified by the Legislatures of three-fourths of the several States, or by conventions in three-fourths thereof, as the one or the other mode of ratification may be proposed by the Congress; provided that no amendment which may be made prior to the year one thousand eight hundred and eight shall in any manner affect the first and fourth clauses in the Ninth Section of the First Article; and that no State, without its consent, shall be deprived of its equal suffrage in the Senate.

ARTICLE VI.

1. All debts contracted and engagements entered into before the adoption of this Constitution shall be as valid against the United States under this Constitution as under the Confederation.

2. This Constitution and the laws of the United States which shall be made in pursuance thereof and all treaties made, or which shall be made, under the authority of the United States, shall be the supreme law of the land, and the judges in every State shall be bound thereby, anything in the Constitution or laws of any State to the contrary notwithstanding.

3. The Senators and Representatives before mentioned, and the members of the several State Legislatures, and all executive and judicial officers, both of the United States and of the several States, shall be bound by oath or affirmation to support this Constitution; but no religious test shall ever be required as a qualification to any office or public trust under the United States.

ARTICLE VII.

The ratification of the Conventions of nine States shall be sufficient for the establishment of this Constitution between the States so ratifying the same.

AMENDMENTS TO THE CONSTITUTION

ARTICLE I.

Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.

ARTICLE II.

A well-regulated militia being necessary to the security of a free State, the right of the people to keep and bear arms shall not be infringed.

ARTICLE III.

No soldier shall, in time of peace, be quartered in any house without the consent of the owner, nor in time of war but in a manner to be prescribed by law.

ARTICLE IV.

The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no warrants shall issue but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

ARTICLE V.

No person shall be held to answer for a capital or other infamous crime unless on a presentment or indictment of a grand jury, except in cases arising in the land or naval forces, or in the militia, when in actual service, in time of war or public danger; nor shall any person be subject for the same offence to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use without just compensation.

ARTICLE VI.

In all criminal prosecutions, the accused shall enjoy

the right to a speedy and public trial, by an impartial jury of the State and district wherein the crime shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining witnesses in his favor, and to have the assistance of counsel for his defence.

ARTICLE VII.

In suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved, and no fact tried by a jury shall be otherwise reëxamined in any court of the United States than according to the rules of the common law.

ARTICLE VIII.

Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.

ARTICLE IX.

The enumeration in the Constitution of certain rights shall not be construed to deny or disparage others retained by the people.

ARTICLE X.

The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.

ARTICLE XI.

The judicial power of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States, by citizens of another State, or by citizens or subjects of any foreign State.

ARTICLE XII.

The electors shall meet in their respective States, and vote by ballot for President and Vice-President, one of whom at least shall not be an inhabitant of the same State with themselves; they shall name in their ballots the person voted for as President, and in distinct ballots the person voted for as Vice-President; and they shall make distinct lists of all persons voted for as President, and of all persons voted for as Vice-President, and of the number of votes for each, which list they shall sign and certify, and transmit, sealed, to the seat of the Government of the United States, directed to the President of the Senate; the President of the Senate shall, in the presence of the Senate and House of Representatives, open all the certificates, and the votes shall then be counted; the person having the greatest number of votes for President shall be the President, if such number be a majority of the whole number of electors appointed; and if no person have such majority, then from the persons having the highest numbers, not exceeding three, on the list of those voted for as President, the House of Representatives shall choose immediately, by ballot, the President. But in choosing the President, the votes shall be taken by States, the representation from each State having one vote; a quorum for this purpose shall consist of a member or members from two-thirds of the States, and a majority of all the States shall be necessary to a choice. And if the House of Representatives shall not choose a President, whenever the right of choice shall devolve upon them, before the fourth day of March next following, then the Vice-President shall act as President, as in the case of the death or other constitutional disability of the President. The person having the greatest number of votes as Vice-President shall be the Vice-President, if such number be a majority of the whole number of electors appointed, and if no person have a majority, then from the two highest numbers on the list the Senate shall choose the Vice-President; a quorum for the purpose shall consist of two-thirds of the whole number of Senators, and a majority of the whole number shall be necessary to a choice. But no person constitutionally ineligible to the office of President shall be eligible to that of Vice-President of the United States.

ARTICLE XIII.

1. Neither slavery nor involuntary servitude, except as a punishment for crime whereof the party shall have been duly convicted, shall exist within the United States, or any place subject to their jurisdiction.

2. Congress shall have power to enforce this article by appropriate legislation.

ARTICLE XIV.

1. All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property without due process of law, nor deny to any person within its jurisdiction the equal protection of the laws.

2. Representatives shall be apportioned among the several States according to their respective numbers, counting the whole number of persons in each State, excluding Indians not taxed. But when the right to vote at any election for the choice of electors for President and Vice-President of the United States, Representatives in Congress, the executive and judicial officers of a State, or the members of the Legislature thereof, is denied to any of the male members of such State, being of twenty-one years of age, and citizens of the United States, or in any way abridged, except for participation in rebellion or other crime, the basis of representation therein shall be reduced in the proportion which the number of such male citizens shall bear to the whole number of male citizens twenty-one years of age in such State.

3. No person shall be a Senator or Representative in Congress, or elector of President and Vice-President, or holding any office, civil or military, under the United States, or under any State, who, having previously taken an oath, as a member of Congress, or as an officer of the United States, or as a member of any State Legislature, or as an executive or judicial officer of any State, to support the Constitution of the United States, shall have engaged in insurrection or rebellion against the same, or given aid and comfort to the enemies thereof. But Congress may, by a vote of two-thirds of each House, remove such disability.

4. The validity of the public debt of the United States, authorized by law, including debts incurred for payment of pensions and bounties for services in suppressing insurrection and rebellion, shall not be questioned. But neither the United States nor any State shall assume or pay any debt or obligation incurred in aid of insurrection or rebellion against the United States, or any claim for the loss or emancipation of any slave; but all such debts, obligations, and claims shall be held illegal and void.

5. The Congress shall have power to enforce by appropriate legislation the provisions of this article.

ARTICLE XV.

1. The right of the citizens of the United States to vote shall not be denied or abridged by the United States or by any State on account of race, color, or previous condition of servitude.

2. The Congress shall have power to enforce the provisions of this article by appropriate legislation.

ARTICLE XVI.

The Congress shall have power to lay and collect taxes on incomes, from whatever source derived, without apportionment among the several states and without regard to any census or enumeration.

ARTICLE XVII.

The Senate of the United States shall be composed of two senators from each state, elected by the people thereof, for six years; and each senator shall have one vote. The electors in each state shall have the qualifications requisite for electors of the most numerous branch of the state legislatures.

When vacancies happen in the representation of any state in the Senate, the executive authority of such state shall issue writs of election to fill such vacancies, provided that the Legislature of any state may empower the executive thereof to make temporary appointments until the people fill the vacancies by election as the Legislature may direct.

ARTICLE XVIII.

1. After one year from the ratification of this article the manufacture, sale, or transportation of intoxicating liquors within, the importation thereof into, or the exportation thereof from, the United States and all territory subject to the jurisdiction thereof for beverage purposes is hereby prohibited.

2. The Congress and the several States shall have concurrent power to enforce this article by appropriate legislation.

3. This article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by the legislatures of the several States, as provided by the Constitution, within seven years from the date of the submission hereof to the States by the Congress.

ARTICLE XIX.

1. The right of citizens of the United States to vote shall not be denied or abridged by the United States or by any State on account of sex.

2. Congress shall have power, by appropriate legislation, to enforce the provisions of this Article.

RATIFICATION OF THE CONSTITUTION

The Constitution was ratified by the thirteen original States in the following order:

Delaware, December 7, 1787, unanimously.
Pennsylvania, December 12, 1787, vote 46 to 23.
New Jersey, December 18, 1787, unanimously.
Georgia, January 2, 1788, unanimously.
Connecticut, January 9, 1788, vote 128 to 40.
Massachusetts, February 6, 1788, vote 187 to 168.
Maryland, April 28, 1788, vote 63 to 12.
South Carolina, May 23, 1788, vote 149 to 73.
New Hampshire, June 21, 1788, vote 57 to 46.
Virginia, June 25, 1788, vote 89 to 79.
New York, July 26, 1788, vote 30 to 28.
North Carolina, November 21, 1789, vote 193 to 75.
Rhode Island, May 29, 1790, vote 34 to 32.

RATIFICATION OF THE AMENDMENTS

I to X were declared in force December 15, 1791.

XI was declared in force January 8, 1798.

XII, regulating elections, was ratified by all the States except Connecticut, Delaware, Massachusetts, and New Hampshire, which rejected it. It was declared in force September 28, 1804.

XIII. The emancipation amendment was ratified by 31 of the 36 States; rejected by Delaware and Kentucky; not acted on by Texas; conditionally ratified by Alabama and Mississippi. Proclaimed December 18, 1865.

XIV. Reconstruction amendment was ratified by 23 Northern States; rejected by Delaware, Kentucky, Maryland and 10 Southern States, and not acted on by California. The 10 Southern States subsequently ratified under pressure. Proclaimed July 28, 1868.

XV. Negro citizenship amendment was not acted on by Tennessee; rejected by California, Delaware, Kentucky, Maryland, New Jersey, and Oregon; ratified by the remaining 30 States. New York rescinded its ratification January 5, 1870. Proclaimed March 30, 1870.

XVI. The income tax amendment failed of ratification in Connecticut, Florida, Massachusetts, New Hampshire, Pennsylvania, Rhode Island, Utah, Vermont, and Virginia. It was ratified by the remaining thirty-nine states. Proclaimed February 25, 1913.

XVII. The direct election of senators amendment became, *de facto*, a part of the Constitution on its ratification by the last of the required number of states on April 8, 1913.

XVIII. The prohibition amendment, on January 16, 1919, had received ratification by thirty-six states, and, on January 29, 1919, was formally proclaimed to take effect January 16, 1920. By March 12, 1922, it had been ratified by all the states except Connecticut and Rhode Island.

XIX. The equal suffrage amendment, having been adopted (June 10, 1919—August 18, 1920) by three-quarters of the States, was proclaimed in effect August 26, 1920, by the Secretary of State.

Corea, or Korea. A country embracing the peninsula lying between the Yellow Sea and the Sea of Japan. Until 1894 China was suzerain of Corea, but, on the conclusion of the Chino-Japanese War in 1895, the independence of Corea was granted. Then a struggle began between Russia and Japan which culminated in the Russo-Japanese War. By the Treaty of Portsmouth, 1905, the paramount interest of Japan in Corea was acknowledged. In 1910 Corea was annexed to Japan and officially named Chosen.

Cuba, after having been continuously in the possession of Spain from its discovery, was, by the peace preliminaries and by the definitive treaty signed by the Peace Commissioners at Paris, December 10, 1898, relinquished by Spain, and thus has the position of an independent state. The direct armed interposition of the United States in the struggle against Spanish domination has, however, brought the island into close association with the United States Government. On November 5, 1900, a convention met to decide on a Constitution, and on February 21, 1901, a Constitution was adopted, under which the island has a republican form of government, with a President, a Vice-President, a Senate, and a House of Representatives. The United States Legislature passed a law authorizing the President of the United States to make over the government of the island to the Cuban people as soon as Cuba should undertake to make no treaty with any foreign power endangering its independence, to contract no debt for which the current revenue would not suffice, to concede to the United States Government a right of intervention, and also to grant to it the use of naval stations. On June 12, 1901, these conditions were accepted by Cuba, on February 24, 1902, the President and Vice-President of the Republic were elected, and on May 20th the control of the island was formally transferred to the new Cuban Government. Under treaties signed July 2, 1903, and ratified within seven months of that date, the United States has coaling stations in the Bay of Guantánamo and Bahia Honda, for which they pay $2,000 annually. The connection between Cuba and the United States was rendered still closer by the reciprocal commercial convention which came into operation on December 27, 1903. In August, 1906, an insurrection broke out and a United States Commission undertook the provisional government. In 1909, Cuba again resumed the reins of government under President Gomez and a native Cabinet. The Cabinet consists of the Secretaries of State, of Justice, of the Interior, of Finance, of Agriculture, Commerce, and Labor, of Public Instruction, of Public Works, and of Sanitation and Charity.

Declaration of Independence

THE UNANIMOUS DECLARATION OF THE THIRTEEN UNITED STATES OF AMERICA, IN CONGRESS, JULY 4, 1776.

When in the Course of human events, it becomes necessary for one people to dissolve the political bands which have connected them with another, and to assume among the powers of the earth, the separate and equal station to which the Laws of Nature and of Nature's God entitle them, a decent respect to the opinions of mankind requires that they should declare the causes which impel them to the separation.

We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness. That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed. That whenever any Form of Government becomes destructive of these ends, it is the Right of the People to alter or to abolish it, and to institute new Government, laying its foundation on such principles and organizing its powers in such form, as to them shall seem most likely to effect their Safety and Happiness. Prudence, indeed, will dictate that Governments long established should not be changed for light and transient causes; and accordingly all experience hath shewn, that mankind are more disposed to suffer, while evils are sufferable, than to right themselves by abolishing the forms to which they are accustomed. But when a long train of abuses and usurpations, pursuing invariably the same Object evinces a design to reduce them under absolute Despotism, it is their right, it is their duty, to throw off such Gov-

ernment, and to provide new Guards for their future security. Such has been the patient sufferance of these Colonies; and such is now the necessity which constrains them to alter their former Systems of Government. The history of the present King of Great Britain is a history of repeated injuries and usurpations, all having in direct object the establishment of an absolute Tyranny over these States. To prove this, let Facts be submitted to a candid world.

He has refused his Assent to Laws, the most wholesome and necessary for the public good.

He has forbidden his Governors to pass Laws of immediate and pressing importance, unless suspended in their operation till his Assent should be obtained; and when so suspended, he has utterly neglected to attend to them.

He has refused to pass other Laws for the accommodation of large districts of people, unless those people would relinquish the right of Representation in the Legislature, a right inestimable to them and formidable to tyrants only.

He has called together legislative bodies at places unusual, uncomfortable, and distant from the depository of their public Records, for the sole purpose of fatiguing them into compliance with his measures.

He has dissolved Representative Houses repeatedly, for opposing with manly firmness his invasions on the rights of the people.

He has refused for a long time, after such dissolutions, to cause others to be elected; whereby the Legislative powers, incapable of Annihilation, have returned to the People at large for their exercise; the State remaining in the meantime exposed to all the dangers of invasion from without, and convulsions within.

He has endeavored to prevent the population of these States; for that purpose obstructing the Laws for Naturalization of Foreigners; refusing to pass others to encourage their migrations hither, and raising the conditions of new Appropriations of Lands.

He has obstructed the Administration of Justice, by refusing his Assent to Laws for establishing Judiciary powers.

He has made Judges dependent on his Will alone, for the tenure of their offices, and the amount and payment of their salaries.

He has erected a multitude of New Offices, and sent hither swarms of Officers to harrass our people, and eat out their substance.

He has kept among us, in times of peace, Standing Armies without the Consent of our legislature.

He has affected to render the Military independent of and superior to the Civil power.

He has combined with others to subject us to a jurisdiction foreign to our constitution, and unacknowledged by our laws; giving his Assent to their Acts of pretended Legislation:

For quartering large bodies of armed troops among us:

For protecting them, by a mock Trial, from punishment for any Murders which they should commit on the Inhabitants of these States:

For cutting off our Trade with all parts of the world:

For imposing Taxes on us without our Consent:

For depriving us in many cases, of the benefits of Trial by jury:

For transporting us beyond Seas to be tried for pretended offenses:

For abolishing the free System of English Laws in a neighboring Province, establishing therein an Arbitrary government, and enlarging its Boundaries so as to render it at once an example and fit instrument for introducing the same absolute rule into these Colonies:

For taking away our Charters, abolishing our most valuable Laws, and altering fundamentally the Forms of our Governments:

For suspending our own Legislatures, and declaring themselves invested with power to legislate for us in all cases whatsoever.

He has abdicated Government here, by declaring us out of his Protection and waging War against us.

He has plundered our seas, ravaged our Coasts, burnt our towns, and destroyed the lives of our people.

He is at this time transporting large Armies of foreign Mercenaries to compleat the works of death, desolation, and tyranny, already begun with circumstances of Cruelty & perfidy scarcely paralleled in the most barbarous ages, and totally unworthy the Head of a civilized nation.

He has constrained our fellow-Citizens taken Captive on the high Seas to bear Arms against their Country, to become the executioners of their friends and Brethren, or to fall themselves by their Hands.

He has excited domestic insurrections amongst us, and has endeavored to bring on the inhabitants of our frontiers, the merciless Indian Savages, whose known rule of warfare, is an undistinguished destruction of all ages, sexes and conditions.

In every stage of these Oppressions We have Petitioned for Redress in the most humble terms: Our repeated Petitions have been answered only by repeated injury. A Prince, whose character is thus marked by every act which may define a Tyrant, is unfit to be the ruler of a free people.

Nor have We been wanting in attentions to our British brethren. We have warned them from time to time of attempts by their legislature to extend an unwarrantable jurisdiction over us. We have reminded them of the circumstances of our emigration and settlement here. We have appealed to their native justice and magnanimity, and we have conjured them by the ties of our common kindred to disavow these usurpations, which would inevitably interrupt our connections and correspondence. They, too, have been deaf to the voice of justice and of consanguinity. We must, therefore, acquiesce in the necessity, which denounces our Separation, and hold them, as we hold the rest of mankind, Enemies in War, in Peace Friends.

WE, THEREFORE, the REPRESENTATIVES of the UNITED STATES OF AMERICA, IN GENERAL CONGRESS, Assembled, appealing to the Supreme Judge of the world for the rectitude of our intentions, do, in the Name, and by authority of the good People of these Colonies, solemnly PUBLISH and DECLARE, That these United Colonies are, and of Right ought to be FREE AND INDEPENDENT States; that they are Absolved from all Allegiance to the British Crown, and that all political connection between them and the State of Great Britain, is and ought to be totally dissolved; and that as FREE AND INDEPENDENT STATES, they have full Power to levy War, conclude Peace, contract Alliances, establish Commerce, and to do all other Acts and Things which INDEPENDENT STATES may of right do. And for the support of this Declaration, with a firm reliance on the protection of Divine Providence, We mutually pledge to each other our Lives, our Fortunes and our sacred Honor.

(The foregoing declaration was, by order of Congress, engrossed, and signed by the following members:)

JOHN HANCOCK.

New Hampshire.

JOSIAH BARTLETT, MATTHEW THORNTON.
WM. WHIPPLE,

Massachusetts Bay.

SAML. ADAMS, ROBT. TREAT PAINE,
JOHN ADAMS, ELBRIDGE GERRY.

Rhode Island, etc.

STEP. HOPKINS, WILLIAM ELLERY.

Connecticut.

ROGER SHERMAN, WM. WILLIAMS,
SAM'EL HUNTINGTON, OLIVER WOLCOTT.

New York.

WM. FLOYD, FRANS. LEWIS,
PHIL. LIVINGSTON, LEWIS MORRIS.

New Jersey.

RICHD. STOCKTON, JOHN HART,
JNO. WITHERSPOON, ABRA. CLARK.
FRAS. HOPKINSON,

Pennsylvania.

ROBT. MORRIS, JAS. SMITH,
BENJAMIN RUSH, GEO. TAYLOR,
BENJA. FRANKLIN, JAMES WILSON,
JOHN MORTON, GEO. ROSS.
GEO. CLYMER,

Delaware.

CESAR RODNEY, THO. M'KEAN.
GEO. READ,

Maryland.

SAMUEL CHASE, THOS. STONE
WM. PACA, CHARLES CARROLL of Carrollton.

Virginia.

GEORGE WYTHE, THOS. NELSON, jr.,
RICHARD HENRY LEE, FRANCIS LIGHTFOOT LEE,
TH. JEFFERSON, CARTER BRAXTON.
BENJA. HARRISON,

North Carolina.

WM. HOOPER, JOHN PENN.
JOSEPH HEWES,

South Carolina.

EDWARD RUTLEDGE, THOMAS LYNCH, jr.,
THOS. HEYWARD, jr., ARTHUR MIDDLETON.

Georgia.

BUTTON GWINNETT, GEO. WALTON.
LYMAN HALL,

Delaware. The first Constitution, adopted in 1776, was followed by those of 1792, 1831, and 1897, the last named being still in force. Constitutional amendments, proposed in either House of the Legislature, agreed to by a two-thirds vote of both Houses, and by a similar vote of the next Legislature, become law. The Legislature consists of a Senate of seventeen members, elected for four years, and a House of Representatives of thirty-five members, elected for two years, the two Houses being known as the General Assembly. Senators must be 27 years of age, and Representatives 24; both must be citizens who have resided three years in the State, and one year in the electoral district immediately preceding the election. Money bills must originate in the House of Representatives. The Senate tries cases of impeachment brought by the House of Representatives. The principal executive officer of the State is the governor, who is elected for four years and is not eligible for a third term. He is commander-in-chief of the military and naval forces of the State, and, with the consent of the Senate, appoints to various offices of State. He may call special sessions of the legislature, and has power to pardon, limited by the authority of the board of pardons, of which he is a member. He has a veto on legislation, which may be overridden by a three-fifths vote of each house. The secretary of state is appointed by the governor with the consent of the Senate. Other State officials are the lieutenant-governor, the treasurer, and the auditor.

Denmark. The original constitution of 1849, as modified in 1855, 1863, and 1866, was in force until 1915. Under the constitution of 1915 the executive power is vested in the king and ministers, the legislative in the Rigsdag or Diet acting jointly with the sovereign. The Rigsdag is composed of the Landsthing (or upper house of seventy-two members—indirectly elected on the proportional system for eight years), and the Folkething (or house of commons of 140 members also elected on the proportional system for three years). Both sexes vote in the elections of the upper and lower houses, and women are eligible for election thereto. The franchise age for either sex is 25 years. Members of both houses are paid about three dollars a day while the Rigsdag is sitting, and their traveling expenses. The Rigsdag must meet every October, and all money bills be submitted first to the Folkething. For local government the country is divided into eighteen counties, each under a governor, and these are subdivided into hundreds and parishes. The towns are administered by mayors.

District of Columbia. The municipal government of the District of Columbia is vested by act of Congress approved June 11, 1878, in three commissioners, two of whom are appointed by the president from citizens of the District having had three years' residence therein immediately preceding that appointment, and confirmed by the Senate. The other commissioner is detailed by the President of the United States from the Corps of Engineers of the United States Army, and must have lineal rank senior to captain, or be a captain who has served at least fifteen years in the Corps of Engineers of the Army. The commissioners appoint the subordinate official service of said government, except the board of education which is appointed by the Supreme Court of the District of Columbia. Congress makes all laws for the District, but has entrusted to the commissioners authority to make police, building, and plumbing regulations, and others of a municipal nature.

Dominican Republic, or **Santo Domingo,** is the Republic which occupies the eastern end of the island of Hayti, and was founded in 1844, after a revolution which overthrew the Spanish rule. It is practically a protectorate of the United States. By the Constitution of 1908 the legislative power of the republic is vested in a National Congress, consisting of a Senate of 12 senators and a Chamber of Deputies of 24 members. These representatives are remunerated at the rate of 480*l.* per annum each. The republic is divided into twelve provinces. There is one senator for each province, and the deputies are elected by the provinces in proportion to the number of their inhabitants. The members are chosen by indirect vote, in the ratio of two for each province for the term of four years. But the powers of the National Congress embrace only the general affairs of the republic.

The President is chosen by an electoral college for the term of six years, and receives a salary of 9,600 dollars per annum. There is no Vice-President. In case of death or disability of the President, Congress designates a person to take charge of the executive office.

The executive of the Republic is vested in a cabinet, composed of the president and seven ministers, who are the heads of the departments of the interior and police, finance and commerce, justice and public instruction, war and marine, agriculture and immigration, foreign affairs, and public works and communications.

Ecuador is a Republic of equatorial South America, constituted in 1830, by separation from the original Republic of Colombia. Under the Constitution of 1884, modified in 1887 and 1897, it is governed by a President elected for four years, with the assistance of a Cabinet of five ministers and a Congress composed of a Senate of thirty-two members, elected for four years, representing the sixteen provinces, and a Chamber of forty-eight Deputies, which is elected every two years. The electors to both chambers must be adults able to read and write.

Florida. The original Constitution, framed in 1838, was succeeded by others in 1865, 1868, and 1885. That of 1885, as amended from time to time, is now in force. Amendments proposed by initiative petition, or in either House of the Legislature and approved by a three-fifths vote of all the members of each House, are thereupon submitted to the people and, if accepted by a majority of those voting on them, they become part of the Constitution. The State Legislature consists of a Senate of thirty-two members, and a House of Representatives of seventy-five members. Senators are elected for four years, Representatives for two, the Senate being renewed by one-half every two years. Any bill may originate in either House. The House of Representa-

tives has the sole power of impeachment, but a two-thirds vote of all members present is necessary to impeach. Impeachment cases are tried by the Senate. Legislators must be qualified electors in the counties they represent. The chief executive officer of the State is the governor, who is elected for four years, and is not eligible for the next term of office. He has the usual powers of State governors, including a veto on legislation which may be overridden by a two-thirds vote of the members present in each House. Other State officers elected for four years are the attorney-general, the comptroller, the treasurer, the superintendent of public instruction, and the commissioner of agriculture.

France is a Republic, governed by the Constitution of 1875, modified in 1879, 1884, 1885, and 1899. The Legislature consists of the Assembly, sitting in two Houses, viz., the Senate of 300 members, indirectly elected for nine years (one-third retiring every three years) by delegates chosen by the municipal councils and the senators, deputies, councilors-general, and district councilor of the departments (there are a number of Senators originally elected for life by the two chambers, but as these die the vacancies are filled by the election of Senators for a period of nine years only); and the Chamber of Deputies of 602 members, elected for four years by universal suffrage. Voters are required to be over 21 and to have a six months' residential qualification. Both Houses can initiate and frame laws, except in the case of financial laws, which must first be presented to and voted by the Chamber of Deputies. Deputies and Senators are both paid at the rate of 15,000 francs a year. The presidents of the two chambers each receive in addition 72,000 francs a year for the expense of entertainment. Members of both chambers travel free on all railways on making a small annual payment. The executive power is confided to the President, who is elected for seven years by the two Houses united in National Assembly, and receives 600,000 francs a year, and a further allowance of 600,000 francs for expenses. He appoints the ministers and makes all civil and military appointments. War can be declared by the President only with consent of the two Houses and his every act must be countersigned by a minister. The colonies are looked upon as being politically part of France, and are represented in the Senate by four Senators and in the Chamber by ten Deputies.

Georgia. Georgia entered the Union as one of the original States and its first Constitution, adopted in 1777, was succeeded by those of 1789, 1798, 1861, 1865, and 1877. The last has been amended seven times, most recently in 1904. Amendments proposed in either House and approved by a two-thirds vote of the members of each House must be submitted to the people; if ratified by a majority of those who vote, they become part of the Constitution. The Legislature consists of a Senate of fifty-one members and a House of Representatives of 193 members, known collectively as the General Assembly. Both Senators and Representatives are elected for two years. Senators must be citizens of the United States, 25 years old, resident in the State four years preceding election and one year in the district for which elected. Representatives must be citizens of the United States, 21 years old, resident in the State two years and in the county one year next preceding election. The seat of a member of either House is vacated on his removal from the district or county from which he was elected. The House of Representatives has sole power of impeachment, and the Senate tries impeachment cases. All bills to raise money must originate in the House of Representatives. The chief executive officer of the State is the governor, who is elected for two years. He has the usual limited powers of pardon and veto. He has power to fill vacancies not otherwise provided for by law, and is required to see that the laws of the State are faithfully executed. He is commander-in-chief of the State militia. Other elective officials are the secretary of state, the comptroller, the treasurer, the attorney-general, and the superintendent of education. Georgia is divided into 146 counties.

Germany, Republic of. The Constitution of the Republic was adopted July 31, 1919, by the National Assembly at Weimar, and was promulgated August 11, 1919. This instrument declares that the New Commonwealth of Germany is a Republic and that the power of the State is derived from the people. The Constitution provides for a national and for a state legislative body. It makes foreign relations, defense, customs duties, taxation, and railway services, matters for the central or national authority. The Constitution further provides that every component State in the Federation must have a republican constitution, with a universal, equal, direct, and secret franchise of male and female voters on the proportional system.

An Imperial Council (*Reichsrat*) is to be formed for the representation of the component States (*Länder*). All bills before they may be introduced into the Reichstag require the assent of the Reichsrat. The principle of the referendum is provided for in the Constitution. The Constitution further declares all Germans equal before the law, and abolishes all privileges or disadvantages of birth, class, or creed. Freedom of speech and freedom of the press is guaranteed; as is also the right of meeting. Members of the legislature of the nation (*Reichstag*) are to be elected by universal, equal, direct, and secret votes of male and female voters on the proportional system. The members of the Reichstag are elected for terms of four years. The President of the German Republic is elected by the vote of the whole German people for a period of seven years. Declarations of war and conclusions of peace are made by a law of the entire nation. The Cabinet, including a Chancellor and 11 Ministers appointed by the President, must enjoy the confidence of the Reichstag.

The Reichsrat consists of 55 members, 22 of which are from Prussia, 7 from Bavaria, 5 from Saxony, 3 from Württemberg, 3 from Baden, and 15 from the other States. In 1920 the Reichstag was composed of 466 members. Of these, the Majority Socialists elected 113 members; the Independent Socialists, 81; Center Party, 69; German National People's Party, 66; German

People's Party, 62; German Democratic Party, 45; Bavarian People's Party, 20; minor parties 10. The total popular vote cast at the 1920 election was 26,028,362.

Greece. The Constitution of Greece, adopted October 29, 1864, vested the whole legislative power in a single chamber, called the Bulé, consisting of 184 representatives, elected by manhood suffrage (in the proportion of 1 to every 16,000 inhabitants) for the term of four years. In 1911 the constitution was modified and a substitute for a second chamber was adopted in the reëstablishment of the Council of State. The functions of the council are the elaboration of the *Projets de Loi* and the annulling of official decisions and acts which may be contrary to law. The new constitution came into force June 1, 1911. The deputies must be at least 25 years of age and their number has been fixed at 181. The elections take place by ballot, and each candidate must be put in nomination by the requisition of at least one-thirtieth of the voters of an electoral district. The Bulé must meet annually for not less than three, nor more than six, months. No sitting is valid unless at least one-third of the members of the Assembly are present, and no bill can pass into law without an absolute majority of members. Every measure, before being adopted, must be discussed and voted, article by article, thrice, and on three separate days. The ministry is as follows: Premier and minister of war, marine, foreign affairs, interior, finance, commerce and agriculture, justice, public instruction.

Hague Tribunal, The. The Permanent Court of Arbitration was established under the Act of July 29, 1899, signed (and subsequently ratified) on the part of twenty-four powers. Under protocol of June 14, 1907, for the accession of non-signatory powers, the number of powers represented in the court has been largely increased. The purpose is to facilitate arbitration for international disputes which it has been impossible to settle by diplomacy. The court is competent for all arbitration cases unless the parties agree to constitute a special tribunal, and its jurisdiction may be extended to disputes to which one or both of the parties are non-signatory powers, if the parties so agree.

Hayti. The Republic of Hayti was originally a French colony, but was proclaimed independent in 1804, and is governed under a Constitution drawn up in 1889. The executive power is in the hands of a President, elected for seven years by the Senate and the Chamber of Representatives, who receives a salary of $24,000. The Chamber of ninety-nine members is elected directly for three years by all male citizens, and the Senate of thirty-nine members indirectly for six years. The religion is Roman Catholic, and elementary education is free. There is an army of about 5,000 men, and a navy of four small vessels. In 1915 both houses of the Haytian congress approved a treaty with the United States establishing a virtual protectorate by the United States over Hayti.

Hungary, Kingdom of. Following the abdication of King Charles, November 13, 1918, Hungary was proclaimed an independent republic, of which Count Karolyi became Provisional President. On March 22, 1919, the Karolyi régime was succeeded by a soviet government which at once proclaimed the dictatorship of the proletariat. On August 7, 1919, the soviet government gave way to a new national government under which a parliament was elected by universal suffrage early in 1920. The new Parliament proceeded to elect a regent who was officially called Protector of the Magyar Republic. On March 23, 1920, a government order proclaimed that Hungary should be described as a Monarchy. The Ministry consists of a Prime Minister, together with Ministers of foreign affairs, interior, finance, agriculture, commerce, instruction, justice, food, and social welfare.

Idaho. The original Constitution, adopted in 1889, is still in force. Amendments may be proposed in either House of the Legislature, and, if approved by a two-thirds vote of all the members of each House, are submitted to the popular vote for ratification. The Legislature consists of a Senate of thirty-seven members, and a House of Representatives of sixty-five members, all the Legislators being elected for two years. The chief executive officer is the governor, who is elected for two years, and has the powers usually vested in state governors, including a limited veto. The board of pardons, of which he is a member, may pardon or grant reprieves. Other State officials elected for two years are the lieutenant-governor, auditor, treasurer, attorney-general, and superintendent of public instruction. In 1912 the constitution was amended to provide for the initiative and referendum and for the recall of all elective officers except judges.

Illinois. The Constitution adopted in 1818 was superseded by that of 1848, which gave place to the Constitution adopted in 1870. This, with several amendments, is now in force. Amendments proposed in either House of the Legislature, approved by a two-thirds majority of all the members of each House, and ratified by a majority of the electors voting at the next general election, become part of the Constitution. Provision is also made for Constitutional amendments by means of a convention called for the purpose. The Legislature consists of a Senate of fifty-one members elected for four years (about half of whom retire every two years), and a House of Representatives of 153 members elected for two years. The two Houses have equal rights in introducing and passing bills. Senators and Representatives must be citizens, not holding any State or Federal office to which payment is attached. Senators must be 25 and Representatives 21 years of age; both must have resided in the State five, and in the district two, years next before election. The chief executive officer is the governor, elected for four years. He must be 30 years of age, and must have been a citizen for five years. He appoints many State officials and has the powers and duties which usually belong to State governors, including limited pardoning power and a limited veto. Other members of the executive, elected for four years, are the lieutenant-governor, the auditor, the superintendent of public instruction, and the attorney-general. The treasurer is elected for two years.

IMPORTANT FACTS CONCERNING THE COUNTRIES

Countries	Area in Sq. Miles	Population	Population per Sq. Mile	Largest City	Standard Currency
Abyssinia,	350,000	7,000,000	20	Harar,	
Afghanistan,	250,000	4,600,000	18.4	Kabul,	
Albania,	11,000	800,000	72.7	Scutari,	
Argentina,	1,138,996	8,533,332	7.5	Buenos Aires	Gold
Australia,	2,974,581	5,436,794	1.8	Sydney,	Gold
Austria,	30,716	6,139,197	199.8	Vienna,	Gold
Belgium,	11,392	7,577,027	665.1	Brussels,	Gold & sil'r
Bolivia,	594,460	2,820,074	4.7	La Paz,	Gold,
Brazil,	3,298,870	30,645,296	9.2	Rio de Janeiro,	Gold
Bulgaria,	42,000	4,975,000	118.4	Sofia,	
Canada,	3,729,665	8,769,489	2.3	Montreal,	Gold
Chile,	292,580	4,038,050	13.8	Santiago,	Gold
China,	3,913,560	320,650,000	81.9	Peking,	Silver
Colombia,	440,846	5,847,491	13.2	Bogota,	Gold
Costa Rica,	23,000	469,133	20.3	San Jose,	Gold
Cuba,	44,000	2,898,905	65.8	Havana,	Gold
Czecho-Slovakia,	56,000	14,000,000	250.	Prague,	
Denmark,	15,582	2,940,979	188.7	Copenhagen,	Gold
Ecuador,	116,000	2,000,000	17.2	Guayaquil,	Gold
Egypt,	350,000	12,750,918	36.4	Cairo,	Gold
Esthonia,	23,160	1,800,000	77.7	Reval,	
Finland,	125,689	3,331,814	26.5	Helsingfors,	Gold
France,	212,659	37,499,394	176.3	Paris,	Gold & sil'r
Germany,	183,381	60,900,197	332.0	Berlin,	Gold
Greece,	65,000	9,000,000	138.4	Athens,	Gold & sil'r
Guatemala,	48,290	2,003,579	41.4	Coban,	Silver,
Hayti,	10,204	2,500,000	245.0	Port au Prince,	Gold
Hejaz,	112,500	400,000	3.5	Mecca,	
Honduras,	44,275	637,114	14.3	Tegucigalpa,	Silver
Hungary,	35,000	7,840,832	224.0	Budapest,	Gold
Indian Empire,	1,900,000	320,000,000	168.4	Calcutta,	Gold
Italy,	120,450	38,500,000	319.6	Naples,	Gold
Japan,	148,756	55,961,140	376.1	Tokyo,	Gold
Jugoslavia,	95,628	11,337,686	118.5	Belgrade,	Gold
Latvia,	24,440	1,503,193	61.5	Riga,	Gold
Liberia,	48,000	1,500,000	31.2	Monrovia,	Gold
Lithuania,	60,000	5,000,000	83.3	Vilna,	
Mexico,	765,623	15,501,684	20.2	Mexico,	Gold
Netherlands,	12,582	6,843,436	543.8	Amsterdam,	Gold
New Zealand,	104,910	1,164,405	11.0	Auckland,	Gold
Nicaragua,	49,200	746,000	15.1	Leon,	Gold
Norway,	125,001	2,691,855	21.5	Christiania,	Gold
Panama,	32,380	401,428	12.3	Panama,	Gold
Paraguay,	75,673*	1,000,000	13.2	Asuncion,	Gold
Persia,	628,000	9,500,000	15.1	Teheran,	Silver
Peru,	722,461	4,500,000	6.2	Lima,	Gold
Poland,	149,042	24,272,349	162.8	Warsaw,	
Portugal,	35,490	6,399,355	180.3	Lisbon,	Gold
Rumania,	122,282	17,393,149	142.2	Bucharest,	Gold
Russia (Soviet),	4,800,000	136,000,000	28.3	Petrograd,	Gold
Salvador,	13,183	1,336,442	101.3	San Salvador,	Gold
Santo Domingo,	19,332	1,000,000	51.7	Santo Domingo,	Gold
Siam,	195,000	8,819,686	45.2	Bangkok,	
Spain,	194,783	20,783,844	106.7	Madrid,	Gold & Sil'r
Sweden,	173,035	5,903,762	34.1	Stockholm,	Gold
Switzerland,	15,976	3,861,508	241.6	Zürich,	Gold
Turkey,	176,500	9,300,000	52.6	Constantinople,	Gold
United Kingdom,	121,633	47,307,749	388.9	London,	Gold
United States,	3,026,789	105,710,620	34.9	New York,	Gold
Uruguay,	72,153	1,462,887	20.2	Montevideo,	Gold
Venezuela,	398,594	2,411,952	6.0	Caracas,	Gold

*Excluding the Chaco.

OF THE WORLD (From latest statistics available March 1, 1922.)

Ruler	Title	Capital	Countries
Waizeru Zauditu,	Empress,	Adis Abeba,	Abyssinia.
Amanullah Khan,	Amir,	Kabul,	Afghanistan.
Djaffer Uti Bey,	President of Council,	Scutari,	Albania.
Hipolito Irigoyen,	President,	Buenos Aires,	Argentina.
Lord H. W. Forster,	Governor-General,	Melbourne,	Australia.
Dr. Michael Hainisch,	President,	Vienna,	Austria.
Albert,	King,	Brussels,	Belgium.
Dr. Bautista Saavedra,	President,	La Paz,	Bolivia.
Dr. Epitacio Pessoa,	President,	Rio de Janeiro,	Brazil.
Boris III,	King (Czar),	Sofia,	Bulgaria.
Gen. Lord Byng of Vimy,	Governor-General,	Ottawa,	Canada.
Don Arturo Alessandri,	President,	Santiago,	Chile.
Hsu Chi Chang,	President,	Peking,	China.
Gen. Jorge Holguin,	President,	Bogota,	Colombia.
Julio Acosta,	President,	San Jose,	Costa Rica.
Dr. Alfredo Zayas,	President,	Havana,	Cuba.
Thomas G. Masaryk,	President,	Prague,	Czecho-Slovakia.
Christian X,	King,	Copenhagen,	Denmark.
Dr. José Tamayo,	President,	Quito,	Ecuador.
Fuad I,	Sultan,	Cairo,	Egypt.
Constantine Paets,	President-Premier,	Reval,	Esthonia.
K. J. Ståhlberg,	President,	Helsingfors,	Finland.
Alexandre Millerand,	President,	Paris,	France.
Friedrich Ebert,	President,	Berlin,	Germany.
Constantine,	King,	Athens,	Greece.
José M. Orellana,	Prov. President,	New Guatemala,	Guatemala.
Sudre Dartiguenave,	President,	Port au Prince,	Hayti.
Husein Ibn Ali,	King (Emir),	Mecca,	Hejaz.
Rafael Lopez Gutierrez,	President,	Tegucigalpa,	Honduras.
Admiral Nicholas von Horthy,	Regent,	Budapest,	Hungary.
Rt. Hon. Earl of Reading,	Viceroy,	Delhi,	India, British.
Victor Emmanuel III,	King,	Rome,	Italy.
Yoshihito,	Emperor,	Tokyo,	Japan.
Alexander,	King,	Belgrade,	Jugoslavia.
Jahnis Tschakste,	President,	Riga,	Latvia.
Chas. D. B. King,	President,	Monrovia,	Liberia.
A. Stulginskis,	President,	Vilna,	Lithuania.
Gen. Alvero Obregon,	President,	Mexico,	Mexico.
Wilhelmina,	Queen,	The Hague,	Netherlands.
Viscount Jellicoe of Scapa,	Governor General,	Wellington,	New Zealand.
Diego Manuel Chamorra,	President,	Managua,	Nicaragua.
Haakon VII,	King,	Christiania,	Norway.
Dr. Felix Belisario Porras,	President,	Panama,	Panama.
Felix Piava,	President,	Asuncion,	Paraguay.
Ahmed Mirza,	Shah,	Teheran,	Persia.
Agusto B. Leguia,	President,	Lima,	Peru.
Joseph Pilsudski,	President,	Warsaw,	Poland.
Antonio Jose de Almeida,	President,	Lisbon,	Portugal.
Ferdinand I,	King,	Bucharest,	Rumania.
Nicolai Lenin,	President of Council,	Petrograd,	Russia.
Jorge Meléndez,	President,	San Salvador,	Salvador.
Rear Admiral Thomas Snowden,	U. S. Military Governor,	Santo Domingo,	Santo Domingo.
Chao Fa Maha Vajiravudh,	King,	Bangkok,	Siam.
Alfonso XIII,	King,	Madrid,	Spain.
Gustaf V,	King,	Stockholm,	Sweden.
Robert Haab,	President,	Berne,	Switzerland.
Mohammed VI,	Sultan,	Constantinople,	Turkey.
George V,	King,	London,	United Kingdom.
Warren G. Harding,	President,	Washington,	United States.
Dr. Baltasar Brum,	President,	Montevideo,	Uruguay.
Juan Vicente Gomez,	President,	Caracas,	Venezuela.

India. The present form of government of the Indian Empire is established by the Government of India, act of 1858. By this act, all the territories theretofore under the government of the East India Company are vested in the King of Great Britain, and all its powers are exercised in his name; all territorial and other revenues, and all tributes and other payments, are likewise received in his name, and disposed of for the purposes of the government of India alone. The secretary of state for India is invested with all the powers formerly exercised by the company or by the board of control. The administration of the Indian Empire in England is entrusted to a secretary of state for India, assisted by a council of not less than ten members, vacancies in which are filled by the secretary of state for India. The duties of the council, which has no initiative authority, are, under the direction of the secretary of state for India, to conduct the business transacted in the United Kingdom in relation to the Government of India. The supreme executive authority in India is vested in the governor-general in Council, often styled the Government of India. The governor-general, who since 1858 has also been viceroy, is appointed by the Crown, and usually holds office for five years. The salary of the governor-general is $83,250 a year.

Indiana. The Constitution of 1816 was superseded by that of 1851 which, as amended in 1873 and 1881, is still in force. Amendments proposed in and approved by the Legislature require the approval of the succeeding General Assembly; if then passed by a majority vote, they become part of the Constitution. The State Legislature consists of a Senate of fifty members elected for four years, and a House of Representatives of 100 members elected for two years, the two Houses together being called the General Assembly. Special sessions, called by the governor, are limited to forty days. Bill for raising revenue may originate only in the House of Representatives. Eligible to sit in either House are all citizens of the United States who have resided in the State two years, and in their county or district one year next preceding the election; but Senators must be 25, and Representatives 21 years of age. The chief executive officer of the State is the governor, who is elected for four years. He may call special sessions of the Legislature, and he has a veto which may be overridden by a majority vote of the two Houses. He appoints to offices not otherwise provided for by law, is commander-in-chief of the militia, and may pardon or reprieve in all cases of crime except treason or where the accused has been impeached. Other elective officials are the auditor, the treasurer, and the attorney-general.

Iowa. The original Constitution of 1846 was, in 1857, superseded by a new Constitution, which, amended three times since 1868, is still in force. The Legislature, known as the General Assembly, consists of a Senate of fifty, and a House of Representatives of 108 members, meeting every two years or an unlimited session. Senators are elected for four years, half of them retiring every second year; Representatives for two years. Any bill may originate in either House. The House of Representatives alone can impeach; the Senate tries impeachments. Amendments to the Constitution may be proposed in either House, but to become law they must be sanctioned by a majority vote of both Houses of the then sitting and next succeeding Assembly, followed by a majority vote of the people. The executive power is vested in a governor, elected for two years. He has the powers usually entrusted to State governors, including limited pardoning power and a veto which may be overridden by a two-thirds majority of all the members of each House. Other State officials are a lieutenant-governor, an auditor, a treasurer, an attorney-general, and a superintendent of public instruction, all elected for two years.

Ireland. Until the ratification, January 7, 1922, of the agreement between the British Parliament and the Dail Eireann, the head of the executive in Ireland was the viceroy of the British Crown, called also the lord-lieutenant. He was assisted by a chief secretary, the lord chancellor of Ireland, by the permanent officials, and by a privy council. In all essential points the government was carried on under the direction of the British ministry in London.

Irish Free State. The agreement between Great Britain and Ireland provides that "Ireland shall have the same constitutional status in the community of nations known as the British Empire as the Dominion of Canada, the Commonwealth of Australia, the Dominion of New Zealand and the Union of South Africa, with a Parliament having power to make laws for peace and order and good government in Ireland, and an executive responsible to that Parliament, and shall be styled and known as the Irish Free State."

The agreement expressly stipulates that subject to the provisions specified in its text, the law, practice and constitutional usage governing the relationship of the British Crown and the British Parliament to the Dominion of Canada shall govern their relationship to the Irish Free State. The Irish Free State agrees to assume liability for its fair proportion of the public debt of the United Kingdom, and similarly for the payment of pensions. The Irish Free State also agrees to afford the British naval forces necessary harbor and other facilities for defense.

Northern Ireland. The agreement for the creation of the Irish Free State provides that Northern Ireland, comprising certain portions of Ulster, shall have the option of joining the Irish Free State or of remaining separate. In the latter case, the Parliament of the government of Northern Ireland shall continue to exercise the powers conferred by the Government of Ireland Act of 1920. Neither the Irish Free State nor Northern Ireland shall make a law endowing any religion, or prohibiting the free exercise of any religion, or give preference or impose disability on account of any religious belief or make any discriminations in state aid between schools under the management of various denominations. In case Northern Ireland remains separate, provision is made for a commission to establish the boundary between it and the Irish Free State.

Italy is a constitutional monarchy. Under the constitution of 1848, as subsequently modified and expanded, the executive power is vested in the king, and exercised through his ministers. The legislative authority is exercised by the king in conjunction with a senate of about 400 members in 1915 (composed of the princes of the royal house who are of age, and of an unlimited number of members selected by the ministry and nominated by the king for life, who have rendered eminent services to the country, are upwards of forty years of age, and pay taxes to an annual amount of $600), and a chamber of 508 deputies, elected by conditional universal suffrage for a period of five years, though the king can dissolve the chamber at any time. All money bills must be initiated in the chamber. Senators and deputies are unpaid, but travel free.

Japan. The Empire of Japan consists of the Archipelago of Nippon, which includes the four large islands of Honshiu, Kiushiu, Shikoku, and Hokkaido, together with Formosa and the Pescadores, ceded by China in 1895; the peninsula Chosen (Corea); the southern part of the island of Sakhalin, and nearly 4,000 smaller islands. Although Japan is regarded as one of the absolute monarchies of the world, it possesses a Constitution which was adopted in 1889. It provides that the Emperor shall be the head of the empire, with all the rights of the sovereign and exercising full executive power, with the advice and assistance of the Cabinet Ministers who are appointed by himself. There is also a Privy Council and a House of Diet, consisting of two branches, a House of Peers, and a House of Representatives. The House of Peers is composed of members of the imperial family, princes and marquises, counts, viscounts, barons, persons appointed by the Emperor for their meritorious service to the state or for erudition, and persons elected by each Fu and Ken. The total membership of the of the House of Peers is about 370. According to the Constitution the membership of the House of Representatives shall be 379, a fixed number being returned from each electoral district. Voting is by secret ballot and the proportion of members to the population is one to each 136,522. Under the Constitution absolute freedom of religious belief and practice is assured so long as it does not interfere with general peace and order. There is no state religion, but the mass of the people follow one of the twelve sects of Shintoism, or one of the twelve sects and thirty-three creeds of Buddhism. The Emperor Mutsuhito was born at Kyoto on November 3, 1852. He succeeded his father, Komei Tenno, February 13, 1867, and was married to Princess Haruko, the daughter of Prince Ichijo. Their issue has been: Prince Yoshihito, Prince Hirohito, Prince Yasuhito, Princess Masako, Princess Fusako, Princess Nobuko, Princess Toshiko.

The Succession.—The Imperial House law, which was passed February 11, 1889, definitely fixes the succession to the throne upon the next male descendant of the sovereign. As the result, Prince Yoshihito, the oldest son of the Emperor, succeeded to the throne, July 30, 1912, upon the death of Mutsuhito. He was born August 31, 1879, and was proclaimed Kotaishi, or Crown Prince, November 3, 1889. On May 10, 1900, he was married to Princess Sadako, the daughter of Prince Kujo. They have had three sons, Prince Hirohito, Prince Yasuhito and Prince Nobuhito, of whom the eldest, Prince Hirohito, born April 29, 1901, is now heir apparent.

The Ministry.—The ministry, or cabinet, comprises the following departments: President or premier, foreign affairs, finance, interior, justice, war, navy, public instruction, agriculture and commerce, communications.

Kansas. Successive Constitutions were framed in 1857, 1858, 1859, and 1861, the last of which, as amended from time to time, is still in force. Amendments, proposed in either House of the Legislature, and agreed to by a two-thirds majority of each House, are submitted to the people, and, if approved by a majority of those who vote, become part of the Constitution. The Legislature consists of a Senate of forty members, elected for four years, half their number retiring every two years, and a House of Representatives of 125 members, elected for two years. Any bill may originate in either House. The Senate tries cases of impeachment brought by the House of Representatives. Legislators must be voters, resident in the county for which they are elected. The chief executive officer of the State is the governor, elected for two years. He has the power usually invested in State governors, including authority to call special sessions of the Legislature, a limited pardoning power and a veto which may be overridden by a two-thirds majority of each House. In 1912 the constitution was amended to give the suffrage to women.

Kentucky. The Constitution adopted in the year 1792 was succeeded by other Constitutions in 1799, 1850, and 1891, that of 1891 being still in force. Amendments to the Constitution, proposed in either House of the Legislature and agreed to by a three-fifths vote of all the members of each House, are submitted to the popular vote, and, if then approved, become part of the Constitution. The Legislature, known as the General Assembly, consists of a Senate of thirty-eight members elected for four years, one-half retiring every two years, and a House of Representatives of 100 members elected for two years. Bills for raising money must originate in the House of Representatives. In order to become law any bill at its final passage must have a majority voting for it not less than two-fifths of the members elected to each House. The House of Representatives can impeach; the Senate tries impeachments. Eligible to the Senate are all citizens 30 years of age who have resided in the State six years and in the district one year next before the election. Representatives must be 24 years of age and must have resided in the State two years, and in the county or district one year next before election. The chief executive authority resides in the governor, elected for four years. He has the powers usually vested in State governors, including a veto which may be overridden by a majority of all the members elected to each House. Other officials elected for four years are the lieutenant-governor, treasurer, auditor, attorney-general, and superintendent of public instruction.

Liberia is a negro Republic on the coast of West Africa. Founded in 1822 by American philanthropists for the settlement of freed slaves. It was declared independent in 1847, was recognized as a sovereign state by Great Britain in 1848, and by the United States in 1862. The Constitution is on the model of that of the United States. The President is elected for four years, the House of Representatives (fourteen members) for four years, and the Senate (nine members) for six. The Liberian Development Chartered Company (British) in 1906 advanced £100,000 to the government, with which a government bank was founded, roads were built, other public works were commenced, and a military constabulary force was established. In addition two British officials were appointed to reorganize the customs service and the country's finance. In 1911, through the good offices of the United States, all public debts were refunded by means of a new loan of $1,000,000; the custom receipts were pledged as security.

Louisiana. The Constitution of 1812 was succeeded by those of 1845, 1852, 1864, 1868, 1879, and 1898; the last-named, as variously amended from time to time, is still in force. Amendments proposed in the General Assembly and approved by a two-thirds vote of each House are submitted to the popular vote for ratification. The Legislature consists of a Senate of forty-one members and a House of Representatives of 115 members, Senators and Representatives being chosen for four years. The powers of the two Houses are similar, but bills for raising money must originate in the House of Representatives, and the Senate tries cases of impeachment brought by the other House. Senators must be at least 25 and Representatives 21 years of age; both must have been citizens of the State for five years and residents in the State for two years next before their election. The chief executive officer is the governor, who is elected for four years, and has the powers usually entrusted to State governors, including the limited veto. Other officials elected for four years are the lieutenant-governor, the treasurer, the secretary of state, the auditor, the attorney-general, and the superintendent of education.

Maine. The first Constitution of Maine, adopted in 1819, was frequently altered by amendments, which, to the number of twenty-one, were in 1875 incorporated in the document. Since that time other amendments have been adopted. The Constitution was amended in 1908 to provide for the initiative and referendum. Proposed amendments, passed by a two-thirds vote of both Houses of the Legislature, are submitted to the voters at the next election, and, if then passed by a majority of those voting, they become part of the Constitution. The Constitution provides for a Legislature of two Houses, the Senate, consisting of thirty-one members, and the House of Representatives with 151 members, both Houses being elected at the same time for two years. Senators are elected in districts formed of groups of towns, and Representatives are chosen by cities, towns, and plantations according to population. Senators must be 25 and Representatives 21 years of age; members of both Houses must be citizens of the United States, resident in Maine for one year, and in the district or town for three months before the election. But no member of Congress, no office holder of the Federal Government, except a postmaster, no paid officer of the State, except justices of the peace, notaries public, coroners, and militia officers, may sit in either House. The powers of the two Houses are similar, but money bills must originate in the House of Representatives. The chief executive authority resides in the governor, who is elected for two years by popular vote. He must be 30 years of age, born in the United States, resident in the State for five years next before election, and he may not hold any other office, either under the United States or under the State of Maine. He recommends legislative measures, and has a veto which lapses if unused for five days, and which may be overridden by a two-thirds vote of each House. He is commander-in-chief of the military forces and he along with the council appoints many State officers. He may grant pardons, etc., but has to report to the Legislature on each case of his exercise of this power. The governor has an advisory council consisting of seven members chosen every two years by joint ballot of Senators and Representatives. The council's advice and consent are required for appointments, and its warrant for payment of money from the treasury. The secretary of state, treasurer, and attorney-general are appointed by joint ballot of the Legislature. Other officers are the superintendent of schools, various commissioners (for labor statistics, insurance, land, etc.), and also boards and commissions for State institutions, railways, assessment, health, fisheries, etc. For local government the State is divided into sixteen counties, subdivided into towns, cities, plantations, and various unincorporated places. Counties are administered by boards of commissioners elected for six years, one commissioner retiring every year. These boards have elective officers and supervise county finance, property, jails, roads, etc.

Maryland. The first Constitution of Maryland, 1776, was succeeded by others in 1851, 1864, and 1867, that of 1867, as amended from time to time, being still in force. Amendments proposed in the General Assembly must obtain a three-fifths vote of all the members elected to each House; they must then be submitted to the people, and, if approved by a majority of those voting, they become part of the Constitution. The Legislature consists of a Senate and a House of Delegates, the two bodies together being known as the General Assembly. There are twenty-seven Senators and 102 Delegates. The Senators serve for four years, and the Senate is renewed to the extent of half every two years. The Delegates are elected for two years. Senators must be 25 years of age, and Delegates 21. Clergy, members of Congress, and federal officials are ineligible for either Senate or House of Delegates. No person is eligible who has not lived in the State three years next preceding election. Any bill may originate in either House and be altered, amended, or rejected by the other. The House of Delegates

has sole power of impeachment, and impeachment cases are tried by Senate. The highest officer of the State is the governor, elected for four years. He is commander-in-chief of the State militia, and, with consent of Senate, appoints all civil and military officers of State whose appointment or election is not otherwise provided for by law. He may remove for incompetency or misconduct civil officers who received appointment from the executive for a term of years. He may convene the Legislature or Senate alone for special sessions. He has a veto which may be overcome by a three-fifths vote of the members elected to both Houses. He may grant pardons and reprieves except in cases of impeachment, but must report his action to the Legislature whenever required. Other officers are the secretary of state, treasurer, the comptroller, the adjutant-general, the attorney-general, and the superintendent of education. The State is divided into twenty-three counties and the city of Baltimore.

Massachusetts. The first Constitution of the State, after having been submitted to and accepted by the people, was formally adopted at a Convention held at Boston on June 15, 1780. As it has been variously amended from time to time, it is still in force. The Constitution provides for a legislative body consisting of a Senate and a House of Representatives, styled collectively the General Court of Massachusetts. The Senate consists of forty members elected annually by popular vote, the State being divided into forty senatorial districts, each of which returns one Senator. The House of Representatives consists of 240 members, elected in 173 districts, each of which returns one, two, or three representatives, according to population. There is an annual session of the Legislature and special sessions may be called by the governor in case of exigency. Money bills must originate in the House of Representatives, but may be amended in the Senate. If the subjects under consideration are of public interest, hearings are advertised and the people have a right to appear and speak in support of or against the passing of certain laws. Amendments to the Constitution must be proposed in the General Court, and agreed to by a majority of the Senate and two-thirds of the House of Representatives present and voting thereon; they must be referred to the General Court next elected, and if then agreed to by similar majorities, they are submitted to the people, and, if approved and ratified by a majority of the qualified voters voting thereon at meetings legally held for the purpose, they become part of the Constitution. The executive power of the State resides in the governor, assisted by a council. He is chosen by popular vote and holds office for one year, but no one is eligible who has not resided within the State for the seven years last past. He has power to adjourn or prorogue (for not more than ninety days), or to summon the General Court. He is commander-in-chief of the State's army and navy. He may, with the advice of his council, pardon convicted offenders, but not those convicted before the Senate on impeachment by the House. He appoints (with the consent of his council) the judges, the solicitor-general, and many other officials, and he has general supervision of the administration of affairs in the State. The council with which he acts consists of eight councillors elected by popular vote in the eight districts into which the State is, for this purpose, divided. The lieutenant-governor, who becomes acting governor in case of the death of the governor, or of his absence from the State, is similarly elected by the people, and holds office for one year. The secretary of the commonwealth is also elected by the people for one year. Other officials elected by the people for a year are the treasurer and receiver-general, who is ineligible for more than five successive years of office; the State auditor, and the attorney-general. There are fourteen counties in the State, thirty-five cities and 318 towns. The cities are granted charters by the State Legislature. The mayor is the executive officer in each city, and the legislative bodies are usually a board of aldermen and a common council.

Mexico. On February 5, 1917, a new Constitution, amending the original Constitution of 1857, was promulgated. By its terms Mexico is declared a federative republic. Originally, the country was divided into nineteen States, but in 1921 there were twenty-eight States, with two Territories, and the Federal District. While each manages its own local affairs, all of these divisions are bound together as an inseparable body by fundamental and constitutional laws. In many respects the form of government in Mexico is similar to that of the United States.

The powers of the national government are divided into three branches, the legislative, the executive, and the judicial. The legislative power is vested in a Congress, consisting of a House of Representatives and a Senate. Representatives, one for each 60,000 inhabitants, or about 230 in all, are elected for two years by universal suffrage. A Representative must be 25 years of age and a resident of the State in which he is elected. The Senate is comprised of fifty-eight members, two for each state, elected in the same manner as the Representatives. A Senator must be at least 30 years of age. Both Senators and Representatives receive salaries of about $7000 per annum.

The President, who holds office for a term of four years and is not eligible for reelection, is elected at a general election by direct popular vote. In case of the death or resignation of a President, Congress assumes the function of an electoral college for the election of a successor to fill the vacancy. If this occurs during the first half of the President's term, a provisional President is chosen, and a new popular election is ordered. If the vacancy occurs during the second half, a President is chosen by Congress for the remaining part of the term.

Under the law of April 13, 1917, the administration of the government is conducted, under the direction of the President and a Council, by seven Secretaries of State and three Departments of State. The Secretaries of State include those of Foreign Affairs, Interior, Finance, Communications, Industry and Com-

merce, War, and Agriculture. The three Departments of State are the Judicial, the Educational, and the Department of Public Health. Each State has its own constitution and laws. Interstate tariffs are prohibited, though State taxes are levied.

Michigan. Its first Constitution was framed and adopted in 1835, and Congress passed the Act admitting it into the Union as a State on January 26, 1837. In 1850 and again in 1908 new Constitutions were adopted: the latter with little alteration is still in force. The legislative authority is vested in a Senate of thirty-two members elected by the counties or groups of counties for two years, and a House of Representatives of 100 members, the electoral districts being rearranged according to population every ten years. Senators and Representatives must be citizens of the United States and qualified electors of the districts for which they are chosen. Any bill may originate in either House. Amendments to the Constitution proposed by popular initiative subject to legislative veto, or in either House and approved by a two-thirds vote of each House, must be submitted for the approval of the people in manner prescribed, and, if this approval be given, the amendments become part of the Constitution. For a complete or extensive revision a Convention is required and the question is submitted to the electors. If the majority of those who vote are on the affirmative side, the Legislature makes provision for a Convention. The executive power is vested in the governor, elected for two years. He has the powers usually entrusted to State governors, including a limited veto, and he makes administrative appointments, many of which require the approval of the Senate. The secretary of state, State treasurer, auditor-general, and attorney-general are elected by popular vote. The lieutenant-governor, elected for two years, presides over the Senate, and in case of the death, absence, or default of the governor, succeeds to the governor's authority. For local government the State is organized in counties, cities, towns, and villages. There are eighty-three counties, each of which is a corporate body with a board of supervisors as its administrative authority. Cities hereafter incorporated must have each a population of not less than 2,000 inhabitants and 500 persons per square mile, but a few which have been long incorporated have a smaller population. Cities are classified into four groups, according to population, and are divided into three or more wards.

Minnesota. The State Legislature consists of a Senate of sixty-seven members, one being elected in each of the legislative districts, and a House of Representatives of 131 members elected in the same districts in numbers proportioned to population. Eligible for either House are all male citizens of the United States, 21 years of age, who have resided one year in the State and six months in the district just before election; but no office-holder under the Federal or State government, except a postmaster, may belong to either House. The two Houses have similar powers, but money bills must originate in the House of Representatives. No special laws relating to personal or local affairs or corporations can be enacted. The House of Representatives can impeach State officers before the Senate, which by a two-thirds majority of members present may convict and deprive of office. Some changes have been made in the Constitution of 1857, chiefly, as in 1896 and 1898, affecting the regulations for local organization. Amendments proposed in either House and supported by a two-thirds vote of each and subsequently approved by the people in manner prescribed, become part of the Constitution. For an extensive revision, the proposal, after being approved by a two-thirds vote of each House, must be submitted to the electors; if approved, the Legislature provides for the holding of a convention; delegates are elected, meet, and make the revision which is then referred to the people, and, if approved, becomes law. The chief executive officer of the State is the governor, who is elected by the people for two years. He must be a citizen of the United States, 25 years of age, and resident in the State for one year before election. In legislation he has a limited veto and other powers usually entrusted to State governors. The lieutenant-governor presides over the Senate and, on the death or absence of the governor, he acts as governor. The secretary of state is elected for two years; the auditor (elected for four years) audits State accounts and superintends State lands; the treasurer and attorney are elected for two years. Several important officials, boards, and commissioners, with duties relating to health, equalization, charities, insurance, railways, etc., are appointed by the governor. The State is organized in counties, and in townships, villages, and cities. There are eighty-two counties.

Mississippi. The Constitution of 1817 was followed by others in 1832, 1868, and 1890. Proposed amendments of the Constitution approved by two-thirds of the members of each House voting on them on three separate days, and ratified by a majority of the qualified electors voting on them, become part of the Constitution. The Legislature consists of a Senate of 45 members and a House of Representatives of 138 members, both elected for four years. Formerly ordinary sessions were held every four years. Special sessions, limited to thirty days, unless extended by proclamation by the governor, were held alternately with regular sessions, so that the Legislature in fact met biennially. In 1912 this system was changed to biennial sessions. Bills for raising revenue and bills providing for assessment of property must be approved by three-fifths of the members of each House present and voting. The chief executive officer of the State is the governor, who is elected for four years, and is not eligible for the succeeding term. He has a limited veto, and the other powers usually vested in State governors. Other officials elected for four years are the secretary of state, the lieutenant-governor, the treasurer, and the auditor. Neither treasurer nor auditor is eligible for the succeeding term, nor can the one succeed the other. Mississippi is divided into seventy-eight counties.

Missouri. The original Constitution, adopted in 1820, was followed by those of 1865

and 1875, the latter of which, as amended, is still in force. The Constitution was amended in 1908 to provide for the initiative and referendum. Amendments proposed by initiative petition, or in either House of the Legislature and supported by a majority of the members of each, are submitted to the popular vote and, if approved, become part of the Constitution. The Legislature, called the General Assembly, consists of a Senate of thirty-four members elected for four years (half their number retiring every two years), and House of Representatives of 142 members elected for two years. Any bill may originate in either House. The Senate tries cases of impeachment brought by the House of Representatives. Senators must be at least 30 years of age, electors in the State three years and resident in the district one year next before election. Representatives must be 24 years of age, citizens, electors in the State two years, and resident in the county or district one year next before election. The chief executive official is the governor, who is elected for four years, and possesses the powers usually entrusted to State governors, including a limited pardoning power and a veto which may be overridden by a two-thirds majority of all the members of each House. Other State officials are the secretary of state, lieutenant-governor, auditor, treasurer, attorney-general, and superintendent of public instruction, all elected for four years. The State is divided into 114 counties.

Monaco. Monaco is a small Principality in the Mediterranean, surrounded by the French Department of Alpes Maritimes, excepting on the side towards the sea. From 968 it belonged to the House of Grimaldi. In 1715, it passed into the female line, Louise Hippolyte, daughter of Antony I., heiress of Monaco, marrying Jacques de Goyon Matignon, Count of Thorigny, who took the name and arms of Grimaldi. Antony I. died in 1731, Louise Hippolyte reigning only ten months and dying in 1732. She was succeeded by her husband under the name of Jacques I., who also succeeded Antony I. as Duc de Valentinois, who was in his turn succeeded by his son Honorius III. This prince was dispossessed by the French Revolution in 1792, and died in 1795. In 1814, the Principality was reëstablished, but placed under the protection of the kingdom of Sardinia by the Treaty of Vienna (1815). In 1848, Mentone and Roquebrune revolted, and declared themselves free towns; in 1861, Charles III. ceded his rights over them to France, and the Principality thus became geographically an *enclave* of France, when the Sardinian garrison was withdrawn and the protectorate came to an end. The Prince was an absolute ruler, there having been no elective representation within the Principality. In 1911, a Constitution was promulgated, which provides for a National Council elected by universal suffrage and *scrutin de liste*. The Government is carried out under the authority of the Prince by a ministry assisted by a Council of State. The legislative power is exercised by the Prince and the National Council, which consists of 21 members elected for four years. The territory of the Principality is divided into three communes, administered by municipal bodies, in the election of which women are entitled to take part. The Principality has its own coinage, which is current since 1876 in all the States of the Latin Union.

Mongolia. A vast and indefinite country lying to the north of China. Mongolia comprises an area of about 1,367,000 square miles, the central part of which is occupied by the great desert of Gobi. The population, which numbers about 2,600,000, consists of nomadic Mongols and Kalmucks.

After the outbreak of the Chinese Revolution, 1911, Outer Mongolia declared its independence and proclaimed Hutuku as Emperor. In 1912 this autonomy was recognized by the Russian government which undertook to aid Mongolia in maintaining separate rule. In 1913 an agreement was reached between Russia and China whereby Russia recognized Outer Mongolia as a part of Chinese territory under Chinese suzerainty and China recognized the autonomy of Outer Mongolia. In 1915 Japan obtained from China exclusive mining rights in eastern Mongolia and the right to settle in the province. With the overthrow of the Romanoffs and the spread of Bolshevism the autonomy of Outer Mongolia availed but slight protection from invasions of the Red forces. In 1919 Outer Mongolia petitioned China to cancel its independence. But conditions changed and, in 1921, Hutuku was crowned King of Mongolia, and the independence of the country was again proclaimed.

Montana adopted its first and present Constitution in 1889, the initiative and referendum in 1906. The legislative power is vested in a Senate and a House of Representatives, which meet in regular session on the first Monday of January in each odd-numbered year. There are fifty-one Senators, elected for four years in such a manner that the Senate is renewed to the extent of one-half at each biennial election. The members of the House of Representatives, 104 in number, are elected for two years. Elective State officials are the governor, lieutenant-governor, secretary of state, State treasurer, attorney-general, State auditor, and superintendent of public instruction. The governor has the right of appointment to various offices, including those of State land agent, commissioner of the bureau of agriculture, labor and industry, and inspector of mines. For local administrative purposes the state is divided into twenty-nine counties, and into fourteen judicial districts.

Morocco. The internal government of the Sultanate, or Empire of Morocco, is in reality an absolute despotism, unrestricted by any laws, civil or religious. The Sultan is chief of the state, as well as head of the religion. As spiritual ruler, the Sultan stands quite alone, his authority not being limited, as in Turkey and other countries following the religion of Mohammed, by the expounders of the Koran, the class of "Ulema," under the "Sheïk-ul-Islam."

Since the establishment of the French protectorate the Sultan has to follow the advice of the French Resident-General in all matters. There is a Grand Vizier, Ministers of Foreign Affairs, War, Finance, Justice, The officer commanding

the French troops is Minister of War; the Moorish Minister of Finance acts under the control of the French Director-General of Finance; the Minister of Justice under that of the French Secretary-General.

By the Anglo-French Convention of 1904, Great Britain recognizes that it appertains to France to assist in the administrative, economic, financial, and military forms in Morocco, but reserves the rights which by treaties or usage she now enjoys. Both governments agree not to allow fortifications on the Moorish coast between Melilla and the heights dominating the right bank of the Sebu, but this arrangement does not apply to points held by Spain on that coast. Neither government will lend itself to any inequality in taxation or railway rates, and reciprocal engagements with respect to trade are to last for thirty years with prolongation for periods of five years, failing denunciation a year in advance. Roads, railways, harbor works, etc., are to remain under State control. These arrangements were accepted also by Spain in a Franco-Spanish convention. Germany, however, expressed dissatisfaction with this arrangement, and a conference of thirteen delegates, representing Morocco, the European Powers interested, and the United States of America, was held at Algeciras for the settlement of disputed matters, from January 16th to April 7, 1906, when an agreement, embodied in a General Act, was signed by all the delegates. The Sultan signed the agreement on June 18th, and ratifications of the agreement were deposited at Madrid by the other powers, December 31, 1906. In July, 1911, the German Government sent a cruiser to Agadir, informing the Sultan and the European powers that their object was to protect German interests in that place. Negotiations were thereupon entered into between France and Germany, and after lasting about three months eventually terminated in the signature of two agreements (Nov. 4, 1911), under which Germany renounces all political interests in Morocco and practically agrees to the establishment of a French protectorate, receiving in exchange ample guarantees for absolute equality in economic and commercial matters, and the cession of a considerable tract of country in the French Congo. In April, 1912, a treaty was signed at Fez by which the Sultan formally accepted the French protectorate. On November 27, 1912, a treaty was signed between France and Spain; in this treaty France acknowledges the right of Spain to exercise its protectorate in the Spanish zone, the extent of which is already defined.

Mulai-Abd-el-Hafid, son of Mulai-Hassan, revolted against his brother, Sultan Mulai-Abd-el-Aziz, and was proclaimed Sultan at Marakesh on August 25, 1907, at Fez on January 4, 1908, and at Tangier, August 23, 1908. He was recognized by the Powers as Sultan on January 5, 1909. Mulai Yusef, son of Mulai-Hassan, was proclaimed Sultan on August 18, 1912; he is the seventeenth of the dynasty of the Alides, founded by Mulai-Ahmed, and the thirty-sixth lineal descendant of Ali, uncle and son-in-law of the prophet.

Nebraska. The first Constitution, adopted in 1867, was succeeded in 1875 by that which as since amended is still in force. Amendments proposed by initiative petition, or in either House of the Legislature and agreed to by a two-thirds majority of each House, if approved by a majority of the electors voting on them at a general election, become part of the Constitution. The Legislature consists of a Senate of thirty-three members and a House of Representatives of 100 members. The Legislators are elected for two years. Money bills must originate in the House of Representatives. The Senate tries cases of impeachment brought by the other House, but if the person impeached is a justice of the Supreme Court, the trial takes place before a court of impeachment consisting of the District Court judges. Legislators must be citizens resident in the district for one year next preceding election. The franchise extends not only to citizens but also to aliens who, thirty days before the election, have declared their intention of becoming citizens. The chief executive officer of the State is the governor, elected for two years. He is commander-in-chief of the militia, and, with advice and consent of the Senate, appoints to various offices, and may grant pardons, etc. He may call special sessions of the Legislature, and he has a veto which may be overridden by a three-fifths vote of each House. Other officials elected for two years, besides those named, are the lieutenant-governor, auditor, treasurer, superintendent of public instruction, attorney-general, and commissioners of public lands and buildings and of State institutions. The Constitution was amended in 1912 to provide for the initiative and referendum.

Netherlands. The Constitution of 1848, revised in 1887, vests the executive in the sovereign, and the legislative authority in the sovereign and the states-general, the latter sitting in two chambers: the first, consisting of fifty members, elected for nine years (one-third retiring every three years) by the provincial states from among the most highly-assessed inhabitants and from among a number of specified officials; the second of 100 members, elected for four years by all male citizens of 25 years or more who pay a direct tax to the state, or are householders or own boats of not less than twenty-four tons, or receive a minimum wage or salary of about $115, or give other evidence of their ability to support themselves and their families. The government and the second chamber possess the initiative in legislation, the upper house having the right of approval or rejection, but not of amendment. Alterations in constitution are made by a two-thirds vote of both houses, followed by a general election, and confirmation by a similar vote of the new states-general. A state council of fourteen members appointed by the sovereign is consulted on all legislative and on most executive matters.

Nevada. The original Constitution adopted in 1864 is in force as since variously amended. Amendments proposed in and approved by the Legislature are submitted to the next Legislature and if then approved are referred to the people for ratification. Amendments may also be proposed by initiative petition. The Legislature consists of a senate of seventeen members elected for four years, about half their number retiring every two years, and a House of Representatives

of thirty-seven members elected for two years. Any bill may originate in either house. The Senate tries cases of impeachment brought by the House of Representatives. The chief executive officer is the governor, elected for four years. He has the powers and duties usually entrusted to State Governors, except that he has not pardoning power, this authority being vested (apart from impeachment cases) in the board of pardons of which he is a member. He has the usual limited veto. In 1912 the constitution was amended to provide for the initiative and referendum and for the recall of all state elective officers.

New Hampshire. The Constitution of 1792, as amended from time to time, is still in force. The sense of the people as to the calling of a convention for the revision of the Constitution must be taken every seven years. If a convention is held the amendments to the Constitution which it proposes must be laid before the towns, and approved by two-thirds of the qualified voters present and voting on the subject. The State Legislature, consisting of a Senate and a House of Representatives, meets once in two years and remains in session until prorogued by the governor, generally about three months. The Senate consists of twenty-four members, elected for two years. It cannot originate money bills. Any qualified elector is eligible to sit in the Senate. The House of Representatives consists of from 390 to 409 members, the number varying slightly with each session, as representation is on the basis of population. The House has the power of impeachment and of originating money bills. The governor is chosen by popular election, and holds office for two years. He has the nomination of all judicial officers, the attorney-general, coroners, and all officers of the navy, and general and field-officers of the militia. His appointments require the approval of the council. He has the other powers usually entrusted to State governors, including a limited veto and limited pardoning power. The secretary of state is elected by joint ballot of the senators and representatives. The other important State officials are the state treasurer, adjutant-general, and commissioners of labor, immigration, railroads, banks, education, health, agriculture.

New Jersey. The Constitution ratified on August 13, 1844, as since variously amended, is still in force. The legislative power is vested in a Senate and a General Assembly, the members of which are chosen by the people, all male citizens (with necessary exceptions) 21 years of age, resident in the State for a year, and in the county for five months preceding the election, having the right of suffrage. The Senate consists of twenty-one Senators, one for each county, elected by the voters for three years, in such manner that the Senate is renewed to the extent of one-third annually. Senators must be 30 years of age, and must have resided, just before their election, four years in New Jersey, and one year in the county for which they are elected. The General Assembly consists of sixty members elected by the voters of the counties in numbers proportioned to the population of the counties as determined by the decennial Federal census. Money bills must originate in the Assembly, but the Senate may propose amendments. Every bill passed by both Houses requires the assent of the governor, who may within five days remit it for reconsideration to the House in which it originated; if then the bill be approved by a majority of each House it becomes law. The executive of the State is vested in a governor, elected for three years by the legal voters. He must be not less than 30 years of age, have been twenty years a citizen, and seven years resident in the State immediately before election. He is not eligible for the next term of the office. His duties include the military command-in-chief, the summoning of the Legislature when necessary, the recommendation of legislation, the granting of commissions, and the supervision of the execution of the laws. The State secretary is appointed for five years by the governor with the advice and consent of the Senate. The treasurer and the comptroller are appointed for three years by the Senate and General Assembly in joint session.

New Mexico. The government of New Mexico is divided into three distinct departments, legislative, executive, and judicial. The legislative power is vested in a Senate and a House of Representatives. The Senate consists of twenty-four members, elected for a term of four years, and the House of Representatives has forty-nine members, elected for two-year terms. Senators shall be not less than twenty-five years and representatives not less than twenty-one years of age at the time of their election. The executive department consists of a governor, lieutenant-governor, secretary of state, state auditor, state treasurer, attorney-general, superintendent of public instruction, and commissioner of public lands, who are elected for a term of four years. The supreme executive power is vested in the governor. He is commander-in-chief of the military forces of the State, except when they are called into the service of the United States. He has power to call out militia to preserve public peace, execute laws, suppress insurrection, and repel invasion. The lieutenant-governor is President of the Senate but votes only in case of tie. The judicial power of the State is vested in a Senate when sitting as a court of impeachment, a supreme court, district courts, probate courts, justices of the peace, and such courts, inferior to the district courts, as may be established by law from time to time in any county or municipality, including juvenile courts. Amendments to the constitution may be proposed in either house of the legislature at any regular session, and if two-thirds of all members elected to each of the two houses voting separately shall vote in favor thereof, such proposed amendments shall be submitted at the next general election for approval or rejection.

New York. From 1609 to 1664 the region now called New York was under the sway of the Dutch; then it came under the rule of the English who governed the country till the outbreak of the War of Independence. Between July 9, 1776, and April 20, 1777, a Convention framed a Constitution under which New York was transformed into an independent State, after-

wards, in 1788, entering the Union as one of the thirteen original States. A New Constitution, framed on a wider basis, was ratified by the people in 1821. A third Constitution was enacted in 1846, and a fourth in 1894. The legislative authority is vested in a Senate of fifty-one members elected every two years, and an Assembly of 150 members elected annually. The senatorial electoral districts are counties, either singly or grouped according to population; the assembly districts are either counties or parts of counties, the various districts having approximately equal population. Each senatorial and each assembly district elects one member. Senators and representatives must be citizens of the United States 21 years of age. No member of Congress or Federal officer or officer of any city government, nor any person who within 100 days of the election has held such office, can sit in either House. The two Houses have equal powers, even with respect to money bills. Every law must be passed by both Houses with the assent of the majority of the members of each. Bills appropriating money for local or private purposes require a two-thirds majority. The Legislature is by the Constitution prevented from enacting special laws in numerous matters, and there are important restrictions respecting financial legislation. The principal executive officer of the State is the governor, elected by the people for two years. He must be a citizen of the United States, 30 years of age, and resident in the State for five years next preceding the election. He has a veto in legislation, provided it be exercised within ten days; but it may be overridden by a two-thirds majority of each House. He is commander-in-chief of the military and naval forces; with the assent of the Senate, he appoints many State officers; he may convene the Senate or the Legislature if necessary; he recommends legislative measures and sees that the laws are faithfully executed. He may reprieve or pardon criminals, but not in cases of treason or impeachment. Elective officers are the state secretary who keeps the State records and seal; the comptroller who audits accounts and issues warrants for payments; the treasurer who pays money on warrants; the attorney-general who is law officer of the State; the State engineer and surveyor who has charge of public lands and the construction of canals. The administrative boards (civil service commissioners, railroad commissioners, and many others) are generally appointed by the governor with the assent of the Senate.

New Zealand. The present form of government for New Zealand was established in 1852. By this act the colony was divided into six provinces, afterwards increased to nine, each governed by a superintendent and provincial council, elected by the inhabitants according to a franchise practically amounting to household suffrage. By a subsequent act of the colonial legislature, in 1875, the provincial system of government was abolished, and the powers previously exercised by superintendents and provincial officers were ordered to be exercised by the governor or by local boards. By the terms of this and other amending statutes, the legislative power is vested in the governor and a general assembly, consisting of two chambers—the first called the legislative council, and the second the house of representatives. The governor has the power of assenting to or withholding consent from bills, or he may reserve them. He summons, prorogues, and dissolves the parliament. He can send drafts of bills to either house for consideration, but in case of appropriations of public money must first recommend the house of representatives to make provision accordingly before any appropriations can become law. He can return bills for amendment to either house. The legislative council consists at present of thirty-four members, who are paid at the rate of £200 per annum. Those appointed before September 17, 1891, are life members, but those appointed subsequently to that date hold their seats for seven years only, though they are eligible for reappointment. By an act passed in 1900, the number of members of the house of representatives was increased to eighty, including four Maoris, elected by the people for three years. They are paid at the rate of £300 per annum.

North Carolina. The Constitution of 1776 was succeeded by those of 1868 and 1876, which last, as since amended from time to time, is still in force. Amendments proposed in either House, and agreed to by a three-fifths vote of each House of the Legislature, require ratification by a majority vote of the people. The State Legislature, known as the General Assembly, consists of a Senate of fifty members, and a House of Representatives of 120 members, elected for two years. Senators must be United States citizens, 25 years of age, resident in the State for two years next preceding the election; Representatives must be 21 years of age, citizens, and resident in the State one year next before the election. Any bill may originate in either House. The chief executive official is the governor, elected for four years. He is commander-in-chief of the militia; has power to pardon, etc., except in cases of impeachment, but must report to the General Assembly on his exercise of this power; he appoints, with the consent of the Senate, to offices not otherwise provided for. He has no veto. Officials elected for four years are the lieutenant-governor, secretary of state, auditor, treasurer, superintendent of public instruction, and attorney-general.

North Dakota, with its present boundaries, was admitted as a State into the Union in 1889, and the original Constitution is still in force. It may be altered by amendment proposed in either House in two successive Legislatures, agreed to by a majority of all the members of each House, and finally approved by a popular vote. The Legislature, called the Legislative Assembly, consists of a Senate of 49 members elected for four years, and a House of Representatives of 113 members elected for two years. Any bill may originate in either House. The Senate tries cases of impeachment brought by the House of Representatives. Senators must be 25 years of age; Representatives, 21; both must be citizens resident in the State for two years next before election. At the head of the executive is the governor, elected for two years. He

has the powers usually vested in State governors, including limited pardoning power, and a veto which may be overridden by a two-thirds majority of all the members of each House. Officials elected for two years are the lieutenant-governor, secretary of state, auditor, treasurer, and superintendent of public instruction.

Norway. The union with Sweden, which had endured from 1814 to 1905, was dissolved by the action of the Norwegian Storthing on June 7, 1905, following a protracted dispute between the two countries as to their diplomatic representation abroad; and the Karlsbad Convention was signed September 24, 1905, settling the details of a mutual agreement for the repeal of the union. King Oscar declined the offer of the throne to a prince of his house, and after a plêbiscite it was offered to and accepted by Prince Charles of Denmark, who became King as Haakon VII. The Norwegian Constitution of 1814, several times modified since, vests the legislative power in the Storthing, which has 123 members (forty-one from urban and eighty-two from rural districts), who are elected for three years. Every male citizen of 25 who has resided in the country for five years is qualified as an elector, except for legal disabilities. For business purposes it is divided into the Odelsthing, composed of three-fourths of the members, and the Lagthing, consisting of the remainder; all new bills originate in the former. The king has the right of vetoing the laws passed by the Storthing, but if the same bill pass three Storthings separately and subsequently elected, his veto is overridden. The executive power is in the hands of the king with a council of state composed of a minister of state and at least seven councilors.

Ohio. The Constitution of 1802 was superseded by that of 1851, which has been variously amended. In 1912 thirty-three amendments, proposed by a constitutional convention, were incorporated into the constitution by popular vote, practically making it a new instrument. The principal measures adopted tend toward a freer expression of democracy, through municipal home rule, direct primaries, and the initiative and referendum. Other important provisions are those for judicial reform permitting the decision of civil cases by three-fourths vote of the juries and limiting the arbitrary power of the courts. Advanced ground was also taken on industrial and labor questions. Instead of the recall, the legislature was authorized to remove public officers for cause without impeachment. Amendments to the constitution proposed by initiative petition, or in either house of the legislature and agreed to by three-fifths majority of the members of each house, may be finally adopted by a majority popular vote. The Legislature consists of a Senate of thirty-seven members, and a House of Representatives of 125 members, both Houses being elected for two years. Any bill may be proposed in either House and is subject to amendment or rejection in the other. Eligible to either House are all male citizens 21 years of age, resident in the State and in the district one year next before the election, but paid office holders of the Union or of the State are not eligible. The chief executive authority is vested in the governor, elected for a term of two years. He has the powers usually entrusted to State governors, including limited pardoning power and the veto, which may be overridden by a three-fifths majority of all the members of each House. Other state officials are the lieutenant-governor, secretary of state, attorney-general, treasurer, State auditor, a dairy and food, and a common schools commissioner.

Oklahoma. The President of the United States on November 16, 1907, signed the Constitution of Oklahoma and issued a proclamation announcing its admission as a State into the Union. The Census Bureau on September 19, 1907, reported the result of a special census taken of the population of the new State to be 1,414,042, or about twice as great as that possessed by any other state at date of admission. The legislature consists of a senate of 44 members elected for four years and a house of representatives of not more than 109 members elected for two years.

The most notable feature of the State Constitution was its provisions for the regulation of corporations. In line with its other corporation provisions were the adoption of 2-cent passenger fares, electric lines not included (since declared unconstitutional by the United States Supreme Court), and the abolition of the doctrine of the fellow-servant.

The initiative and referendum were given a prominent place in the constitution, but the recall usually regarded as practically a parallel proposition was rejected.

Separate schools for white and negro children were provided; all other races than negroes being classed as "white."

The State was given the right to engage in any business or occupation, but the grant was limited by the qualification that it shall be "for public purposes."

Trial by jury was granted in contempt cases for violations of injunctions or orders of restraint, and an opportunity to be heard must be given on all contempts before punishment is imposed. Three-fourths jury verdicts were provided for in civil cases and criminal cases less than felony. The grand jury system was not made mandatory. Persons were granted immunity from prosecution if their testimony incriminated themselves.

The control of all public-service corporations was vested in a corporation commission of three members, elected by the people for six-year terms. Commissioners are required to take an oath that they are not interested directly or indirectly in any company which may come under their supervision. All railroads, oil, pipe, car, express, telephone or telegraph lines are required to receive and transport each other's business without delay or discrimination. All railroads were declared public highways. Public-service corporations and their officials were prohibited from consolidating with or owning stock in any competing corporation.

"Transportation companies" were defined as including railroads, street railways, canals, steamboat lines, freight-car companies or car associations, express companies and sleeping-car companies. "Transportation companies" include telegraph and telephone lines, and both of these classes were rated as common carriers.

The common law doctrine of fellow-servant was abrogated as to all railroad, street or interurban electric lines and mining companies, and recovery may be had as fully in cases where death occurs as where it does not.

Campaign contributions by corporations were forbidden and it was sought to prevent the issuance of watered stock by providing that no stock shall be issued except for money, labor done or property actually received to the amount of the par value of the stock.

Oman. An independent state in Southeastern Arabia extending along a coast line — southeast and southwest — of almost 1,000 miles from the Gulf of Ormuz and inland to the deserts. Area, 82,000 square miles; population, estimated at 500,000, chiefly Arabs. The capital, Maskat, and the adjacent town of Mattra have together about 24,000 inhabitants. Maskat

was occupied by the Portuguese from 1508 until the middle of the Seventeenth Century. After various vicissitudes it was recovered in the Eighteenth Century by Ahmed bin Sa'eed, of Yemenite origin, who was elected Imam in 1741. His family have since ruled. The present Sultan is Seyyid Taimur bin Feysil, eldest son of Seyyid Feysil bin Turki, who succeeded his father October 5, 1913, and was formally recognized by the British Government. In the beginning of the last century the power of the Imam of Oman extended over a large area of Arabia, the islands in the Persian Gulf, a strip of the Persian coast, and a long strip of the African coast south of Cape Guardafui, including Socotra and Zanzibar. On the death of Sultan Sa'eed in 1856, one son proclaimed himself Sultan in Zanzibar and another in Maskat. Eventually the rivals agreed to submit their claims to the arbitration of Lord Canning, Viceroy of India, who formally separated the two sultanates. Subsequent troubles curtailed the area of the state in Asia. The closest relations have for years existed between the Government of India and Oman and a British consul and political agent resides at Maskat.

Oregon. The Constitution adopted in 1857 is still in force, except as stated below. Amendments proposed in and approved by the Legislature are submitted to the next elected Legislature, and if then approved are formally submitted to the people for ratification; but this method of ratification is not exclusive (see below). The Legislature or Legislative Assembly consists of a Senate of thirty members, chosen for four years (half their number retiring every two years), and a House of sixty Representatives, elected for two years. Members of either House must be 21 years of age and must have resided in their county or district for one year next before election. Bills for raising revenue must originate in the House of Representatives. The Constitution was amended in 1902, under the terms of which amendment the people reserve to themselves the power to propose laws and amendments to the Constitution and to enact or reject the same at the polls independent of the Legislative Assembly, and also reserve the power at their own option to approve or reject at the polls any act of the Legislative Assembly. This is known as the initiative and referendum. Not more than eight per cent. of the legal voters are required to propose any measure to be voted upon by the people at the next ensuing general election. Measures thus initiated are enacted or rejected at the polls independently of the Legislative Assembly. Under the referendum, any bill passed by the Legislative Assembly, except such as are for the preservation of the public peace, health, and safety, may, by petition signed by five per cent. of the legal voters, be referred to the people to be voted on for approval or rejection at the next ensuing general election. By virtue of this provision several amendments to the Constitution have been voted on, some of which have been rejected and some adopted. A number of laws have been enacted under the initiative covering different subjects. The chief executive officer of the State is the governor, who is elected for four years and exercises the powers usually entrusted to governors, including the pardoning power, and a limited veto which does not extend to acts referred to the people. Elective officers are the secretary of state, treasurer, attorney-general, and superintendent of public instruction, State printer, and labor commissioner. There are thirty-four counties in the State.

Panama. The Republic of Panama was constituted on November 4, 1903, having previously been a department of the Republic of Colombia. The inhabitants of the Isthmus of Panama being strongly in favor of the acquisition of the Panama Canal Concession by the United States and the construction by them of the canal, declared their independence. The United States Government at once recognized the new Republic, and concluded with it a treaty on November 18, 1903, guaranteeing and agreeing to maintain its independence. Panama then ratified the treaty. There is a President elected for four years and a Cabinet of five members. The Chamber of Deputies consists of thirty-three members elected for two years. The Republic is divided into seven provinces, each under a governor.

Paraguay is a Republic, and is governed, under a Constitution proclaimed in November, 1870, by a President elected for four years, a Congress consisting of a Senate and a Chamber of Deputies, both elected by universal suffrage, and five Ministers of State chosen by the President. The President has a salary of $8,000, ministers of $3,000, and the Senators and Deputies each receive $3,000. The state religion is Roman Catholic, but all others are tolerated. Education is free and nominally compulsory. The army numbers about 2,500 men, but every citizen between 20 and 35 is liable to military service.

Pennsylvania. New Constitutions were adopted in 1790, 1838 and 1873: the last, as since variously amended, is still in force. The legislative power is vested in a General Assembly consisting of a Senate and a House of Representatives. General elections are held biennially. The Senate consists of fifty members chosen for four years, twenty-five Senators being elected at each General Assembly election. The House of Representatives consists of 207 members chosen for two years. Members of the General Assembly must have been citizens and inhabitants of the State four years and inhabitants of their respective districts one year next before their election. Amendments to the Constitution agreed to by a majority of each House, approved by a majority in each House of Legislature next elected, and ratified by the electors at a special election held for the purpose, become part of the Constitution. The supreme executive power is vested in a governor who is elected at the general election and holds office for four years. He is not eligible for election for the next succeeding term. He must be not less than 30 years of age and have been seven years resident in the State immediately before election; he must not be a member of Congress nor can he hold any office under the United States. His duties include the command of the military and

naval forces of the State, except when these are called into the actual service of the United States, the summoning of the Legislature when necessary, the granting of commissions, and the supervision of the execution of the laws. Every bill passed by both Houses requires the assent of the governor, who may within ten days remit it for consideration to the House in which it originated; if then the bill be approved by a two-thirds majority of each House it becomes law. A lieutenant-governor is chosen at the same time, in the same manner, and for the same term as the governor. A secretary of the commonwealth and an attorney-general are appointed by the governor, by and with the advice and consent of two-thirds of all the members of the Senate, during pleasure, and a superintendent of public instruction is similarly appointed for four years. The qualified electors choose at each general election a secretary of internal affairs for a period of four years, an auditor-general for a period of three years, and a state treasurer for two years.

Persia. The form of government in Persia up to the year 1906 was, in the most important features, similar to that of Turkey. The Shâh, within the limitations imposed by the Mohammedan religion, was an absolute ruler, generally regarded by the people as the vice-regent of the Prophet. In 1905, however, the Persian people demanded representative institutions, and in January, 1906, the government announced that the Shâh had given his consent to the establishment of a national council. Under the rescript of August 5, 1906, it was decided that the national council should consist of and be elected by members of the reigning dynasty, clergy, chiefs, nobles, landowners, merchants, and tradesmen. An ordinance of September 10, 1906, fixed the number of members at 156, and early in October elections were held. On October 7th, the national council (or as many of its members as could be got together) met, chose a president, and was welcomed by the Shâh, whose speech was read before it. The constitution of January 1, 1907, signed by Muzaffar-eddîn, the Shâh, and countersigned by the Vali Ahd, Muhammad Ali, and by the grand vizier, deals with the decree of August 5, 1906, and states the powers and duties of the national council, besides making provision for the regulation of its general procedure by the national council itself. The number of members is at present limited to 156, but may be raised to 200; members will be elected for two years, will meet annually, and will have immunity from prosecution, except with the knowledge of the national council. The publicity of their proceedings (except under conditions accepted by the national council) is secured. Ministers (or their delegates) may appear and speak in the national council, and will be responsible to that body which will have special control of financial affairs and internal administration. Its sanction will be required for all territorial changes, for alienation of state property, for the granting of concessions, for the contracting of loans, for the construction of roads and railways, and for the ratification of all treaties, except such as in the interest of the state require secrecy. There is to be a senate of sixty members, of whom thirty are to be appointed to represent the Shâh, and thirty to be elected on behalf of the national council, fifteen of each class being from Teheran, and fifteen from the provinces. The national council, however, has never been properly constituted, although various attempts have been made from time to time to establish it. In 1915 it practically ceased to exist, either as a legislative or as an administrative body, and the government has been carried on by a cabinet of ministers.

Peru. The present Constitution, proclaimed October 16, 1856, was revised November 25, 1860. The legislative power is vested in a senate and a house of representatives. Both senators and deputies are elected by a direct vote. There are fifty-two senators and 116 deputies, and there are as many *suplentes*, or substitutes, as there are members in each chamber. Every two years one-third of the members of each chamber, as decided by lot, retire. Congress meets annually on July 28th, and sits for ninety days only. It may be summoned as often as necessary, but no extraordinary session may last more than forty-five days. The executive power is entrusted to a president, elected for four years, and not reëligible till after another four years. He receives $24,000 a year and an amount for administration expenses. There are two vice-presidents, who take the place of the president only in case of his death or incapacity, and they are elected for four years. The vice-presidents receive no salary as such. The president and vice-presidents are elected by direct vote. The president exercises his executive functions through a cabinet of six ministers, holding office at his pleasure. The ministers are those of the interior, war and marine, foreign affairs; justice, with worship and instruction, finance and public works. Each minister receives $3,000 a year. None of the president's acts have any value without the signature of a minister.

Poland, Republic of. On June 28, 1919, the Treaty of Versailles recognized the independence of Poland. According to the Constitution adopted by the Polish Parliament (*Sejm*) on April 8, 1921, the franchise will be universal for both sexes, the voting age being 21. There are two national legislative chambers, a Diet and a Senate, both elected by universal suffrage. The President convenes, opens, prorogues, and closes the Parliament. The President is elected for a term of seven years by the Diet and Senate united in a National Assembly. He is the supreme commander of the army, except in time of war, and is authorized to make treaties with foreign powers. Any citizen of Poland who has attained the age of 41 years is eligible for election as President. In the conduct of his office the President is not responsible either politically or personally. The executive department, first appointed in 1920 and called the Council of Ministers, consists of a Prime Minister and 16 departmental Ministers. Besides the usual departments, it includes those of health, food, art, and education.

Portugal. Since the twelfth century Portugal has been an independent state; until 1910 it was a monarchy. On October 5, 1910, after

a short revolution, the republic was proclaimed and a provisional government established. On August 20, 1911, a new constitution was adopted. This provides that there shall be two chambers: the national council of 164 members is elected by direct suffrage for three years; the upper chamber of 71 members is elected by all municipal councils, renewable half at a time every three years. The president is elected by both chambers with a mandate for four years, but he cannot be reëlected. He must be at least 35 years of age; he appoints ministers but these are responsible to parliament. The constitution may be revised every ten years. Ministers are those of foreign affairs, interior, finance, justice, the colonies, war, marine, public works, education.

POPULAR VOTE FOR PRESIDENT AND VICE-PRESIDENT FROM 1789 TO THE PRESENT

Strictly speaking, there is no popular vote for President and Vice-President; the people vote for electors, and those chosen in each State meet therein and vote for the candidates for President and Vice-President. The record of any popular vote for electors prior to 1824 is so meager and imperfect that a compilation would be useless. In most of the States, for more than a quarter century following the establishment of the Government, the State Legislatures "appointed" the Presidential electors, and the people therefore voted only indirectly for them, their choice being expressed by their votes for members of the Legislature. In this tabulation only the aggregate electoral vote for candidates for President and Vice-President in the first nine quadrennial elections appears.

Year	Presidential Candidates	State	Party	Vote				Candidates for Vice-President		
				States Voting	Total Vote	Electoral Vote	Popular Vote	Name	State	Electoral Vote
1789*	George Washington,	Va.	.....	10†	73	69	.....	John Adams, . . .	Mass.	34
	John Adams, . .	Mass.	.....	...	...	34				
	John Jay, ...	N. Y.	.....	...	...	9				
	R. H. Harrison, .	Md.	.....	...	...	6				
	John Rutledge, .	S. C.	.....	...	...	6				
	John Hancock, . .	Mass.	.....	...	...	4				
	George Clinton, . .	N. Y.	.....	...	...	3				
	Samuel Huntington,	Conn.	.....	...	...	2				
	John Milton, . . .	Ga.	.....	...	...	2				
	James Armstrong,	Ga.	.....	...	...	1				
	Benjamin Lincoln,	Mass.	.....	...	...	1				
	Edward Telfair, .	Ga.	.....	...	...	1				
	Vacancies, ...	....	.....	...	...	4				
1792	George Washington,	Va.	Fed., .	15	135	132	.....	John Adams, . . .	Mass.	77
	John Adams, . .	Mass.	Fed., .	...	...	77				
	George Clinton, . .	N. Y.	Rep.‡, .	...	...	50				
	Thomas Jefferson,	Va.	.....	...	...	4				
	Aaron Burr, . . .	N. Y.	.....	...	...	1				
	Vacancies, ...	....	.....	...	...	3				
1796	John Adams, . .	Mass.	Fed., .	16	138	71	.....	Thomas Jefferson, .	Va.	68
	Thomas Jefferson,	Va.	Rep.,. .	...	...	68				
	Thomas Pinckney,	S. C.	Fed., .	...	...	59				
	Aaron Burr, . . .	N. Y.	Rep.,. .	...	...	30				
	Samuel Adams, . .	Mass.	Rep.,. .	...	...	15				
	Oliver Ellsworth, .	Conn.	Ind., . .	...	...	11				
	George Clinton, . .	N. Y.	Rep.,. .	...	...	7				
	John Jay, ...	N. Y.	Fed., .	...	...	5				
	James Iredell, . .	N. C.	Fed., .	...	...	3				
	George Washington,	Va.	Fed., .	...	...	2				
	John Henry, . . .	Md.	Fed., .	...	...	2				
	S. Johnson, . . .	N. C.	Fed., .	...	...	2				
	C. C. Pinckney, . .	S. C.	Fed., .	...	...	1				
1800	Thomas Jefferson,	Va.	Rep.,. .	16	138	73§	.....	Aaron Burr, ...	N. Y.	73
	Aaron Burr, . . .	N. Y.	Rep.,. .	...	...	73§				
	John Adams, . .	Mass.	Fed., .	...	...	65				
	C. C. Pinckney, . .	S. C.	Fed., .	...	...	64				
	John Jay, ...	N. Y.	Fed., .	...	...	1				
1804	Thomas Jefferson,	Va.	Rep.,. .	17	176	162	.....	George Clinton, . .	N. Y.	162
	C. C. Pinckney, . .	S. C.	Fed., .	...	...	14	.....	Rufus King, . . .	N. Y.	14
1808	James Madison, .	Va.	Rep.,. .	17	176	122	.....	George Clinton, . .	N. Y.	113
	C. C. Pinckney, . .	S. C.	Fed., .	...	...	47	.....	Rufus King, . . .	N. Y.	47
	George Clinton, . .	N. Y.	Rep.,. .	...	...	6	.....	John Langdon, . .	N. H.	9
	Vacancy, ...	....	.....	...	...	1				
								James Madison, . .	Va.	3
								James Monroe, . .	Va.	3
1812	James Madison, .	Va.	Rep.,. .	18	218	128	.....	Elbridge Gerry, . .	Mass.	131
	De Witt Clinton, .	N. Y.	Fed., .	...	...	89	.....	Jared Ingersoll, . .	Pa.	86
1816	James Monroe, . .	Va.	Rep.,. .	19	221	183	.....	D. D. Tompkins, .	N. Y.	183
	Rufus King, . . .	N. Y.	Fed., .	...	...	34	.....	John E. Howard, .	Md.	22
	Vacancies, ...	....	.....	...	...	4	.....			
								James Ross, ...	Pa.	5
								John Marshall, . .	Va.	4
1820	James Monroe, . .	Va.	Rep.,. .	24	235	231	.....	Robert G. Harper, .	Md.	3
	John Q. Adams, .	Mass.	Rep.,. .	...	...	1	.....	D. D. Tompkins, .	N. Y.	218
	Vacancy, ...	....	.....	...	...	...	.....	.....	....	1
								Richard Stockton, .	N. J.	8

POPULAR VOTE FOR PRESIDENT AND VICE-PRESIDENT FROM 1789 TO THE PRESENT—Continued

Year	Presidential Candidates	State	Party	Vote				Candidates for Vice-President		
				States Voting	Total Vote	Electoral Vote	Popular Vote	Name	State	Electoral Vote
								Daniel Rodney,	Del.	4
								Robert G. Harper,	Md.	1
								Richard Rush,	Pa.	1
1824	John Q. Adams,	Mass.	Rep.,	24	261	84§	108,740	John C. Calhoun,	S. C.	182
	Andrew Jackson,	Tenn.	Dem.,	...	...	99§	153,544	Nathan Sanford,	N. Y.	30
	Henry Clay,	Ky.	Rep.,	...	...	37	47,136	Nathaniel Macon,	N. C.	24
	W. H. Crawford,	Ga.	Rep.,	...	...	46	46,618	Andrew Jackson,	Tenn.	13
								Martin Van Buren,	N. Y.	9
								Henry Clay,	Ky.	2
	Vacancy,	.....	.....	...	...	...	.....	.....	...	1
1828	Andrew Jackson,	Tenn.	Dem.,	24	261	178	647,286	John C. Calhoun,	S. C.	171
	John Q. Adams,	Mass.	Nat. Rep.,	...	...	83	508,064	Richard Rush,	Pa.	83
								William Smith,	S. C.	7
1832	Andrew Jackson,	Tenn.	Dem.,	24	288	219	687,502	Martin Van Buren,	N. Y.	189
	Henry Clay,	Ky.	Nat. Rep.,	...	...	49	530,189	John Sergeant,	Pa.	49
	John Floyd,	Ga.	Ind.,	...	...	11	.....	Henry Lee,	Mass.	11
	William Wirt,	Md.	Anti-M.,	...	...	7	.....	Amos Ellmaker,	Pa.	7
	Vacancies,	.....	.....	...	...	2	.....	William Wilkins,	Pa.	30
1836	Martin Van Buren,	N. Y.	Dem.,	26	294	170	762,678	R. M. Johnson,	Ky.	147
	Wm. H. Harrison,	Ohio	Whig,	...	...	73	}	Francis Granger,	N. Y.	77
	Hugh L. White,	Tenn.	Whig,	...	...	26	} 735,651	John Tyler,	Va.	47
	Daniel Webster,	Mass.	Whig,	...	...	14	}	William Smith,	Ala.	23
	W. P. Mangum,	N. C.	Whig,	...	...	11				
1840	Wm. H. Harrison,	Ohio	Whig,	26	294	234	1,275,016	John Tyler,	Va.	234
	Martin Van Buren,	N. Y.	Dem.,	...	...	60	1,129,102	R. M. Johnson,	Ky.	48
	James G. Birney,	N. Y.	Lib.,	...	...	...	7,069	L. W. Tazewell,	Va.	11
								James K. Polk,	Tenn.	1
								Thomas Earle,	Pa.	
1844	James K. Polk,	Tenn.	Dem.,	26	275	170	1,337,243	George M. Dallas,	Pa.	170
	Henry Clay,	Ky.	Whig,	...	...	105	1,299,062	T. Frelinghuysen,	N. J.	105
	James G. Birney,	N. Y.	Lib.,	...	...	...	62,300	Thomas Morris,	Ohio	
1848	Zachary Taylor,	La.	Whig,	30	290	163	1,360,099	Millard Fillmore,	N. Y.	163
	Lewis Cass,	Mich.	Dem.,	...	...	127	1,220,544	Wm. O. Butler,	Ky.	127
	Martin Van Buren,	N. Y.	F. S.,	...	...	...	291,263	Chas. F. Adams,	Mass.	
1852	Franklin Pierce,	N. H.	Dem.,	31	296	254	1,601,274	William R. King,	Ala.	254
	Winfield Scott,	N. J.	Whig,	...	...	42	1,386,580	Wm. A. Graham,	N. C.	42
	John P. Hale,	N. H.	Fed. D.,	...	...	...	155,825	George W. Julian,	Ind.	
	Daniel Webster,	Mass.	Whig,	...	...	...	1,670			
1856	James Buchanan,	Pa.	Dem.,	31	296	174	1,838,169	J. C. Breckenridge,	Ky.	174
	John C. Fremont,	Cal.	Rep.,	...	...	114	1,341,264	Wm. L. Dayton,	N. J.	114
	Millard Fillmore,	N. Y.	Amer.,	...	...	8	874,534	A. J. Donelson,	Tenn.	8
1860	Abraham Lincoln,	Ill.	Rep.,	33	303	180	1,866,452	Hannibal Hamlin,	Me.	180
	J. C. Breckenridge,	Ky.	Dem.,	...	...	72	847,953	Joseph Lane,	Ind.	72
	Stephen A. Douglas,	Ill.	Union D.,	...	...	39	1,375,157	H. V. Johnson,	Ga.	39
	John Bell,	Tenn.	Amer.,	...	...	12	590,631	Edward Everett,	Mass.	12
1864	Abraham Lincoln,	Ill.	Rep.,	36	314	212	2,213,665	Andrew Johnson,	Tenn.	212
	Geo. B. McClellan,	N. J.	Dem.,	...	...	21	1,802,237	G. H. Pendleton,	Ohio	21
1868	Ulysses S. Grant,	Ill.	Rep.,	37	317	214	3,012,833	Schuyler Colfax,	Ind.	214
	Horatio Seymour,	N. Y.	Dem.,	...	...	80	2,703,249	F. P. Blair, Jr.,	Mo.	80
1872	Ulysses S. Grant,	Ill.	Rep.,	37	366	286	3,597,132	Henry Wilson,	Mass.	286
	Horace Greeley,	N. Y.	D. & L.,	...	...	||	2,834,125	B. Gratz Brown,	Mo.	47
	Charles O'Conor,	N. Y.	Dem.,	...	...	...	29,489	John Q. Adams,	Mass.	
	James Black,	Pa.	Temp.,	...	...	...	5,608	John Russell,	Mich.	
	Thos. A. Hendricks,	Ind.	Dem.,	...	...	42	.....	Geo. W. Julian,	Ind.	5
	B. Gratz Brown,	Mo.	Dem.,	...	...	18	.....	A. H. Colquitt,	Ga.	5
	Charles J. Jenkins,	Ga.	Dem.,	...	...	2	.....	J. M. Palmer,	Ill.	3
	David Davis,	Ill.	Ind.,	...	...	1	.....	T. E. Bramlette,	Ky.	3
	Not counted,	.....	.....	...	...	17	.....	W. S. Grosbeck,	Ohio	1
								W. B. Machen,	Ky.	1
								N. P. Banks,	Mass.	1
1876	Ruth'd B. Hayes,	Ohio	Rep.,	38	369	185	4,036,298	Wm. A. Wheeler,	N. Y.	185
	Samuel J. Tilden,	N. Y.	Dem.,	...	...	184	4,300,590	T. A. Hendricks,	Ind.	184
	Peter Cooper,	N. Y.	Grb.,	...	...	...	81,737	Samuel F. Cary,	Ohio	
	Green Clay Smith,	Ky.	Pro.,	...	...	...	9,522	G. T. Stewart,	Ohio	
	James B. Walker,	Ill.	Amer.,	...	...	...	2,636	D. Kirkpatrick,	N. Y.	
1880	James A. Garfield,	Ohio	Rep.,	38	369	214	4,454,416	Chester A. Arthur,	N. Y.	214
	Win'd S. Hancock,	Pa.	Dem.,	...	...	155	4,444,952	Wm. H. English,	Ind.	155
	James B. Weaver,	Iowa	Grb.,	...	...	...	308,578	B. J. Chambers,	Tex.	
	Neal Dow,	Me.	Pro.,	...	...	...	10,305	H. A. Thompson,	Ohio	
	John W. Phelps,	Vt.	Amer.,	...	...	...	707	S. C. Pomeroy,	Kan.	
1884	Grover Cleveland,	N. Y.	Dem.,	38	401	219	4,874,986	T. A. Hendricks,	Ind.	219
	James G. Blaine,	Me.	Rep.,	...	...	182	4,851,981	John A. Logan,	Ill.	182
	John P. St. John,	Kan.	Pro.,	...	...	...	150,369	William Daniel,	Md.	
	Benjamin F. Butler,	Mass.	People's,	...	...	...	175,370	A. M. West,	Miss.	
	P. D. Wigginton,	Cal.	Amer.,	...	...	...				
1888	Benjamin Harrison,	Ind.	Rep.,	38	401	233	5,439,853	Levi P. Morton,	N. Y.	233
	Grover Cleveland,	N. Y.	Dem.,	...	...	168	5,540,309	A. G. Thurman,	Ohio	168
	Clinton B. Fisk,	N. J.	Pro.,	...	...	...	249,506	John A. Brooks,	Mo.	
	Alson J. Streeter,	Ill.	U. L.,	...	...	...	146,935	C. E. Cunningham,	Ark.	
	R. H. Cowdry,	Ill.	N'd L.,	...	...	...	2,808	W. H. Wakefield,	Kan.	

POPULAR VOTE FOR PRESIDENT AND VICE-PRESIDENT FROM 1789 TO THE PRESENT—Continued

Year	Presidential Candidates	State	Party	Vote				Candidates for Vice-President		
				States Voting	Total Vote	Electoral Vote	Popular Vote	Name	State	Electoral Vote
	James L. Curtis,	N. Y.	Amer.	..	...	...	1,591	James B. Greer,	Tenn.	
1892	Grover Cleveland,	N. Y.	Dem.,	44	444	277	5,556,918	A. E. Stevenson,	Ill.	277
	Benjamin Harrison,	Ind.	Rep.,	..	...	145	5,176,108	Whitelaw Reid,	N. Y.	145
	James B. Weaver,	Iowa	People's,	..	...	22	1,041,028	James G. Field,	Va.	22
	John Bidwell,	Cal.	Pro.,	..	...	...	264,133	James R. Cranfill,	Texas	
	Simon Wing,	Mass.	Soc. L.,	..	...	...	21,164	C. H. Matchett,	N. Y.	
1896	William McKinley,	Ohio	Rep.,	45	447	271	7,104,779	Garret A. Hobart,	N. J.	271
	William J. Bryan,	Neb.	Dem.,	..	...	176	6,502,925	Arthur Sewall,	Me.	149
	William J. Bryan,	Neb.	Peoples',					Th. E. Watson,	Ga.	27
	John M. Palmer,	Ill.	Nat.Dem.,	..	...	...	133,148	Sim. B. Buckner,	Ky.	
	Joshua Levering,	Md.	Pro.,	..	...	...	132,007	Hale Johnson,	Ill.	
	Chas. H. Matchett,	N. Y.	Soc. L.,	..	...	...	36,274	Matthew McGuire,	N. J.	
	Chas. E. Bentley,	Neb.	Nat.,	..	...	...	13,969	J. H. Southgate,	N. C.	
1900	William McKinley,	Ohio	Rep.,	45	447	292	7,207,923	Theo. Roosevelt,	N. Y.	292
	William J. Bryan,	Neb.	Dem.&P.,	..	...	155	6,358,133	A. E. Stevenson,	Ill.	155
	John G. Woolley,	Ill.	Pro.,	..	...	...	208,914	Henry B. Metcalf,	R. I.	
	Eugene V. Debs,	Ind.	S. D.,	..	...	...	87,814	Job Harriman,	Cal.	
	Wharton Barker,	Pa.	M. R. P.,	..	...	...	50,373	Ignatius Donnelly,	Minn.	
	Jos. F. Malloney,	Mass.	Soc. L.,	..	...	...	39,739	Val. Remmel,	Pa.	
	Seth H. Ellis,	Ohio	U. R.,	..	...	...	5,698	Sam T. Nicholson,	Pa.	
	J. F. R. Leonard,	Iowa	U. C.,	..	...	...	1,059	John G. Woolley,	Ill.	
1904	Theodore Roosevelt,	N. Y.	Rep.,	45	476	336	7,623,486	Charles W. Fairbanks,	Ind.	336
	Alton B. Parker,	N. Y.	Dem.,	..	...	140	5,077,911	Henry G. Davis,	W. Va.	140
	Eugene V. Debs,	Ind.	Soc.,	..	...	...	402,283	Benjamin Hanford,	N. Y.	
	Silas C. Swallow,	Pa.	Pro.,	..	...	...	258,536	George W. Carroll,	Texas	
	Thomas E. Watson	Ga.	People's,	..	...	...	117,183	Thomas H. Tibbles,	Neb.	
	Charles H. Corrigan,	N. Y.	Soc. L.,	..	...	...	31,249	William W. Cox,	Ill.	
1908	William H. Taft,	Ohio	Rep.,	46	483	321	7,678,908	James S. Sherman,	N. Y.	321
	William J. Bryan,	Neb.	Dem.,	..	...	162	6,409,104	John W. Kern,	Ind.	162
	Eugene V. Debs,	Ind.	Soc.,	..	...	...	420,793	Benjamin Hanford,	N. Y.	
	Eugene W. Chafin,	Ill.	Pro.,	..	...	...	253,840	Aaron S. Watkins,	Ohio	
	Thomas L. Hisgen,	Mass.	Ind. L.,	..	...	...	82,872	John Temple Graves,	Ga.	
	Thomas E. Watson,	Ga.	Peo.,	..	...	...	29,100	Samuel Williams,	Ind.	
	August Gillhaus,	N. Y.	Soc. L.,	..	...	...	13,825	Donald L. Munro,	Va.	
1912	Woodrow Wilson,	N. J.	Dem.,	48	531	435	6,293,454	Thos. R. Marshall,	Ind.	435
	William H. Taft,	Ohio	Rep.,	..	...	8	3,484,980	Nicholas M. Butler,	N. Y.	8
	Theodore Roosevelt,	N. Y.	Prog.,	..	...	88	4,119,538	Hiram W. Johnson,	Cal.	88
	Eugene V. Debs,	Ind.	Soc.,	..	...	...	900,672	Emil Seidel,	Wis.	
	Eugene W. Chafin,	Ariz.	Pro.,	..	...	...	206,275	Aaron S. Watkins,	Ohio	
	Arthur E. Reimer,	Mass.	Soc. L.,	..	...	...	28,750	August Gillhaus,	N. Y.	
1916	Woodrow Wilson,	N. J.	Dem.,	48	531	277	9,129,606	Thos. R. Marshall,	Ind.	277
	Chas. E. Hughes,	N. Y.	Rep.,	..	...	254	8,538,221	Chas. W. Fairbanks,	Ind.	254
	A. L. Benson,	N. Y.	Soc.,	..	...	...	585,113	G. R. Kirkpatrick,	N. J.	
	J. Frank Hanly,	Ind.	Pro.,	..	...	...	220,506	Ira Landrith,	Tenn.	
	Arthur E. Reimer,	Mass.	Soc. L.,	..	...	...	13,403	Caleb Harrison,	Ill.	
1920	Warren G. Harding,	Ohio	Rep.	48	531	404	16,152,200	Calvin C. Coolidge,	Mass.	404
	James M. Cox,	Ohio	Dem.	..	...	127	9,147,353	Franklin D. Roosevelt,	N. Y.	127
	Eugene V. Debs,	Ind.	Soc.	..	...	...	919,799	Seymour Stedman,	Ill.	
	P. P. Christensen,	Utah	Far.-L.	..	...	...	265,411	Max S. Hayes,	Ohio	
	Aaron S. Watkins,	Ohio	Pro.	..	...	...	189,408	D. Leigh Colvin,	N. Y.	

*Prior to 1804 each elector was entitled to vote for two candidates for President. The candidate receiving the greatest number of votes was declared elected, while the candidate receiving the next highest vote was declared Vice-President. †Three States not voting. ‡It is claimed that the first Republican party was the progenitor of the present Democratic party. §As there was no election the choice was decided by the House of Representatives. ||Owing to the death of Horace Greeley the Democratic electors scattered their vote.

Rhode Island. On May 29, 1790, the State accepted the Federal Constitution and entered the Union as one of the thirteen original States. The charter of 1663, however, continued to be the constitutional law of the State down to 1842. In that year a new Constitution was adopted, which with amendments, provides for a Legislature called the General Assembly, consisting of a Senate and a House of Representatives. The Senate has thirty-nine members, besides the governor who is *ex-officio* president, and the lieutenant-governor who is *ex-officio* a senator. The House of Representatives consists of one hundred members. Concurrent action between the two legislative bodies is necessary for the enactment of laws. Senators and representatives are elected at town, ward, and district meetings biennially in November, and hold office for two years, commencing on the first Tuesday in January. The governor is the chief executive officer of the State. He has the power to veto in legislation; most of his appointments require the consent of the Senate. By and with the advice and consent of the Senate, he exercises the pardoning power. The governor, lieutenant-governor, secretary of state, attorney-general, and general treasurer are elected biennially in the same manner, and at the same time, as the senators and representatives.

Rumania, Kingdom of. The union of the two principalities of Wallachia and Moldavia was proclaimed at Bucharest and Jassy in 1861, the name Rumania being given to these united provinces.

In 1878 the Berlin Congress recognized the independence of Rumania which, in 1881, was declared a Kingdom. The constitution of the Old Kingdom, which was voted by a constituent assembly, elected by universal suffrage, in 1866,

and twice modified, once in 1879 and again in 1884, provided for a legislature of two houses. In 1918 Bessarabia, Bukovina, and Transylvania were joined to Rumania. The constituent assembly, elected in 1920 for United Rumania by a universal, direct, and secret suffrage, was confronted with the task of unifying the different constitutions of the Old Kingdom and the newly added provinces. In March 1920 the Senate consisted of 170 members, 82 from the Old Kingdom, 45 from Transylvania, 24 from Bessarabia, and 19 from Bukovina, including also four for the universities, and 19 bishops. The Chamber of Deputies consisted of 347 members, apportioned as follows: Old Kingdom, 168; Transylvania, 112; Bessarabia, 51; and Bukovina, 16.

A Senator must be 40 years of age, and a Deputy 25; both must be Rumanians by birth or naturalization, in full enjoyment of civil and political rights, and residents of the country. All citizens of 21 years, paying taxes, are electors. All laws passed by the Chamber of Deputies and the Senate are subject to the suspensive veto of the King. The executive power is vested in a council of Ministers.

In addition to revenues from Crown lands, the King has an annual allowance of 2,500,000 lei or about $500,000. Senators and Deputies, in addition to 2000 lei per month and free railway passes, receive 160 lei per day of actual attendance at legislative sessions.

Russia. Until the abdication of Nicholas II. and the setting up of a provisional democratic government during the revolution of 1917, Russia was called a constitutional monarchy, although, in fact, the whole legislative, executive, and judicial power was united in the czar. In 1905, however, an elective state council, or duma, was created, and a law was promulgated apparently granting to the population the foundations of public liberty, based on the principles of the real inviolability of the person, and of freedom of conscience, speech, assembly, and association, and establishing that no law shall come into effect without the approval of the duma, and that to the elected of the people shall be guaranteed real participation in the control of the legality of the acts of such authorities as are appointed by the emperor. The original duma consisted of members elected for five years, representing the governments or provinces and also Petrograd, Moscow, and five other of the greatest cities. The election of the deputies was indirect and was made by electoral bodies of the chief towns of governments or provinces and of the greatest cities, composed of delegates chosen by the district or town elective assemblies. In towns, all lodgers occupying for twelve months lodging let to them might vote in these assemblies, also salaried clerks of state, or of municipal or railway administration; in the country, all owners of a determinate area of land, different in different districts, or of non-industrial estate more than 50,000 roubles in value, were electors; the *volosts* or peasant communities and manufactories with more than fifty working people were represented in the electoral assemblies by delegates, two for each *volost* and one for each thousand workmen. Students, soldiers, governors of provinces (in provinces governed by them), and police officers (in the localities for which they act) might not vote. Under a manifesto and ukases published on March 5, 1906, the council of the empire was reorganized and changes were made in the constitution of the duma. The council of the empire was thereafter to consist of an equal number of elected members and members nominated by the emperor, and to be convoked and prorogued annually by imperial ukase. The council of the empire and the duma were to have equal legislative powers and the same right of initiative in legislation and of addressing questions to ministers. Every measure, before being submitted for the imperial sanction, must be passed by both the duma and the council of the empire, and all such as were rejected by one of the two legislative institutions were not to be laid before the czar at all. Both the duma and the council had the right to annul the election of any of their members. The elective members of the council were eligible for nine years, a third of the number to be elected every three years. Each assembly of the *zemstvo* of each government was to elect one member. Six members were to be returned by the synod of the orthodox church, six by the representatives of the academy of sciences and the universities, twelve by the representatives of the bourses of commerce and of industry, eighteen by the representatives of the nobility, and six by the representatives of the landed proprietors of Poland, assembled in congress at Warsaw. The congress of the representatives of the academy of sciences, the nobility, and the commercial and industrial communities for the election of their members to the council of the empire were to meet in Petrograd. In those provinces of European Russia which had no *zemstvo*, a congress of the representatives of the landed proprietors was to assemble in the chief town of their province to elect one member for each province to the council of the empire. All members of the council must have attained their fortieth year and have an academical degree. The president and the vice-president were to be appointed by the czar. The elective members of the council were to receive an honorarium of 25 roubles ($12.50) a day during the session. The sittings of both the duma and the council of the empire were to be public. The closure of a debate might be voted by a simple majority. Neither the council of the empire nor the duma was empowered to receive deputations or petitions. Ministers were to be eligible for the duma and, in the capacity of elected members, qualified to vote. Members of the duma were to be paid 10 roubles ($5) per day during session, and once a year traveling expenses to and from Petrograd at the rate of 5 kopecks per verst (40c per mile). Laws voted by the two houses were to be submitted for the imperial sanction by the president of the council of the empire. The members of both institutions were to have the privilege of personal immunity during the session. They were to be liable to arrest only with the permission of the duma or the council of the empire, as the case might be, except in cases of flagrant offenses or offenses committed in the exercise of their duties. The ukases further provided

that bills rejected by the czar could not be brought forward again in the course of the same session, while bills rejected by one of the legislative bodies could not be brought forward again without the imperial consent.

The administration of the empire was entrusted to great boards, or councils, possessing separate functions. One of the great colleges, or boards of government, was the ruling senate established by Peter I. in 1711. The functions of the senate were partly of a deliberative and partly of an executive character. To be valid, a law must be promulgated by the senate. Another was the holy synod, established by Peter I. in 1721, and to it was committed the superintendence of the religious affairs of the empire. It was composed of the three metropolitans (Petrograd, Moscow, and Kiev), the archbishop of Georgia (Caucasus), and several bishops sitting in turn. All its decisions ran in the emperor's name and had no force until approved by him. A third board of government was the committee of ministers, reorganized by a decree of 1905. The fourth board of government, the most important after the decree for its reorganization was issued in 1905, was the council of ministers. All of the foregoing elaborate governmental machinery left the real power absolutely in the hands of the czar. An avowed object of the revolution was to place it in the hands of the people.

Soviet Government. According to the Constitution adopted and amended by the All-Russian-Soviet Congress, 1918-19-20, Russia is a Republic of Soviets of Workers', Soldiers', and Peasants' Delegates. All central and local authority is vested in these Soviets. Private property and land is abolished and all land is made the common property of the people. All forests, mines, waterways having national importance, all livestock, fixtures, and agricultural concerns are national property. The State owns all factories, mines, railways, and other means of production and transportation. Every person is under obligation to work, and the principal task of the Republic is to establish the dictatorship of the Proletariat.

The Constitution guarantees freedom of conscience, of opinion, of the press, and of meeting. Universal military service is obligatory upon all citizens in order to protect the conquests of the revolution. The privilege of defending the revolution with arms is reserved for the laboring classes only. The non-laboring groups in the population are to discharge other military duties.

The All-Russian Congress of Soviets is the highest authority in the State. This body consists of representatives of town Soviets on the basis of one delegate for every 25,000 inhabitants, and a provincial congress of Soviets on the basis of one delegate for every 125,000 inhabitants. The Congress elects an All-Russian Central Executive Committee which consists of 300 members. These constitute the supreme legislative, administrative, and controlling body in the Republic. It meets not less often than once in two months. Current affairs are administered by a Presidium, or standing committee called the Central Executive Committee which also forms a Council of People's Commissaries for the general administration of affairs. All citizens over 18 years of age who earn their livelihood by productive labor, and all soldiers and sailors in the Red Army and Navy, are entitled to vote irrespective of religion, nationality, residence, or sex.

Scotland. By the local government act of Great Britain, in 1894, a local government board for Scotland was constituted. It consists of the secretary for Scotland as president, the solicitor general of Scotland, the under secretary for Scotland, and three other members nominated by the Crown. The local government act which was passed for Scotland in 1889 followed in its main outlines the English Act of the previous year. The powers of local administration in counties formerly exercised by the commissioners of supply and road trustees were either wholly or in part transferred to the new councils, which took over their duties and responsibilities in 1890. The act of 1894 provided that a parish council should be established in every parish to take the place of the parochial boards and to exercise powers similar to those of the parish councils in England. Municipal bodies exist in the towns of Scotland, as in those of England, but instead of their magistrates being called aldermen, they are called bailies, and instead of their chief magistrates being called mayors they are called provosts. There are in Scotland five kinds of burghs—(1) burghs of barony; (2) burghs of regality (no practical distinction between these two); the councils of these two classes of burghs ceased to exist in 1893, by statutory enactment; (3) royal burghs, representatives of which meet together annually in a collective corporate character, as the "convention of royal burghs," for the transaction of business; (4) parliamentary burghs, which possess statutory constitutions almost identical with those of the royal burghs; (5) police burghs, constituted under the burgh police (Scotland) act, 1892, in which the local authority is the police commissioners. These two latter burghs, by acts passed in 1879 and 1895, are enabled to send representatives to the convention.

Serb, Croat, and Slovene State. The official title of the Kingdom of the Serbs, Croats, and Slovenes, called also Jugoslavia. After the revolution in Austria-Hungary in 1918, Slovenia, Croatia, Dalmatia, and Bosnia declared their independence. A movement was begun for the formation of a new state by the union of these provinces with Serbia. A constituent Assembly, elected in 1920, adopted a Constitution which provides for a limited monarchy with a two-chamber Parliament in which the Senate is the advisory body. The King is commander-in-chief of the army, and can declare war or conclude peace. He also summons Parliament which he has the right of dissolving. The Lower Chamber is elected for four years on the basis of one deputy for each 40,000 inhabitants. The Senate consists of 100 members, elected for nine years, one-third being renewed every three years. The Cabinet is composed of a Prime Minister and 18 departmental heads. It includes ministers of communications, interior, foreign

affairs, commerce, finance, forests and mines, agrarian reform, food, public health, social affairs, religion, public instruction, posts and telegraphs, war, public works, agriculture, and justice; also a minister without portfolio. In 1921 Montenegro joined the new state.

Siam. The executive power is exercised by the king advised by a cabinet (senabodi) consisting of the heads of the various departments of the government: foreign affairs, interior, justice, finance, public instruction, public works, war, marine, police, etc. Most of the portfolios are held by the king's half-brothers and uncles. The law of 1874, constituting a council of state, has now been superseded by the royal decree of 1895, creating a legislative council. The latter is composed of the ministers of state and others, not less than twelve in number, appointed by the Crown. The total membership is now forty. In the preamble to the royal decree it is stated that the object of this body is to revise, amend, and complete the legislation of the kingdom. It is to meet at least once a week, and it may appoint committees of three or four members. An important article gives the legislative council power to promulgate laws without the royal assent in the event of any temporary disability of the Crown. At other times the royal signature is indispensable.

South Carolina. The first Constitution, adopted in 1776, was succeeded by others in 1778, 1790, 1865, 1868, and 1895, the last-named being still in force. Amendments proposed in either House of the Legislature, and approved by a two-thirds vote of each House, are submitted to the popular vote; if approved by a majority of the voters and by a majority of each House of the next Legislature, they become part of the Constitution. The Legislature, called the General Assembly, consists of a Senate of forty-four members, elected for four years (half retiring biennially), and a House of Representatives of 124 members, elected for two years. Senators must be 25, and Representatives 21 years of age, and all the Legislators must be duly qualified electors of the State. Revenue bills must originate in the House of Representatives. The chief executive officer of the State is the governor, elected for two years. He is commander-in-chief of the militia, has power to pardon or reprieve, and has a veto which may be overcome by a two-thirds vote of both Houses. He may call special sessions of the Legislature. Other State officials are the lieutenant-governor, the treasurer, the attorney-general, the comptroller-general, the adjutant general, and the superintendent of education.

South Dakota. Under the Constitution of South Dakota, adopted in 1889, the legislative power is vested in a Senate and a House of Representatives; but to the people is reserved the right that not less than 5 per cent. of the electors may (1) propose measures which the Legislature shall enact and submit to a vote of the general body of electors; (2) demand a referendum in respect to laws enacted by the Legislature, before such laws take effect, save in cases of urgency. The Constitution provides that the Senate shall consist of not less than twenty-five and not more than forty-five members, and the House of Representatives of not less than seventy-five, nor more than 135 members. Both Senators and Representatives must, among other qualifications, have reached the age of 25 years and have resided in the State for two years immediately preceding election. The term of office of both is two years. Any bill may originate in either House. The House of Representatives has the sole power of impeachment; impeachments must be tried by the Senate. The chief executive authority is in the hands of a governor, elected for two years. He himself must be a qualified elector and a citizen of the United States, must have attained the age of 30 years, and have resided in the State during the two years immediately preceding his election. He has the powers usually resident in State governors, including the limited veto and pardoning powers. At the same time as the governor, and for the same period, there are elected a lieutenant-governor, who acts as president of the Senate, a secretary of state, an auditor, a treasurer (who may not hold office for more than two terms consecutively), a superintendent of public instruction, a commissioner of schools and public lands, and an attorney-general.

Spain. By the constitution of 1876, Spain is declared a constitutional monarchy, with the executive power vested in the king, and the legislative power in the cortes with the king. The cortes consist of a senate and congress. The senate is composed of three classes: those who sit by right of royal or noble birth or official position, 100 members nominated by the Crown (these two classes not numbering more than 180 together), and 180 elected by the communal and provincial states, the church, the universities, and the largest taxpayers of the kingdom. The elected senators must be renewed by one-half every five years, and altogether whenever the cortes are dissolved. The congress contains 406 deputies, elected for five years by citizens of 25 years of age who have enjoyed full civil rights in any municipality for two years. There is some provision for minority representation, and for the election of ten deputies, who, though not returned in any single district, yet receive a cumulative vote of more than 10,000 in several districts. The senate and congress are equal in authority, and either of them, or the king, can introduce new laws. Each of the forty-nine provinces has its own parliament, and each commune its own elected ayuntamiento, presided over by the alcalde, for municipal and provincial administration; and by the constitution neither the executive nor the cortes can (although they do) interfere in municipal or provincial administration, except for the protection of national and permanent interests. The national church of Spain is the Roman Catholic and nearly the whole population is of that faith, but liberty of worship is now allowed to Protestants.

In 1903 the army was reorganized on the basis of an effective force of 80,000 men, the second battalions of the infantry regiments and the fourth squadrons of the cavalry being reduced. In 1911 a law was passed making military service in Spain compulsory. The total strength of the field army is about 300,000.

STATE STATISTICS—HISTORICAL

States	Origin and Meaning of Name	Date of Admission into Union	† Settlement: Where	† Settlement: When	† Settlement: By Whom	Area Square Miles	Population When Admitted
Alabama,	Indian—Here we rest,	1819	Mobile Bay,	1702	French,	51,998	127,901
Arizona,	Spanish-Indian—Little Creeks,	1912	Tucson,	1776	Spanish,	113,956	204,354
Arkansas,	From a tribe of Indians,	1836	Arkansas Post,	1685	French,	53,335	97,574
California,	Spanish—Hot furnace,	1850	San Diego,	1768	Spanish,	158,297	92,597
Colorado,	Spanish—Red, or Ruddy,	1876	Auraria,	1859	American,	103,948	39,864
Connecticut,	Indian—Long River,	*1788	Windsor,	1633	English,	4,965	237,946
Delaware,	In honor of Lord Delaware,	*1787	Wilmington,	1637	Swedes,	2,370	59,096
Florida,	Spanish—Blooming,	1845	St. Augustine,	1565	Spanish,	58,666	87,445
Georgia,	In honor of George II.,	*1788	Savannah,	1733	English,	59,265	82,548
Idaho,	Indian—Gem of the Mountains,	1890	Cœur d' Alene,	1842	American,	83,888	88,548
Illinois,	Indian—The Men,	1818	Kaskaskia,	1682	French,	56,665	55,211
Indiana,	Indian's Ground,	1816	Vincennes,	1702	French,	36,354	147,178
Iowa,	Indian—Drowsy Ones,	1846	Dubuque,	1833	American,	56,147	192,214
Kansas,	Indian—Smoky Water,	1861	Leavenworth,	1854	American,	82,158	107,206
Kentucky,	Indian — Dark and Bloody Ground,	1792	Boonesboro,	1769	English,	40,598	73,677
Louisiana,	In honor of Louis XIV.,	1812	New Orleans,	1718	French,	48,506	76,556
Maine,	The Main Land,	1820	Saco,	1623	English,	33,040	298,335
Maryland,	In honor of Queen Henrietta Maria,	*1788	St. Mary's,	1632	English,	12,327	319,728
Massachusetts,	The place of great hills,	*1788	Plymouth,	1620	English,	8,266	378,787
Michigan,	Indian—A weir of fish,	1837	Sault Ste. Marie,	1668	French,	57,980	212,267
Minnesota,	Indian—Cloudy Water,	1858	St. Paul,	1838	American,	84,682	172,023
Mississippi,	Indian—Great River, or Father of Waters,	1817	Biloxi,	1699	French,	46,865	75,448
Missouri,	Indian—Great Muddy,	1821	St. Genevieve,	1755	French,	69,420	66,586
Montana,	Spanish—A Mountain,	1889	Yellowstone River	1809	American,	146,997	142,924
Nebraska,	Indian—Shallow Water,	1867	Bellevue,	1847	American,	77,520	122,993
Nevada,	Spanish—Snow-covered,	1864	Genoa,	1850	American,	110,690	42,491
New Hampshire,	Hampshire, England,	*1788	Portsmouth,	1623	English,	9,341	141,885
New Jersey,	In honor of governor of Jersey Island,	*1787	Elizabethtown,	1617	Dutch,	8,224	184,139
New Mexico,		1912	Santa Fé,	1605	Spanish,	122,634	327,301
New York,	In honor of Duke of York,	*1788	New York,	1614	Dutch,	49,204	340,120
North Carolina,	In honor of Charles II.,	*1789	Albemarle Sound,	1653	English,	52,426	393,751
North Dakota,	Indian—Allied,	1889	Pembino,	1859	American,	70,837	190,983
Ohio,	Indian—Beautiful River,	1803	Marietta,	1788	American,	41,040	45,365
Oklahoma,	Indian—Land of Red Men,	1907	Guthrie,	1890	American,	70,057	1,414,042
Oregon,	Spanish—Wild Marjoram,	1859	Astoria,	1811	American,	96,699	52,465
Pennsylvania,	Latin—Penn's Woods,	*1787	Chester,	1638	Swedes,	45,126	434,373
Rhode Island,	Rhodes, an island in the Ægean Sea,	*1790	Providence,	1636	English,	1,248	68,825
South Carolina,	In honor of Charles II.,	*1788	Ashley River,	1670	English,	30,989	393,751
South Dakota,	Indian—Allied,	1889	Southeast part,	1859	American,	77,615	348,600
Tennessee,	Indian—River with the great bend,	1796	Fort Loudon,	1757	English,	42,022	35,691
Texas,	From tribe of Indians,	1845	San Antonio,	1692	Spanish,	265,896	212,592
Utah,	Indian—Mountain Dwellers,	1896	Salt Lake City,	1847	American,	84,990	210,779
Vermont,	French—Green Mountain,	1791	Fort Dummer,	1724	English,	9,564	85,425
Virginia,	In honor of Elizabeth, the Virgin Queen,	*1788	Jamestown,	1607	English,	42,627	747,610
Washington,	After George Washington,	1889	Columbia River,	1811	English,	69,127	357,232
West Virginia,	From Virginia,	1863	Berkeley County,	1726?	American,	24,170	442,014
Wisconsin,	Indian—Wild Rushing Channel,	1848	Green Bay,	1745	French,	56,066	305,391
Wyoming,	Indian—Extensive Plain,	1890	Cheyenne,	1867	American,	97,914	62,555

* Dates of ratifying the Constitution by the Thirteen Original States. † Considerable uncertainty exists relative to early settlements; best authorities differ.

Territories and Insular Possessions ††	Date of Settlement	Place of Settlement	By Whom Settled	Capitals	Acquired	Population When Organized
Alaska,	1783	Kodiak,	Russians,	Juneau,	1867	29,097
Hawaiian Islands,	1820	Honolulu,	Americans,	Honolulu,	1898	154,001
Porto Rico,	1509	Pueblo Viejo,	Spaniards,	San Juan,	1898	.....
Philippine Islands,	1565	Cebu,	Spaniards,	Manila,	1898	.....
Virgin Islands,	1657	St. Thomas,	Dutch,	Charlotte Amalie,	1917	.....

†† Guam (the largest of the Marianne islands), ceded by Spain to the U. S. in 1898; area, 225 sq. mi., pop., 13,275.

AND GEOGRAPHICAL

Original Names, or Territory from which Derived	Population, 1920	Population, 1910	% of Inc. 1910-20	Rank	Largest City	States
Louisiana and Georgia, Mississippi Territory, Alabama Territory,	2,348,174	2,138,093	9.8	18	Birmingham	Alabama
Mexico,	334,162	204,354	63.5	45	Phoenix	Arizona
Louisiana, Louisiana Territory, Missouri Territory, Arkansas Territory,	1,752,204	1,574,449	11.3	25	Little Rock	Arkansas
New Albion, Upper California,	3,426,861	2,377,549	44.1	8	Los Angeles	California
Louisiana and Mexican cession. Colorado Territory,	939,629	799,024	17.6	33	Denver	Colorado
North Virginia, New England,	1,380,631	1,114,756	23.9	29	New Haven	Connecticut
New Sweden, New Netherland, three lower counties on the Delaware,	223,003	202,322	10.2	46	Wilmington	Delaware
Florida Territory,	968,470	752,619	28.7	32	Jacksonville	Florida
One of the Thirteen Original States,	2,895,832	2,609,121	11.0	12	Atlanta	Georgia
Oregon Territory, Washington Territory, Idaho Territory,	431,866	325,594	32.6	42	Boise City	Idaho
Northwest Territory, Indiana Territory, Illinois Territory,	6,485,280	5,638,591	15.0	3	Chicago	Illinois
Northwest Territory, Indiana Territory,	2,930,390	2,700,876	8.5	11	Indianapolis	Indiana
Louisiana, Missouri, Michigan, Wisconsin, and Iowa Territories,	2,404,021	2,224,771	8.1	16	Des Moines	Iowa
Louisiana, Kansas Territory,	1,769,257	1,690,949	4.6	24	Kansas City	Kansas
Virginia,	2,416,630	2,289,905	5.5	15	Louisville	Kentucky
Louisiana, Territory of Orleans,	1,798,509	1,656,388	8.6	22	New Orleans	Louisiana
New England, Laconia, and Massachusetts,	768,014	742,371	3.5	35	Portland	Maine
One of the Original States,	1,449,661	1,295,346	11.9	28	Baltimore	Maryland
North Virginia, New England, Massachusetts Bay,	3,852,356	3,366,416	14.4	6	Boston	Massachusetts
Northwest Territory, Indiana Territory, Michigan Territory,	3,668,412	2,810,173	30.5	7	Detroit	Michigan
Louisiana and Northwest Territory, Minnesota Territory,	2,387,125	2,075,708	15.0	17	Minneapolis	Minnesota
Louisiana and Georgia, Mississippi Territory,	1,790,618	1,797,114	−0.4	23	Meridian	Mississippi
Louisiana, Louisiana Territory, Missouri Territory,	3,404,055	3,293,335	3.4	9	St. Louis	Missouri
Louisiana, Nebraska Territory, Idaho Territory, Dakota Territory, Montana Territory,	548,889	376,053	46.0	39	Butte	Montana
Louisiana, Nebraska Territory,	1,296,372	1,192,214	8.7	31	Omaha	Nebraska
Upper California, Utah Territory, Nevada Territory,	77,407	81,875	−5.5	48	Reno	Nevada
North Virginia, New England, Laconia,	443,083	430,572	2.9	41	Manchester	New Hampshire
New Netherland,	3,155,900	2,537,167	24.4	10	Newark	New Jersey
Mexico,	360,350	327,301	10.1	43	Albuquerque	New Mexico
New Netherland,	10,385,227	9,113,614	14.0	1	New York	New York
Albemarle Colony,	2,559,123	2,206,287	16.0	14	Winston-Salem	North Carolina
Louisiana, Minnesota, and Nebraska Territories, Dakota Territory,	646,872	577,056	12.1	36	Fargo	North Dakota
Northwest Territory,	5,759,394	4,767,121	20.8	4	Cleveland	Ohio
Indian Territory, Oklahoma Territory,	2,028,283	1,657,155	22.4	21	Oklahoma City	Oklahoma
Oregon Territory,	783,389	672,765	16.4	34	Portland	Oregon
Original State,	8,720,017	7,665,111	13.8	2	Philadelphia	Pennsylvania
North Virginia, New England, Aquiday, Providence and Rhode Island Plantations,	604,397	542,610	11.4	38	Providence	Rhode Island
Carteret Colony,	1,683,724	1,515,400	11.1	26	Charleston	South Carolina
Louisiana, Minnesota, and Nebraska Territories, Dakota Territory,	636,547	583,888	9.0	37	Sioux Falls	South Dakota
North Carolina, Territory south of the Ohio River,	2,337,885	2,184,789	7.0	19	Memphis	Tennessee
	4,663,228	3,896,542	19.7	5	San Antonio	Texas
Mexican Cession, Utah Territory,	449,396	373,351	20.4	40	Salt Lake City	Utah
New Netherland, New Hampshire Grants,	352,428	355,956	−1.0	44	Burlington	Vermont
South Virginia,	2,309,187	2,061,612	12.0	20	Richmond	Virginia
Oregon Territory, Washington Territory,	1,356,621	1,141,990	18.8	30	Seattle	Washington
Virginia,	1,463,701	1,221,119	19.9	27	Wheeling	West Virginia
Northwest Territory, Illinois Territory, Michigan Territory, Wisconsin,	2,632,067	2,333,860	12.8	13	Milwaukee	Wisconsin
Louisiana (chiefly), Nebraska Territory, Dakota Territory, Idaho Territory, Wyoming Territory,	194,402	145,965	33.2	47	Cheyenne	Wyoming

NOTE.—1920 Population of United States, 105,710,620; including possessions, 117,695,984.
District of Columbia, in 1910, 331,069; in 1920, 437,571; increase 32.2%.

Area in Sq. Miles	Population 1920	Population 1910	% of Inc. 1910-20	Largest City	Territories and Insular Possessions††
590,884	54,899	64,356	—14.7	Juneau	Alaska.
6,449	255,912	191,909	33.4	Honolulu	Hawaiian Islands.
3,435	1,297,772	1,118,012	16.1	San Juan	Porto Rico.
115,026	10,350,730(*a*)	8,276,802	25.0	Manila	Philippine Islands.
132	26,051(*b*)	27,086	— 3.8	Charlotte Amalie	Virgin Islands.

†† Tutuila and other Samoan islands, acquired by the U. S. in 1900; area, 102 sq. mi., pop., 8,056. (*a*) 1918. (*b*) 1917.

SUFFRAGE REQUIREMENTS THROUGHOUT

Compiled from latest statistics available March 1, 1922. "Citizen of the United States" means a Constitution "the right of citizens of the United States to vote shall not

States	Capitals	Requirements Other Than Citizenship	Previous Residence Req'red				Persons Disqualified (Other than Felons, Idiots, and Insane)	Governors	
			In State	In County	In Town	In Precinct		Salary	L'gth Term Yrs.
Alabama, . . .	Montgomery,	Property, or able to read and write, and employment. Poll tax.	2 years	1 year	3 mos.	3 mos.	Bribery, malfeasance, election crimes, vagrants, tramps (convicted).	$7,500	4
Arizona, . . .	Phoenix, . .	Declarants. (*b*)	1 year	30 days	30 days	30 days	Persons under guardianship.	6,000	2
Arkansas, . . .	Little Rock,	Poll tax.	1 year	6 mos.	1 mo.	1 mo.	. . . . .	4,000	2
California, . .	Sacramento,	Ability to read Constitution and write name.	1 year	90 days	....	30 days	Bribery, malfeasance, dueling, Chinese.	10,000	4
Colorado, . . .	Denver, . .	. . . . .	1 year	90 days	30 days	10 days	Persons under guardianship.	5,000	2
Connecticut, . .	Hartford, . .	Good moral character, ability to read Constitution.	1 year	. . .	6 mos.	. . .	Bribery, dueling.	5,000	2
Delaware, . . .	Dover, . . .	. . . . .	1 year	3 mos.	. . .	30 days	Bribery, paupers.	4,000	4
Florida, ...	Tallahassee,	Ability to read Constitution and write name.(*c*)	1 year	6 mos.	. . .	30 days	Bettors on election, bribery, dueling, under guardianship, malfeasance. (*d*)	6,000 (*a*)	4
Georgia, . . .	Atlanta, . .	Ability to read.	1 year	6 mos.	. . .	. . .	Delinquent taxpayers.	7,500	2
Idaho, ...	Boise City, .	Must be registered.	6 mos.	30 days	3 mos.	10 days	Election crimes, teachers of polygamy, persons having guardians.(*e*)	5,000	2
Illinois, ...	Springfield, .	. . . . .	1 year	90 days	30 days	30 days	Penitentiary convicts.	12,000	4
Indiana, . . .	Indianapolis,	Declarants.	6 mos.	60 days	60 days	30 days	Soldiers and sailors.	8,000 (*a*)	4
Iowa, ...	Des Moines, .	. . . . .	6 mos.	60 days	10 days	10 days	. . . . .	5,000	2
Kansas, ...	Topeka, . .	. . . . .	6 mos.	30 days	30 days	30 days	Bribery, persons under guardianship, duelists, dishonorably discharged officials.	5,000	2
Kentucky, . .	Frankfort,	Must be registered.	1 year	6 mos.	60 days	60 days	Bribery.	6,500 (*a*)	4
Louisiana, . .	Baton Rouge,	Property, or ability to read and write. (*f*)	2 years	1 year	in Parish.	6 mos.	Inmates of charitable institutions except soldiers' homes, interdicted persons.	7,500 (*a*)	4
Maine, ...	Augusta, . .	Ability to read Constitution and write name.	3 mos.	3 mos.	3 mos.	3 mos.	Bribery, paupers, persons under guardianship, Indians not taxed.	5,000	2
Maryland, . . .	Annapolis, .	Citizens who can read.	1 year	6 mos.	6 mos.	1 day	Bribery, election crimes.	4,500	4
Massachusetts, .	Boston, . .	Ability to read Constitution and write name. Poll tax. (*g*)	1 year	6 mos.	6 mos.	6 mos.	Election crimes, paupers, persons under guardianship	10,000	2
Michigan, . . .	Lansing, . .	Civilized Indians may vote.	6 mos.	20 days	20 days	20 days	Duelists, tribal Indians.	5,000	2
Minnesota, . . .	St. Paul, . .	Civilized Indians may vote.	6 mos.	30 days	30 days	30 days	Persons under guardianship, uncivilized Indians.	7,000	2
Mississippi, . .	Jackson, . .	Ability to read or explain Constitution. Poll tax.	2 years	1 year	1 year	1 year (*h*)	Bribery, dueling, delinquent taxpayers.	7,500 (*a*)	4
Missouri, . . .	Jefferson City,	Declarants.	1 year	60 days	60 days	60 days	Soldiers and sailors, paupers.	5,000	4
Montana, . . .	Helena, . .	. . . . .	1 year	30 days	30 days	30 days	Indians.	7,500	4

THE UNITED STATES

male or female of twenty-one years and over. By the provisions of the XIX Amendment to the be abridged by the United States or by any state on account of sex."

Legislatures			Mem's. Terms		Elec. Vote, 1920	Total Assessed Valuation	Per Ct. Actual Value	Tax Rate per $1,000	Adult Pop. 21 Yrs. and Over 1920		
Ann. or Bien.	Limit of Session	Salaries of Members	Senators	Representatives					Total (*p*).	Whites	Negroes
Quad.	50 days	$4 per diem	4	4	12	$675,162,002	60	$ 6.50	1,143,395	702,031	441,130
Bien.	60 days	7 per diem	2	2	3	834,020,532	100	3.92	187,929	164,629	6,559
Bien.	60 days	6 per diem	4	2	9	553,485,082	43	7.50	867,292	624,903	242,234
Bien.	None	1,000 regular session (*l*)	4	2	13	(*q*)	. . .	. . .	2,318,030	2,206,558	27,539
Bien.	. . .	1,000 per session	4	2	6	1,422,113,275	100	2.77	564,529	553,798	8,106
Bien.	None	300 per year	2	2	7	1,377,229,551	100	1.52	838,074	823,603	13,743
Bien.	60 days	10 per diem	4	2	3	(*q*)	. . .	. . .	136,521	118,359	18,113
Bien.	60 days	6 per diem	4	2	6	352,038,848	32-50	8.00	536,614	355,116	181,008
Annual	50 days	7 per diem	2	2	14	1,079,236,826	40-75	5.00	1,421,606	846,028	575,330
Bien.	60 days	5 per diem	2	2	4	468,121,167	60	2.75	234,076	229,988	699
Bien.	None	3,500 per bien.	4	2	29	2,638,222,219	23	7.50	3,944,197	3,812,605	128,450
Bien.	61 days	6 per diem	4	2	15	2,233,761,065	40-100	3.51	1,779,820	1,725,449	53,935
Bien.	None	1,000 regular session (*l*)	4	2	13	1,444,412,079	15-25	4.63	1,428,682	1,415,559	12,568
Bien.	50 days	3 per diem	4	2	10	3,418,798,222	85-100	1.17	1,024,144	986,188	37,010
Bien.	60 days	10 per diem	4	2	13	2,248,356,058	70-80	3.62	1,289,496	1,145,525	143,881
Bien.	60 days	5 per diem	4	4	10	726,291,145	50	7.00	924,184	564,017	359,251
Bien.	None	400 per session	2	2	6	521,402,933	100	6.16	475,191	473,685	876
Bien.	90 days	5 per diem	4	2	8	1,369,324,009	67-100	3.24	862,391	720,012	141,991
Annual	None	1,500 per annum	1	1	18	4,706,209,126	100	2.34	2,411,507	2,378,354	30,412
Bien.	None	800 regular session (*m*)	2	2	15	4,779,013,200	92-100	4.82	2,215,436	2,168,067	43,407
Bien.	90 days	1,000 per session	4	2	12	1,919,797,044	30-40	4.35	1,380,834	1,369,392	6,666
Bien.	None	500 per session	4	4	10	649,644,340	60-100	5.50	876,106	421,659	453,663
Bien.	70 days	5 per diem	4	2	18	2,202,683,993	40-50	1.80	2,038,814	1,916,864	121,328
Bien.	60 days	10 per diem	4	2	4	571,948,991	45-50	3.42	320,562	312,064	1,262

SUFFRAGE REQUIREMENTS THROUGHOUT

States	Capitals	Requirements Other Than Citizenship	Previous Residence Req'red				Persons Disqualified (Other than Felons, Idiots, and Insane)	Governors	
			In State	In County	In Town	In Precinct		Salary	L'gth Term Yrs.
Nebraska,	Lincoln,	. . . . .	6 mos.	40 days	10 days	10 days	U. S. soldiers and sailors.	$2,500	2
Nevada,	Carson City,	Poll tax.	6 mos.	30 days	30 days	30 days	Dueling, Indians, Chinese.	7,200	4
New Hampshire,	Concord,	Ability to read Constitution and write name.	6 mos.	6 mos.	6 mos.	6 mos.	Paupers, non-taxpayers.	3,000	2
New Jersey,	Trenton,	. . . . .	1 year	5 mos.	. . .	. . .	Paupers.	10,000 (a)	3
New Mexico,	Sante Fe,	. . . . .	1 year	90 days	30 days	30 days	Untaxed Indians.	5,000 (a)	2
New York,	Albany,	Ability to read and write English.	1 year	4 mos.	30 days	30 days	Bettors on elections, bribery.	10,000	2
North Carolina,	Raleigh,	Ability to read and write. Poll tax. (i)	2 years	6 mos.	. . .	4 mos.	Malfeasance in office.	6,500	4
North Dakota,	Bismarck,	Civilized Indians may vote.	1 year	6 mos.	. . .	90 days	Persons under guardianship, U. S. soldiers and sailors.	5,000	2
Ohio,	Columbus,	. . . . .	1 year	30 days	20 days	20 days	U. S. soldiers and sailors.	10,000	2
Oklahoma,	Oklahoma City,	. . . . .	1 year	6 mos.	30 days	30 days	Non-native Indians, persons kept in poorhouses, except Federal and Confederate soldiers.	4,500	4
Oregon,	Salem,	30 days in district required in school elections. Property	6 mos.	No specified time.			Soldiers and sailors. Chinese registration required.	7,500	4
Pennsylvania,	Harrisburg,	. . . . .	1 year	. . .	. . .	2 mos.	Bribery, election crimes, non-taxpayers.	10,000 (a)	4
Rhode Island,	Providence,	Property, $134 or $7 per annum. (j)	2 years	. . .	6 mos.	. . .	Bribery, paupers, persons under guardianship, Indians of Naragansett tribe.	8,000	2
South Carolina,	Columbia,	Ability to read and write for persons not registered before Jan. 1, 1898. Poll tax.	2 years	1 year	4 mos.	4 mos.	Bribery, election crimes, paupers, duelists.	5,000	2
South Dakota,	Pierre,	. . . . .	6 mos.	30 days	10 days	10 days	Persons under guardianship.	3,000	2
Tennessee,	Nashville,	Poll tax.	1 year	6 mos.	. . .	. . .	. . . . .	4,000	2
Texas,	Austin,	Declarants. Poll tax. (k)	1 year	6 mos.	6 mos.	6 mos.	Bribery, dueling, paupers, U. S. soldiers and sailors.	4,000	2
Utah,	Salt Lake City,	. . . . .	1 year	4 mos.	. . .	60 days	Election crimes.	6,000	4
Vermont,	Montpelier,	Good behavior.	1 year	3 mos.	3 mos.	3 mos.	Bribery, deserters.	3,000	2
Virginia,	Richmond,	Poll tax.	2 years	1 year	1 year	30 days	Bribery, dueling, paupers.	5,000	4
Washington,	Olympia,	Ability to read and write English.	1 year	90 days	30 days	30 days	Untaxed Indians.	6,000	4
West Virginia,	Charleston,	. . . . .	1 year	60 days	10 days	. . .	Bribery, paupers, U. S. soldiers and sailors.	10,000 (a)	4
Wisconsin,	Madison,	Civilized Indians may vote.	1 year	10 days	10 days	10 days	Bettors on election, dueling, persons under guardianship.	5,000	2
Wyoming,	Cheyenne,	Ability to read Constitution, unless physically disabled.	1 year	60 days	10 days	10 days	. . . . .	4,000	4

(a) Governor not eligible for re-election. (b) Questions upon bond issues or special assessments submitted to vote of property taxpayers. (c) Must be registered to be qualified voter. (d) Persons disqualified after conviction—bettors on election, bribery, dueling. (e) Chinese and Indians not taxed are disqualified. (f) Must have paid a poll tax two years unless over sixty and be an enrolled voter. (g) Must be in election district, precinct or ward C., L. G., S & R. Does not apply to those over sixty or physically disqualified. Naturalized must be United States residents for two years before voting. (h) Time in election dis-

THE UNITED STATES—Continued

Legislatures			Mem's. Terms		Elec. Vote, 1920	Total Assessed Valuation	Per Ct. Actual Value	Tax Rate per $1,000	Adult Pop. 21 Yrs. and Over 1920		
Ann. or Bien.	Limit of Session	Salaries of Members	Senators	Representatives					Total (*p*).	Whites	Negroes
Bien.	60 days	$600 per session	2	2	8	$568,456,926	20	$8.52	738,310	726,652	9,437
Bien.	60 days	600 term	4	2	3	188,901,637	70	5.98	52,218	47,920	277
Bien.	None	200 per session	2	2	4	503,406,919	100	2.91	281,026	280,530	388
Annual	None	500 per annum	3	1	14	3,277,547,392	100	5.30	1,897,884	1,820,728	75,671
Bien.	60 days	5 per diem	4	2	3	371,559,631	75	5.83	185,186	171,157	4,809
Annual	None	1,500 per annum	2	1	45	12,520,819,811	86	1.16	6,514,681	6,361,349	142,544
Bien.	60 days	4 per diem	2	2	12	1,029,993,778	40-67	2.77	1,210,727	863,055	342,756
Bien.	60 days	5 per diem	4	2	5	496,978,049	20-30	3.58	322,918	319,392	336
Bien.	None	1,000 per annum	2	2	24	9,599,586,925	100	.45	3,558,481	3,430,397	126,940
Bien.	60 days	6 per diem	4	2	10	1,664,448,745	100	2.50	1,021,588	920,853	76,331
Bien.	40 days	3 per diem	4	2	5	928,605,570	60-65	3.08	494,968	485,530	1,620
Bien.	None	1,500 per year	4	2	38	7,431,336,401 (*o*)	60	7.00	5,039,091	4,845,641	191,226
Annual	60 days	5 per diem	2	2	5	800,837,838	60-75	1.20	368,637	361,782	6,554
Annual	None	200 per session	4	2	9	411,124,063	25	7.59	779,991	402,796	376,930
Bien.	60 days	5 per diem	2	2	5	1,598,544,562	80	1.90	344,846	335,622	520
Bien.	75 days	4 per diem	2	2	12	726,369,281	40-85	5.00	1,214,947	969,444	245,395
Bien.	None	5 per diem	4	2	20	3,012,819,287	50	5.50	2,430,715	2,044,270	384,428
Bien.	60 days	4 per diem	2	2	4	609,481,853	100	4.98	228,682	223,629	1,104
Bien.	None	4 per diem	2	2	4	287,064,516	65-75	5.02	217,042	216,674	342
Bien.	60 days (*n*)	500 per session	4	2	12	1,392,944,923	42-67	3.31	1,207,074	855,123	351,231
Bien.	60 days	5 per diem	4	2	7	1,035,938,644	42	8.92	857,079	832,523	5,208
Bien.	60 days	4 per diem	4	2	8	1,449,451,754	100	.74	752,344	701,106	51,145
Bien.	None	500 per session	4	2	13	4,237,461,709	100	2.68	1,527,661	1,518,973	3,609
Bien.	40 days	8 per diem	4	2	3	298,538,152	60	3.70	115,739	112,682	1,065

trict, precinct or ward—ministers six months. (*i*) Must be registered. Those over fifty and those just coming of age need not pay poll tax. (*j*) Registration required and payment of registry tax of $1 unless service in military or marine form. (*k*) In city or town elections only taxpayers to vote on expenditures of money or assumption of debt. (*l*) $10 per day extra session. (*m*) $5 per day extra session. (*n*) Can be extended 30 days by ⅔ vote. (*o*) Real Estate only. (*p*) Total Population—White, Negro, Indian, Chinese, Japanese and all others. (*q*) General property not assessed for state purposes.

Suffrage. The privilege of voting at elections and thereby sharing in the conduct of government. This right is called also the franchise. It is to be distinguished from citizenship, which is membership in a state. The institution of suffrage was recognized in very early times in the states of Greece and Italy. The right, however, was usually much restricted. During the middle ages, a more or less restricted suffrage was maintained in the city republics, such as Venice or the Flemish cities.

The extension of suffrage, in the modern sense, began late in the 18th century. In England, the Reform bills of 1832 and 1835, admitting large numbers of the middle classes to suffrage, marked a long step toward manhood suffrage. But these acts definitely excluded women and so opened the long struggle for woman suffrage. Sweden and Finland were the first European countries to admit women to a limited exercise of the franchise. In America, the territory of Wyoming first provided for unrestricted woman suffrage (1869). In the following countries, men and women have (1921) the ballot on equal terms:

Australia	Latvia
Austria	Lithuania
Canada	Luxemburg
Czechoslovakia	Netherlands
Denmark	Norway
Esthonia	Poland
Finland	Russia
Germany	Sweden
Iceland	United States
Italy	

In some others, women are given a restricted suffrage.

Voting. The systems of representative government in use in modern states necessitate careful definition of the conditions under which a person shall exercise the right of suffrage. *First,* the requirement that a voter shall be a citizen is virtually universal. The *second* qualification demanded is the attainment of a certain age. Usually this age is 21. The lowest age requirement is 18, in Russia and Uruguay. In Germany the limit is 20. The German state of Bavaria requires voters to be 23 years of age. Norway and Sweden also set the voting age at 23. Finland sets it at 24; Denmark, at 25; in Great Britain it is 21 for men and 30 for women. The *third* requirement usually made is that of a period of residence in the country, varying from a few months to several years. A *fourth* qualification sometimes enforced is educational. Usually this means that a voter must be able to read and write. *Fifth,* incompetents of various classes, such as the insane, idiots, and criminals, are commonly debarred from voting. As in Great Britain, paupers and bankrupts are sometimes excluded. *Sixth,* it is frequently required that a voter shall own or lease a certain amount of property. *Seventh,* voters are usually required to register in the district in which they expect to vote. Sometimes voting is made compulsory, as in Spain.

Plural voting and *proportional representation* are in vogue in some countries. The purpose of the plural vote is to give greater influence to certain classes of the people. Sometimes persons of superior education or professional standing are entitled to cast more than one vote; again, the votes of property-holders are given greater weight than those of other persons. Proportional representation is a method of providing that minorities as well as majorities shall be actually represented in legislatures.

The Ballot. The name means a little ball, and recalls ancient methods of voting by depositing little balls or cubes of different colors in a box. The printed paper ballot, now universal, was in use in the New England colonies at a very early date. The custom grew up of allowing all candidates and parties to print and circulate their own ballots. This system virtually destroyed the secrecy of the ballot and discouraged independence on the part of the voter. To correct the worst of these faults, the Australian ballot was originated in South Australia. It is now in very general use. It is an official ballot on which the names of all candidates and parties are printed at public expense. These official ballots only are furnished to voters at the polling places. The voters, in booths provided for the purpose, mark their ballots secretly, placing X opposite the names of candidates for whom they wish to vote.

Voting machines still further reduce the difficulties incident to securing a complete, accurately counted, and secret vote. These are really mechanical Australian ballots. The voter registers his choices by moving levers on the face of the machine.

The Short Ballot. Many experiments are being carried on in various communities, with the purpose of devising the best form of ballot. A ballot should encourage careful, intelligent voting and put obstacles in the way of the corrupt political boss. The short ballot is simply a ballot carrying as few names as possible. In order to make its use practicable, many minor offices must be filled by appointment. The theory is that the voters will give better attention to selecting a few officials about whom they may inform themselves than to selecting many about whom they can know very little.

Supreme Court, The United States. Upon the scope of the powers to be given to the federal courts and upon their relation to the state courts, the framers of the Constitution were divided in opinion. Finally, provision was made in the Constitution for a Supreme Court; but it was left to Congress to organize this court and to define the appeals to be taken to it from inferior courts.

Article III, Section 2, of the Constitution provides that "in all Cases affecting Ambassadors, other public Ministers and Consuls, and those in which a State shall be a Party, the supreme Court shall have original Jurisdiction. In all the other Cases before mentioned, the supreme Court shall have appellate Jurisdiction, both as to Law and Fact, with such Exceptions, and under such Regulations as the Congress shall make."

Congress in 1789 passed a judiciary act, providing for organization of a Supreme Court

to consist of a Chief Justice and five associate justices, which should sit at the capital. This act provided also that appeals might be taken to the Supreme Court from the federal District and Circuit Courts, and also from any state court in cases involving a federal law or treaty or the Constitution. Under these broad provisions, guided in its first critical period by the genius of Chief Justice John Marshall, the Supreme Court of the United States soon attained a power and authority unique among the tribunals of the world.

The striking feature of this court's authority is its acknowledged power to nullify acts both of state legislatures and of Congress. Until very recent years, no other court in the world has ventured to declare legislative acts void. But this power, as Viscount Bryce pointed out, arose, not from any procedure unknown to colonial and English courts, but from the nature of the task falling to the Supreme Court. In the course of 130 years the Court has declared 33 acts of Congress and more than 220 state laws unconstitutional.

The Supreme Court organized for the first time in 1790. At its first meeting the justices appointed a clerk and then adjourned for lack of work. During the next ten years, only six cases involving constitutional law were decided. When John Marshall became Chief Justice in 1801, he found but ten cases awaiting consideration. During Marshall's 34 years as Chief Justice, the great tradition of the Court was formed. He laid down two principles: (1) that every power claimed by Congress must be clearly derived from the Constitution; (2) that, when a power was determined, it should be interpreted liberally. Under Chief Justice Taney, the Court leaned toward strict construction of the Constitution, as in the Dred Scott case; but with the appointment of Chase in 1864, the liberal principles laid down by Marshall again came into full force.

To provide for the increased business of the Supreme Court and to relieve its crowded docket, Congress has, from time to time, increased the number of District Courts, given to federal Circuit Courts of Appeals final jurisdiction in some cases, and further limited the cases to be appealed to the Supreme Court. The number of Supreme Court justices has been increased to nine, one of whom is the Chief Justice of the United States. They are appointed by the President and confirmed by the Senate. Like other federal judges, the Supreme Court justices hold office for life and are removable only by impeachment. The Chief Justice receives $15,000 a year, and each associate justice receives $14,500.

Cases may come before the Supreme Court by original jurisdiction, but these are so limited by the Constitution that they are very rare. Consequently, witnesses are seldom called before the Court. Appeals may be taken to the Supreme Court from the lower federal courts and from the highest court of any state. A case may come to the Supreme Court also by removal; that is, if a party to a suit in a state court believes that the case involves questions of federal or constitutional law, he may have the case "removed" to the Circuit Court and thence appealed to the Supreme Court. The Court may also by a writ bring before it a case in which a lower federal court has, ordinarily, final jurisdiction. The Court hands down decisions only upon questions which come before it regularly in connection with actual controversies. It renders about 350 decisions a year.

The organization and procedure of the Supreme Court accord well with the dignity of its functions and with the authority of its opinions. The Court sits at Washington from October till May. It does not, however, sit regularly during this time. Usually it holds daily sessions for three or four weeks and then adjourns for a like period. The Court assembles in the Supreme Court Room in the Capitol, the room formerly occupied by the Senate. It has its own marshall, clerk, and reporter. The daily sessions begin at noon of each week day except Saturday, when the Court is sitting. At that hour, the justices, wearing their judicial robes of black silk, enter the court room. The Court has no jury. Usually only a few visitors are present. For them the rule of silence is rigidly maintained. The presence of six justices is necessary to hear a case. The Court listens to the oral arguments of the lawyers, which are limited to an hour and a half each, except by special permission, and receives printed briefs of the arguments. A practicing lawyer of three years' standing in any state may be admitted to practice before the Supreme Court. His admission is moved by a member of the Supreme Court bar on one of the Court's motion days, and usually granted as a matter of form.

On Saturday the justices confer upon the cases that have been argued. Every case is discussed twice, once to get the majority opinion which is necessary to a decision, again to criticize and adopt the opinion which has been prepared by one of the justices designated by the Chief Justice. This majority opinion is read in a session of the Court, usually on Monday, and immediately published under the supervision of the Supreme Court reporter. A justice may reach a decision which agrees with the majority of his colleagues, but for reasons different from theirs. In this case, he may write and have printed a "concurring opinion." In any case also, the minority may and frequently do record a "dissenting opinion." Each dissenting justice may write his own "opinion," or one justice may prepare the "dissenting opinion" in which he will be joined by the rest of the minority. Not a few decisions of the Court have been rendered by a bare majority, and the Court has sometimes reversed its own decisions. Within recent years, outspoken critics of the Court have severely censured some of its decisions as unprogressive and too little considerate of human as against property rights in an industrial state. But these conditions are incident to the operation of a human court. It is notable that through more than a century and a quarter this unique Court, in the character of its members and the justice of its decisions, has held the profound respect of the American people. Today, appointment to the Supreme Bench is probably the most coveted honor in America.

Sweden. Under the Swedish Constitution of 1809, with subsequent amendments, the executive power is lodged in the king, who also possesses legislative power in matters of political administration; in all other respects such power is exercised jointly by the Diet, which alone may impose taxes. Every new law must have the assent of the king. The Diet consists of two chambers, the first of 150 members (elected by provinces and municipalities for six years), the second of 230 members (150 representing rural and eighty urban constituencies), elected directly for three years. Members of both chambers are paid $330 per session.

Switzerland is a confederation of nineteen entire and six half cantons, which have been united for federal purposes since 1848. The Constitution of 1874 vests supreme legislative and executive authority in two chambers—viz: (1) a state council of forty-four members, chosen two for each canton and one for each half-canton for three years; and (2) a national council of 189 delegates of the Swiss people (of whom thirty-two are sent by Berne and twenty-five by Zürich), chosen also for three years, directly by manhood suffrage, one deputy for every 20,000 of the population. The united chambers form the federal assembly, to which is confided the supreme government. The executive authority is deputed to a federal council of seven members, elected for three years by the assembly, the president and vice-president of which are elected annually, and are the first magistrates of the republic. The council sits at Berne, which is the headquarters of the federal administration. The principles of the referendum and the initiative are in force. The latter signifies the right of any 50,000 citizens to demand a direct popular vote on any constitutional question. The federal government can alone contract treaties or declare war. The army, postal system, finance, and customs are also under its control. Civil and criminal law, justice, police, public works, and schools are all left under the jurisdiction of the cantonal authorities, while labor legislation may be initiated either by the confederation or by the cantons. The neutrality of the country is guaranteed by the treaty of Vienna, 1815.

Tennessee. The Constitution adopted in 1796 was superseded by that of 1834, which gave place to that of 1870, now in force. Constitutional amendments proposed in either House of the Legislature and agreed to by a majority of all the members of each are referred to the Legislature next elected. If they are then passed by a two-thirds majority of the members elected to each House, they are submitted to the popular vote, and, if ratified by a majority of those who vote, become part of the Constitution. Amendments, however, may not be proposed in the Legislature oftener than once in six years. The Legislature, known as the General Assembly, consists of a Senate of thirty-three members, elected for two years, and a House of Representatives of ninety-nine members elected also for two years. Any bill may originate in either House. Senators must be 30 years of age, and representatives 21; both must have resided in the State three years and in the county or district one year next before election. No clergyman of any denomination is eligible to either House. The chief State officer is the governor, who is elected for two years. "He shall not be eligible more than six years of any term of eight." He has the usual powers of State governors, including limited pardoning powers and a veto which may be overridden by a majority of the members of each House. Other State officers are the treasurer, comptroller, adjutant-general, attorney-general, and superintendent of public instruction.

Texas. The Constitution of 1845 was succeeded by new Constitutions in 1866, 1868, and 1875, which last, as variously amended from time to time, is now in force. Amendments proposed in either House of the Legislature, approved by a two-thirds majority of the members of each House, and ratified by a majority of the electors voting on them, become part of the Constitution. The Legislature consists of a Senate of thirty-one members, elected for four years (half their number retiring every two years), and a House of Representatives of 142 members. Bills for raising revenue must originate in the House of Representatives. The Senate tries cases of impeachment brought by the other House. Eligible as Senators are citizens 26 years of age, resident in the State five years next before the election; as Representatives, citizens 21 years of age, resident in the State two years next before the election. The chief executive officer is the governor, elected for two years. He has the authority usually vested in State governors, including the limited veto and pardoning powers. With the advice and consent of the Senate he appoints the State secretary, and also fills vacancies not otherwise provided for. State officials elected for two years are the lieutenant-governor, comptroller, treasurer, commissioner of the general land office, and attorney-general.

Turkey. The commands of the sultan are absolute, unless opposed to the express directions of the Koran, a legal and theological code upon which the fundamental laws of the empire are based. The legislative and executive authority is exercised through the grand vizier and the Sheik-ul-Islam, who are appointed by the sultan, the latter with the nominal concurrence of the ulema or general body of lawyers and theologians, over which the Sheik-ul-Islam, as head of the Church, presides. The grand vizier, as head of the temporal government, is assisted by the medjliss-i-hass or cabinet of ministers, of whom there are twelve, including the grand vizier and the Sheik-ul-Islam. The other ministers each take charge of a department, *e. g.*, the interior, war, foreign affairs, finance, justice, etc.

United States. The Declaration of Independence was adopted by the First Congress of the United States, July 4, 1776. On November 30, 1782, Great Britain acknowledged the independence of the colonies, and on September 3, 1783, the treaty of peace was concluded. The form of government is based on the Constitution adopted September 17, 1787, to which ten amendments were added, December 15, 1791; an eleventh amendment, January 8, 1798; a twelfth amendment, September 25, 1804; a thirteenth, December 18, 1865; a fourteenth,

July 28, 1868; a fifteenth, March 30, 1870; a sixteenth, February 25, 1913, and a seventeenth, *de facto*, on April 8, 1913. The government is intrusted to three separate authorities—the Executive, the Legislative, and the Judicial. The Executive is vested in the President, who holds his office during the term of four years. He is commander-in-chief of the army and navy and of the militia in the service of the United States. The Vice-President is, *ex-officio*, president of the Senate, and, in case of the death or resignation of the President, he becomes President for the remainder of the term. Electors for President and Vice-President are chosen in all States the Tuesday after the first Monday in November of every fourth year (leap year), and the President is inaugurated on the 4th of March next following. By an act which became a law January 19, 1886, in case of the removal, death, resignation, or inability of both President and Vice-President, the Secretary of State succeeds, and after him other members of the Cabinet in this order: Secretary of Treasury, Secretary of War, Attorney-General, Postmaster-General, Secretary of the Navy, Secretary of the Interior (the others cannot succeed, as their offices were created after the passage of the Acts of the Forty-ninth Congress, Chapter IV). The incumbent shall act as President until the disability of the President is removed or a new President shall be elected. In case of death or removal of the Vice-President the duties of the office shall fall upon the pro tempore president of the Senate, who then receives the salary of Vice-President. Members of the Cabinet are appointed by the President, but are confirmed by the Senate. The legislative power is vested in a Congress, which consists of a Senate and a House of Representatives. The judicial power is vested in a Supreme Court and inferior courts. The Supreme Court consists of a chief justice and eight associate justices, appointed by the President and approved by the Senate. The United States is composed of thirteen original States, seven States which were admitted without having been organized as Territories, and twenty-eight States which have been Territories. States are admitted into the Union by special acts of Congress, either in the form of "enabling acts," providing for the drafting and ratification of a State Constitution, in which case the Territory becomes a State as soon as the conditions are fulfilled, or by accepting a Constitution already framed, and at once gaining admission. In Alaska, Hawaii, Philippine Islands, and Porto Rico there are local Legislatures, the form of which has been prescribed by the Federal Government. Acts made by the Legislatures may be modified or annulled by the Federal Congress. Territorial governors are appointed by the President for terms of four years. The unit of local government in New England is the township, governed directly by the voters. In large cities the city government takes its place. Townships are united to form counties. In the South the unit is the county. In the Middle and Northwestern States the two systems of local government are mixed. In the West the township system is used and public lands are divided into townships six miles square. Representatives to the Federal Congress must be not less than 25 years of age, and must have been citizens of the United States for seven years and residents of the State in which they are elected. In addition to the Representatives from the States, each Territory is allowed a "delegate," who has a right to speak on any subject and make motions, but not to vote. Senators must be 30 years of age, must have been citizens of the United States for nine years and residents of the State for which they are chosen. The franchise is not absolutely universal. In most States residence for at least one year is necessary; in some States residence for two years is required; in the State of Maine three months is the minimum. In some of the Western States unnaturalized persons who have declared their intention of becoming citizens are admitted to the franchise. Fifteen States admit women to the franchise on equal terms with men. Untaxed Indians are excluded from the right to vote, and in some States convicts, duellists, and fraudelent voters are debarred. The following is a synoptical outline of the main features of the constitutional government of the United States:

THE LEGISLATIVE DEPARTMENT

The Senate

Number.—Two Senators from each State. *Elected.*—By direct vote of the people.
Term.—Six years; one-third of the Senate being elected every two years.
Eligibility.—Citizen of the United States nine years; resident of State; minimum age, 30 years.
Salary.—Fixed by law at $7,500 per year.
President of the Senate.—The Vice-President.
Powers of the Senate:

Confirms or rejects nominations of the President.
Ratifies or rejects treaties with Foreign Powers.
Elects President *pro tempore* of the Senate, and its other officers.
Elects Vice-President of the United States if regular election fails.
Acts as a Court for the Trial of Impeachments.

The House of Representatives

Number.—Four hundred thirty-five members, according to the present apportionment.*
Elected.—By the Voters of the Congressional Districts.
Term.—Two years,—the entire House being elected every two years.
Eligibility.—Citizen of the United States seven years; resident of the State; minimum age, 25 years.

* There are, besides, two Territorial Delegates from the Philippines, and one each from Porto Rico, Hawaii, and Alaska, who have the right to speak and to make motions, but not to vote.

Salary.—Fixed by law at $7,500 per year; the Speaker, $12,000 per year.
Powers of the House of Representatives:—
Elects its Speaker (presiding officer) and its other officers.
Elects President of the United States if the regular election fails.
Prosecutes Impeachments before the Senate.
Originates all bills for raising revenue.

The Congress

Consisting of both the Senate and the House of Representatives as coördinate bodies.

Duration.—The term of each Congress is for two years, commencing March 4th of the odd years.
Regular Sessions.—Annual, beginning the first Monday in December.
Special Sessions.—At the call of the President.
Membership.—Each House is the judge of the elections and qualifications of its own members.
Congress has General Powers of Legislation:—
To provide for the raising and disbursement of revenue.
To borrow money; to coin money and to regulate its value; and to fix the standard of weights and measures.
To regulate foreign and interstate commerce.
To declare war, and to maintain an army and a navy.
To establish post offices and post roads.
To enact patent and copyright laws.
To enact uniform naturalization and bankruptcy laws.
To provide for the punishment of crimes against the United States.
To establish courts inferior to the Supreme Court.
To provide for organizing and calling out the militia.
To admit new States into the Union.
To provide for the government of the Territories.
To exercise exclusive jurisdiction over the District of Columbia, public lands, public buildings, forts, and navy yards.
To enact all laws necessary and proper for carrying into execution all the powers vested by the Constitution in the government of the United States.

THE EXECUTIVE DEPARTMENT

The President

How Elected.—The several steps in the election of the President are:
State Electors are chosen at a General Election held on the *Tuesday following the first Monday of November* of every fourth year, the number of Electors of each State being equal to the number of Senators and Representatives to which the State is entitled in Congress.
The Electors meet in their respective States on the *second Monday in January* following their election, and vote by ballot for President and Vice-President; at the same time they make certificates of their vote and transmit the same to the President of the Senate.
The Senate and House of Representatives meet jointly on the *second Wednesday of February* next ensuing, and count the votes of the State Electors, when, if there is an election, the President of the Senate declares who are elected President and Vice-President.
In case there is no choice by the State Electors, the President is elected by the House of Representatives from the three candidates who received the most electoral votes for President, in which election the vote is taken by States, each State having but one vote, and a majority of all the States being necessary to a choice.
Term of Office.—Four years.
Eligibility.—A natural born citizen; resident of the United States fourteen years; minimum age 35 years.
Salary.—Fixed by law at $75,000 per year with an allowance of $25,000 for traveling expenses.
Powers and Duties of the President:—
Commander-in-Chief of the Army and Navy.
Communicates with Congress by message.
Approves or disapproves Acts of Congress.
Makes treaties with advice and consent of the Senate.
Appoints Public Officers with the advice and consent of the Senate.
Commissions Public Officers of the United States.
Grants reprieves and pardons for offenses against the United States.
The Vice-President:—
Elected by State Electors the same as the President; or
By the Senate, in case there is no choice by the State Electors.
Term of Office, — same as for the President.
Eligibility, — same as required of the President.
Salary — fixed by law at $12,000 per year.
The Presidential Succession:—In case of the removal, death, resignation, or inability
Of the President, the Vice-President takes the President's place.
Of both President and Vice-President, the heads of the Executive Departments succeed to

the Presidency in the order in which the Executive Departments are named below; but such officer must be constitutionally eligible to the Presidency, must have been appointed to the cabinet by the advice and with the consent of the Senate, and be not under impeachment. The Secretaries of Agriculture, Commerce, and Labor are ineligible to the presidency by reason of the fact that these three cabinet offices were created subsequent to the passage of the act of the forty-ninth Congress in which provision was made for the presidential succession.

The Executive Departments

Department of State.— Has charge of foreign affairs.
Treasury Department.— Has charge of fiscal affairs.
Department of War.— Has charge of the Army and military affairs.
Department of Justice.— Has charge of the legal affairs of the Government.
Post-office Department.— Has charge of postal affairs.
Navy Department.— Has charge of the Navy and Naval affairs.
Department of the Interior.— Has charge of domestic affairs, including public lands, pensions, patents, Bureau of Education, etc.
Department of Agriculture.— Has charge of agricultural affairs, including Weather Bureau, etc.
Department of Commerce.— Has charge of domestic and foreign affairs, relating to commerce, transportation, etc.
Department of Labor.— Has charge of immigration, naturalization, children's bureau and labor affairs.

The Cabinet

Composed of the Heads of the Executive Departments.
Appointed by the President with the advice and consent of the Senate.
Salary.— All cabinet members, $12,000 annually.

The President and Legislation

Acts of Congress become laws:—
When signed (approved) by the President; or,
By his failure to make objections in writing (veto) within ten days after any act is submitted to him, unless Congress by adjournment within that time prevents its return; but
Congress has power to pass a law over the President's veto by a vote of two-thirds of each House.

THE JUDICIAL DEPARTMENT

Judges of the United States Courts

Appointed by the President with the advice and consent of the Senate.
Tenure of Office.— During life or good behavior; but may retire on full salary after reaching the age of seventy years, and after ten years' service on the bench.

The Supreme Court of the United States

Members.— A Chief Justice and Eight Associate Justices.
Salaries.— Chief Justice, $15,000; Associate Justices, each, $14,500.
Terms of Court.— One each year, beginning on the second Monday in October.
Original Jurisdiction:—In all cases affecting Ambassadors, Ministers and Consuls, and in all cases in which a State is a party.
Appellate Jurisdiction:— In cases of law and equity where the Inferior Courts have original jurisdiction, with such exceptions and regulations as Congress has made.
The Chief Justice.— Presides over the Senate when it sits as a Court of Impeachment for the trial of the President.

Inferior Courts

Jurisdiction:—
In cases between citizens of different States.
In cases in which the United States is a party.
In cases of admiralty and maritime jurisdiction.
In trials for crimes against the United States; but the trial of crimes must be by jury, and must be held in the State where the crime was committed.
Appeals to the Supreme Court may be had in all cases of law and equity, with such exceptions and regulations as Congress has made.

Kinds of Inferior Courts

United States Circuit Courts of Appeals:—
Organized in 1891 to relieve the United States Supreme Court in Appellate Cases.
Number.— One in each Judicial Circuit. Salary of Circuit Judge.— $8,500 per year.
Members.— Three judges: the Chief Justice, the Associate Justice assigned to the circuit, or any Circuit or District Judge within the circuit is competent to sit.
United States District Courts:—
Number of Districts.— One or more in each State. At present there are seventy-nine Judicial Districts, exclusive of non-contiguous territory.
Salary of District Judge.— Fixed by law at $7,500 per year.

United States Court of Claims:—
Jurisdiction.—Claims against the United States, including those referred to it by Congress.
Members.—One Chief Justice and four Associate Justices.
Salaries.—Chief Justice, $8,000; Associate Justices, each $7,500.

United States Court of Customs Appeals:—
Jurisdiction.—Cases involving appeals from customs duties.
Members.—One Chief Justice and four Associate Justices.
Salaries.—Fixed by law at $7,000 per year.

United States Territorial Courts:—
For the District of Columbia there is a Supreme Court with a Chief Justice and five Associate Justices. For Alaska there are four District Courts; for Hawaii, a Supreme Court with a Chief Justice and two Associate Justices, five Circuit Courts, and two District Courts; for Porto Rico, a Supreme Court with a Chief Justice and four Associate Justices, and one District Court.

Department of State. The Secretary of State is charged, under the direction of the President, with the duties appertaining to correspondence with the public ministers and the consuls of the United States, and with the representatives of foreign powers accredited to the United States; and to negotiations of whatever character relating to the foreign affairs of the United States. He is also the medium of correspondence between the President and the chief executives of the several states of the United States; he has the custody of the Great Seal of the United States, and countersigns and affixes such seal to all executive proclamations, to various commissions, and to warrants for the extradition of fugitives from justice. He is regarded as the first in rank among the members of the Cabinet. He is also the custodian of the treaties made with foreign States, and of the laws of the United States. He grants and issues passports, and exequaturs to foreign consuls in the United States are issued through his office. He publishes the laws and resolutions of Congress, amendments to the Constitution, and proclamations declaring the admission of new States.

SECRETARIES OF STATE

Presidents	Cabinet Officers	Residences	Appointed
Washington,	Thomas Jefferson,	Va.	1789
Washington,	Edmund Randolph,	Va.	1794
Washington,	Timothy Pickering,	Mass.	1795
Adams,	Timothy Pickering,	Mass.	1797
Adams,	John Marshall,	Va.	1800
Jefferson,	James Madison,	Va.	1801
Madison,	Robert Smith,	Md.	1809
Madison,	James Monroe,	Va.	1811
Monroe,	John Quincy Adams,	Mass.	1817
J. Q. Adams,	Henry Clay,	Ky.	1825
Jackson,	Martin Van Buren,	N. Y.	1829
Jackson,	Edward Livingston,	La.	1831
Jackson,	Louis McLane,	Del.	1833
Jackson,	John Forsyth,	Ga.	1834
Van Buren,	John Forsyth,	Ga.	1837
Harrison,	Daniel Webster,	Mass.	1841
Tyler,	Daniel Webster,	Mass.	1841
Tyler,	Hugh S. Legaré,	S. C.	1843
Tyler,	Abel P. Upshur,	Va.	1843
Tyler,	John C. Calhoun,	S. C.	1844
Polk,	James Buchanan,	Pa.	1845
Taylor,	John M. Clayton,	Del.	1849
Fillmore,	Daniel Webster,	Mass.	1850
Fillmore,	Edward Everett,	Mass.	1852
Pierce,	William L. Marcy,	N. Y.	1853
Buchanan,	Lewis Cass,	Mich.	1857
Buchanan,	Jeremiah S. Black,	Pa.	1860
Lincoln,	William H. Seward,	N. Y.	1861
Johnson,	William H. Seward,	N. Y.	1865
Grant,	Elihu B. Washburn,	Ill.	1869
Grant,	Hamilton Fish,	N. Y.	1869
Hayes,	William M. Evarts,	N. Y.	1877
Garfield,	James G. Blaine,	Me.	1881
Arthur,	F. T. Frelinghuysen,	N. J.	1881
Cleveland,	Thomas F. Bayard,	Del.	1885
B. Harrison,	James G. Blaine,	Me.	1889
B. Harrison,	John W. Foster,	Ind.	1892
Cleveland,	Walter Q. Gresham,	Ill.	1893
Cleveland,	Richard Olney,	Mass.	1895
McKinley,	John Sherman,	Ohio	1897
McKinley,	William R. Day,	Ohio	1898
McKinley,	John Hay,	Ohio	1898
Roosevelt,	John Hay,	Ohio	1901
Roosevelt,	Elihu Root,	N. Y.	1905
Roosevelt,	Robert Bacon,	N. Y.	1909
Taft,	Philander C. Knox,	Pa.	1909
Wilson,	William J. Bryan,	Neb.	1913
Wilson,	Robert Lansing,	N. Y.	1915
Wilson,	Bainbridge Colby,	N. Y.	1920
Harding,	Charles E. Hughes,	N. Y.	1921

Treasury Department. The Secretary of the Treasury is charged by law with the management of the national finances. He prepares plans for the improvement of the revenue and for the support of the public credit; superintends the collection of the revenue, and directs the forms of keeping and rendering public accounts and of making returns; grants warrants for all moneys drawn from the treasury in pursuance of appropriations made by law, and for the payment of moneys into the Treasury; and annually submits to congress estimates of the probable revenues and disbursements of the Government. He also controls the construction of public buildings; the coinage and printing of money; the administration of the Life-Saving, Revenue-Cutter, and the Public Health and Marine-Hospital branches of the public service.

The routine work of the Secretary's office is transacted in the offices of the Supervising Architect, Director of the Mint, Director of Engraving and Printing, Surgeon-General of the Public Health and Marine-Hospital Service, General Superintendent of the Life-Saving Service, and in the following divisions: Bookkeeping and warrants; appointments; customs; public moneys; loans and currency; revenue-cutter; stationery, printing, and blanks; mail and files; special agents, and miscellaneous.

SECRETARIES OF THE TREASURY

Presidents	Cabinet Officers	Residences	Appointed
Washington,	Alexander Hamilton,	N. Y.	1789
Washington,	Oliver Wolcott,	Ct.	1795

Presidents	Cabinet Officers	Residences	Appointed
Adams,	Oliver Wolcott,	Ct.	1797
Adams,	Samuel Dexter,	Mass.	1801
Jefferson,	Samuel Dexter,	Mass.	1801
Jefferson,	Albert Gallatin,	Pa.	1801
Madison,	Albert Gallatin,	Pa.	1809
Madison,	George W. Campbell,	Tenn.	1814
Madison,	Alexander J. Dallas,	Pa.	1814
Madison,	William H. Crawford,	Ga.	1816
Monroe,	William H. Crawford,	Ga.	1817
J. Q. Adams,	Richard Rush,	Pa.	1825
Jackson,	Samuel D. Ingham,	Pa.	1829
Jackson,	Louis McLane,	Del.	1831
Jackson,	William J. Duane,	Pa.	1833
Jackson,	Roger B. Taney,	Md.	1833
Jackson,	Levi Woodbury,	N. H.	1834
Van Buren,	Levi Woodbury,	N. H.	1837
Harrison,	Thomas Ewing,	Ohio	1841
Tyler,	Thomas Ewing,	Ohio	1841
Tyler,	Walter Forward,	Pa.	1841
Tyler,	John C. Spencer,	N. Y.	1843
Tyler,	George M. Bibb,	Ky.	1844
Polk,	Robert J. Walker,	Miss.	1845
Taylor,	William M. Meredith,	Pa.	1849
Fillmore,	Thomas Corwin,	Ohio	1850
Pierce,	James Guthrie,	Ky.	1853
Buchanan,	Howell Cobb,	Ga.	1857
Buchanan,	Philip F. Thomas,	Md.	1860
Buchanan,	John A. Dix,	N. Y.	1861
Lincoln,	Salmon P. Chase,	Ohio	1861
Lincoln,	William P. Fessenden,	Me.	1864
Lincoln,	Hugh McCulloch,	Ind.	1865
Johnson,	Hugh McCulloch,	Ind.	1865
Grant,	George S. Boutwell,	Mass.	1869
Grant,	Wm. A. Richardson,	Mass.	1873
Grant,	Benjamin H. Bristow,	Ky.	1874
Grant,	Lot M. Morrill,	Me.	1876
Hayes,	John Sherman,	Ohio	1877
Garfield,	William Windom,	Minn.	1881
Arthur,	Charles J. Folger,	N. Y.	1881
Arthur,	Walter Q. Gresham,	Ind.	1884
Arthur,	Hugh McCulloch,	Ind.	1884
Cleveland,	Daniel Manning,	N. Y.	1885
Cleveland,	Charles S. Fairchild,	Ind.	1887
B. Harrison,	William Windom,	Minn.	1889
B. Harrison,	Charles Foster,	Ohio	1891
Cleveland,	John G. Carlisle,	Ky.	1893
McKinley,	Lyman J. Gage,	Ill.	1897
Roosevelt,	Lyman J. Gage,	Ill.	1901
Roosevelt,	Leslie M. Shaw,	Ia.	1902
Roosevelt,	George B. Cortelyou,	N. Y.	1907
Taft,	Franklin MacVeagh,	Ill.	1909
Wilson,	William G. McAdoo,	N. Y.	1913
Wilson,	Carter Glass,	Va.	1918
Wilson,	David F. Houston,	Mo.	1920
Harding,	Andrew W. Mellon,	Pa.	1921

War Department. The Secretary of War is head of the War Department, and performs such duties as are required of him by law or may be enjoined upon him by the President.

He is charged by law with the supervision of all estimates of appropriations for the expenses of the Department, including the military establishment; of all purchases of army supplies; of all expenditures for the support, transportation, and maintenance of the army, and of such expenditures of a civil nature as may be placed by Congress under his direction.

He also has supervision of the United States Military Academy at West Point, of military education in the army, and of the Board of Ordnance and Fortification.

He has charge of all matters relating to national defense and seacoast fortifications, army ordnance, river and harbor improvements, the prevention of obstruction to navigation, and the establishment of harbor lines, and all plans and locations of bridges authorized by Congress to be constructed over the navigable waters of the United States require his approval. He also has charge of the establishment of military posts, and of all matters relating to leases, revocable licenses, and all other privileges upon lands under the control of the War Department.

SECRETARIES OF WAR

Presidents	Cabinet Officers	Residences	Appointed
Washington,	Henry Knox,	Mass.	1789
Washington,	Timothy Pickering,	Mass.	1795
Washington,	James McHenry,	Md.	1796
Adams,	James McHenry,	Md.	1797
Adams,	John Marshall,	Va.	1800
Adams,	Samuel Dexter,	Mass.	1800
Adams,	Roger Griswold,	Ct.	1801
Jefferson,	Henry Dearborn,	Mass.	1801
Madison,	William Eustis,	Mass.	1809
Madison,	John Armstrong,	N. Y.	1813
Madison,	James Monroe,	Va.	1814
Madison,	William H. Crawford,	Ga.	1815
Monroe,	Isaac Shelby,	Ky.	1817
Monroe,	Geo. Graham (*ad in.*),	Va.	1816
Monroe,	John C. Calhoun,	S. C.	1817
J. Q. Adams,	James Barbour,	Va.	1825
J. Q. Adams,	Peter B. Porter,	N. Y.	1828
Jackson,	John H. Eaton,	Tenn.	1829
Jackson,	Lewis Cass,	Ohio	1831
Jackson,	Benjamin F. Butler,	N. Y.	1836
Van Buren,	Joel R. Poinsett,	S. C.	1837
Harrison,	John Bell,	Tenn.	1841
Tyler,	John Bell,	Tenn.	1841
Tyler,	John McLean,	Ohio	1841
Tyler,	John C. Spencer,	N. Y.	1841
Tyler,	James M. Porter,	Pa.	1843
Tyler,	William Wilkins,	Pa.	1844
Polk,	William L. Marcy,	N. Y.	1845
Taylor,	George W. Crawford,	Ga.	1849
Taylor,	Edward Bates,	Mo.	1850
Fillmore,	Charles M. Conrad,	La.	1850
Pierce,	Jefferson Davis,	Miss.	1853
Buchanan,	John B. Floyd,	Va.	1857
Buchanan,	Joseph Holt,	Ky.	1861
Lincoln,	Simon Cameron,	Pa.	1861
Lincoln,	Edwin M. Stanton,	Ohio	1862
Johnson,	Edwin M. Stanton,	Ohio	1865
Johnson,	U. S. Grant (*ad in.*),	Ill.	1867
Johnson,	Lor. Thomas (*ad in.*),		1868
Johnson,	John M. Schofield,	N. Y.	1868
Grant,	John A. Rawlins,	Ill.	1869
Grant,	William T. Sherman,	Ohio	1869
Grant,	William W. Belknap,	Ia.	1869
Grant,	Alphonso Taft,	Ohio	1876
Grant,	James Don. Cameron,	Pa.	1876
Hayes,	George W. McCrary,	Ia.	1877
Hayes,	Alexander Ramsey,	Minn.	1879
Garfield,	Robert T. Lincoln,	Ill.	1881
Arthur,	Robert T. Lincoln,	Ill.	1881
Cleveland,	William C. Endicott,	Mass.	1885
B. Harrison,	Redfield Proctor,	Vt.	1889
B. Harrison,	Stephen B. Elkins,	W.Va.	1891
Cleveland,	Daniel S. Lamont,	N. Y.	1893
McKinley,	Russell A. Alger,	Mich.	1897
McKinley,	Elihu Root,	N. Y.	1899
Roosevelt,	Elihu Root,	N. Y.	1901
Roosevelt,	William H. Taft,	Ohio	1904
Roosevelt,	Luke E. Wright,	Tenn.	1908
Taft,	J. M. Dickinson,	Tenn.	1909
Taft,	Henry L. Stimson,	N. Y.	1911
Wilson,	Lindley M. Garrison,	N. J.	1913
Wilson,	Newton D. Baker,	Ohio	1916
Harding,	John W. Weeks,	Mass.	1921

Department of Justice. The Attorney-General is the head of the Department of Justice and the chief law officer of the Government. He represents the United States in matters involving legal questions; he gives his advice and opinion, when they are required by the President or by the heads of the other Executive Departments, on questions of law arising in the administration of their respective Departments; he appears in the Supreme Court of the United States in cases of especial gravity and importance; he exercises a general superintendence and direction over United States attorneys and marshals in all judicial districts in the States

and Territories; and he provides special counsel for the United States whenever required by any Department of the Government.

ATTORNEYS-GENERAL

Presidents	Cabinet Officers	Residences	Appointed
Washington,	Edmund Randolph,	Va.	1789
Washington,	William Bradford,	Pa.	1794
Washington,	Charles Lee,	Va.	1795
Adams,	Charles Lee,	Va.	1797
Adams,	Theophilus Parsons,	Mass.	1801
Jefferson,	Levi Lincoln,	Mass.	1801
Jefferson,	Robert Smith,	Md.	1805
Jefferson,	John Breckinridge,	Ky.	1805
Jefferson,	Cæsar A. Rodney,	Del.	1807
Madison,	Cæsar A. Rodney,	Del.	1809
Madison,	William Pinkney,	Md.	1811
Madison,	Richard Rush,	Pa.	1814
Monroe,	Richard Rush,	Pa.	1817
Monroe,	William Wirt,	Va.	1817
J. Q. Adams,	William Wirt,	Va.	1825
Jackson,	John McP. Berrien,	Ga.	1829
Jackson,	Roger B. Taney,	Md.	1831
Jackson,	Benjamin F. Butler,	N. Y.	1833
Van Buren,	Benjamin F. Butler,	N. Y.	1837
Van Buren,	Felix Grundy,	Tenn.	1838
Van Buren,	Henry D. Gilpin,	Pa.	1840
Harrison,	John J. Crittenden,	Ky.	1841
Tyler,	John J. Crittenden,	Ky.	1841
Tyler,	Hugh S. Legaré,	S. C.	1841
Tyler,	John Nelson,	Md.	1843
Polk,	John Y. Mason,	Va.	1845
Polk,	Nathan Clifford,	Me.	1846
Polk,	Isaac Toucey,	Ct.	1848
Taylor,	Reverdy Johnson,	Md.	1849
Fillmore,	John J. Crittenden,	Ky.	1850
Pierce,	Caleb Cushing,	Mass.	1853
Buchanan,	Jeremiah S. Black,	Pa.	1857
Buchanan,	Edwin M. Stanton,	Ohio	1860
Lincoln,	Edward Bates,	Mo.	1861
Lincoln,	Titian J. Coffey (*advn.*),	Pa.	1863
Lincoln,	James Speed,	Ky.	1864
Johnson,	James Speed,	Ky.	1865
Johnson,	Henry Stanbery,	Ohio	1866
Johnson,	William M. Evarts,	N. Y.	1868
Grant,	Ebenezer R. Hoar,	Mass.	1869
Grant,	Amos T. Ackerman,	Ga.	1870
Grant,	George H. Williams,	Ore.	1871
Grant,	Edwards Pierrepont,	N. Y.	1875
Grant,	Alphonso Taft,	Ohio	1876
Hayes,	Charles Devens,	Mass.	1877
Garfield,	Wayne MacVeagh,	Pa.	1881
Arthur,	Benjamin H. Brewster,	Pa.	1881
Cleveland,	Augustus H. Garland,	Ark.	1885
B. Harrison,	William H. H. Miller,	Ind.	1889
Cleveland,	Richard Olney,	Mass.	1893
Cleveland,	Judson Harmon,	Ohio	1895
McKinley,	Joseph McKenna,	Cal.	1897
McKinley,	John W. Griggs,	N. J.	1898
McKinley,	Philander C. Knox,	Pa.	1901
Roosevelt,	Philander C. Knox,	Pa.	1901
Roosevelt,	William H. Moody,	Mass.	1904
Roosevelt,	Charles J. Bonaparte,	Md.	1906
Taft,	George W. Wickersham,	N. Y.	1909
Wilson,	James C. McReynolds,	Tenn.	1913
Wilson,	Thomas W. Gregory,	Texas	1914
Wilson,	A. Mitchell Palmer,	Pa.	1919
Harding,	Harry M. Daugherty,	Ohio	1921

Department of the Interior. The Secretary of the Interior is charged with the supervision of public business relating to patents for inventions; pensions and bounty lands; the public lands and surveys; the Indians; education; the Geological Survey and Reclamation Service; the Hot Springs Reservation, Arkansas; Yellowstone National Park, Wyoming, and the Yosemite, Sequoia, and General Grant parks, California, and other national parks; forest reservations; distribution of appropriations for agricultural and mechanical colleges in the States and Territories; the custody and distribution of certain public documents; and supervision of certain hospitals and eleemosynary institutions in the District of Columbia.

SECRETARIES OF THE INTERIOR

Presidents	Cabinet Officers	Residences	Appointed
Taylor,	Thomas Ewing,	Ohio	1849
Fillmore,	James A. Pearce,	Md.	1850
Fillmore,	Thos. M. T. McKernon,	Pa.	1850
Fillmore,	Alexander H. H. Stuart,	Va.	1850
Pierce,	Robert McClelland,	Mich.	1853
Buchanan,	Jacob Thompson,	Miss.	1857
Lincoln,	Caleb B. Smith,	Ind.	1861
Lincoln,	John P. Usher,	Ind.	1863
Johnson,	John P. Usher,	Ind.	1865
Johnson,	James Harlan,	Iowa	1865
Johnson,	Orville H. Browning,	Ill.	1866
Grant,	Jacob D. Cox,	Ohio	1869
Grant,	Columbus Delano,	Ohio	1870
Grant,	Zachariah Chandler,	Mich.	1875
Hayes,	Carl Schurz,	Mo.	1877
Garfield,	Samuel J. Kirkwood,	Iowa	1881
Arthur,	Henry M. Teller,	Col.	1882
Cleveland,	Lucius Q. C. Lamar,	Miss.	1885
Cleveland,	William F. Vilas,	Wis.	1888
B. Harrison,	John W. Noble,	Mo.	1889
Cleveland,	Hoke Smith,	Ga.	1893
Cleveland,	David R. Francis,	Mo.	1896
McKinley,	Cornelius N. Bliss,	N. Y.	1897
McKinley,	Ethan A. Hitchcock,	Mo.	1898
Roosevelt,	Ethan A. Hitchcock,	Mo.	1901
Roosevelt,	James R. Garfield,	Ohio	1907
Taft,	Richard A. Ballinger,	Wash.	1909
Taft,	Walter L. Fisher,	Ill.	1911
Wilson,	Franklin K. Lane,	Cal.	1913
Wilson,	John Barton Payne,	Ill.	1920
Harding,	Albert B. Fall,	N. M.	1921

Post-office Department. The Postmaster-General has the direction and management of the Post-office Department. He appoints all officers and employees of the Department, except the four Assistant Postmasters-General and the purchasing agent, who are appointed by the President, by and with the advice and consent of the Senate; appoints all postmasters whose compensation does not exceed $1,000; makes postal treaties with foreign governments; and awards and executes contracts.

POSTMASTERS-GENERAL

Presidents	Cabinet Officers	Residences	Appointed
Washington,	Samuel Osgood,	Mass.	1789
Washington,	Timothy Pickering,	Mass.	1791
Washington,	Joseph Habersham,	Ga.	1795
Adams,	Joseph Habersham,	Ga.	1797
Jefferson,	Joseph Habersham,	Ga.	1801
Jefferson,	Gideon Granger,	Ct.	1801
Madison,	Gideon Granger,	Ct.	1809
Madison,	Return J. Meigs, Jr.,	Ohio	1814
Monroe,	Return J. Meigs, Jr.,	Ohio	1817
Monroe,	John McLean,	Ohio	1823
J. Q. Adams,	John McLean,	Ohio	1825
Jackson,	William T. Barry,	Ky.	1829
Jackson,	Amos Kendall,	Ky.	1835
Van Buren,	Amos Kendall,	Ky.	1837
Van Buren,	John M. Niles,	Ct.	1840
Harrison,	Francis Granger,	N. Y.	1841
Tyler,	Francis Granger,	N. Y.	1841
Tyler,	Charles A. Wickliffe,	Ky.	1841
Polk,	Cave Johnson,	Tenn.	1845
Taylor,	Jacob Collamer,	Vt.	1849
Fillmore,	Nathan K. Hall,	N. Y.	1850
Fillmore,	Samuel D. Hubbard,	Ct.	1852
Pierce,	James Campbell,	Pa.	1853
Buchanan,	Aaron V. Brown,	Tenn.	1857
Buchanan,	Joseph Holt,	Ky.	1859
Buchanan,	Horatio King,	Me.	1861
Lincoln,	Montgomery Blair,	Md.	1861
Lincoln,	William Dennison,	Ohio	1864
Johnson,	William Dennison,	Ohio	1865
Johnson,	Alexander W. Randall,	Wis.	1866
Grant,	John A. J. Cresswell,	Md.	1869
Grant,	James W. Marshall,	Va.	1874

Presidents	Cabinet Officers	Residences	Appointed
Grant,	Marshall Jewell,	Ct.	1874
Grant,	James N. Tyner,	Ind.	1876
Hayes,	David McK. Key,	Tenn.	1877
Hayes,	Horace Maynard,	Tenn.	1880
Garfield,	Thomas L. James,	N. Y.	1881
Arthur,	Timothy O. Howe,	Wis.	1881
Arthur,	Walter Q. Gresham,	Ind.	1883
Arthur,	Frank Hatton,	Ia.	1884
Cleveland,	William F. Vilas,	Wis.	1885
Cleveland,	Don M. Dickinson,	Mich.	1888
B. Harrison,	John Wanamaker,	Pa.	1889
Cleveland,	Wilson S. Bissell,	N. Y.	1893
Cleveland,	William L. Wilson,	W.Va.	1895
McKinley,	James A. Gary,	Md.	1897
McKinley,	Charles Emory Smith,	Pa.	1898
Roosevelt,	Charles Emory Smith,	Pa.	1901
Roosevelt,	Henry C. Payne,	Wis.	1902
Roosevelt,	Robert J. Wynne,	Pa.	1904
Roosevelt,	George B. Cortelyou,	N. Y.	1905
Roosevelt,	George Von L. Meyer,	Mass.	1907
Taft,	Frank H. Hitchcock,	Mass.	1909
Wilson,	Albert S. Burleson,	Tex.	1913
Harding,	Will H. Hays,	Ind.	1921
Harding,	Hubert Work,	Colo.	1922

Navy Department. The Secretary of the Navy performs such duties as the President may assign him, and has the general superintendence of construction, manning, armament, equipment, and employment of vessels of war.

SECRETARIES OF THE NAVY

Presidents	Cabinet Officers	Residences	Appointed
Adams,	Benjamin Stoddert,	Md.	1798
Jefferson,	Benjamin Stoddert,	Md.	1801
Jefferson,	Robert Smith,	Md.	1801
Jefferson,	Jacob Crowninshield,	Mass.	1805
Madison,	Paul Hamilton,	S. C.	1809
Madison,	William Jones,	Pa.	1813
Madison,	B. W. Crowninshield,	Mass.	1814
Monroe,	B. W. Crowninshield,	Mass.	1817
Monroe,	Smith Thompson,	N. Y.	1818
Monroe,	Samuel L. Southard,	N. J.	1823
J. Q. Adams,	Samuel L. Southard,	N. J.	1825
Jackson,	John Branch,	N. C.	1829
Jackson,	Levi Woodbury,	N. H.	1831
Jackson,	Mahlon Dickerson,	N. J.	1834
Van Buren,	Mahlon Dickerson,	N. J.	1837
Van Buren,	James K. Paulding,	N. Y.	1838
Harrison,	George E. Badger,	N. C.	1841
Tyler,	George E. Badger,	N. C.	1841
Tyler,	Abel P. Upshur,	Va.	1841
Tyler,	David Henshaw,	Mass.	1843
Tyler,	Thomas W. Gilmer,	Va.	1844
Tyler,	John Y. Mason,	Va.	1844
Polk,	George Bancroft,	Mass.	1845
Polk,	John Y. Mason,	Va.	1846
Taylor,	William B. Preston,	Va.	1849
Fillmore,	William A. Graham,	N. C.	1850
Fillmore,	John P. Kennedy,	Md.	1852
Pierce,	James C. Dobbin,	N. C.	1853
Buchanan,	Isaac Toucey,	Ct.	1857
Lincoln,	Gideon Welles,	Ct.	1861
Johnson,	Gideon Welles,	Ct.	1865
Grant,	Adolph E. Borie,	Pa.	1869
Grant,	George M. Robeson,	N. J.	1869
Hayes,	Richard W. Thompson,	Ind.	1877
Hayes,	Nathan Goff, Jr.,	W.Va.	1881
Garfield,	William H. Hunt,	La.	1881
Arthur,	William E. Chandler,	N. H.	1882
Cleveland,	William C. Whitney,	N. Y.	1885
B. Harrison,	Benjamin F. Tracy,	N. Y.	1889
Cleveland,	Hilary A. Herbert,	Ala.	1893
McKinley,	John D. Long,	Mass.	1897
Roosevelt,	John D. Long,	Mass.	1901
Roosevelt,	William H. Moody,	Mass.	1902
Roosevelt,	Paul Morton,	N. Y.	1904
Roosevelt,	Charles J. Bonaparte,	Md.	1905
Roosevelt,	Victor H. Metcalf,	Cal.	1906
Roosevelt,	Truman H. Newberry,	Mich.	1908
Taft,	George Von L. Meyer,	Mass.	1909
Wilson,	Josephus Daniels,	N. C.	1913
Harding,	Edwin Denby,	Mich.	1921

Department of Agriculture. The Secretary exercises personal supervision of public business relating to the agricultural industry. He appoints all the officers and employees of the Department with the exception of the Assistant Secretary and the Chief of the Weather Bureau, who are appointed by the President, and directs the management of all the divisions, offices, and bureaus embraced in the Department. He sustains an advisory relation to the agricultural experiment stations deriving support from the National Treasury; has control of the quarantine stations for imported cattle, of interstate quarantine rendered necessary by sheep and cattle diseases, and of the inspection of cattle-carrying vessels; and directs the inspection of domestic meats and of all imported food products. He is also charged with enforcing the laws prohibiting the transportation of game illegally killed and excluding from importation certain noxious animals.

SECRETARIES OF AGRICULTURE

Presidents	Cabinet Officers	Residences	Appointed
Cleveland,	Norman J. Colman,	Mo.	1889
B. Harrison,	Jeremiah M. Rusk,	Wis.	1889
Cleveland,	J. Sterling Morton,	Neb.	1893
McKinley,	James Wilson,	Ia.	1897
Roosevelt,	James Wilson,	Ia.	1901
Taft,	James Wilson,	Ia.	1909
Wilson,	David F. Houston,	Mo.	1913
Wilson,	Edwin T. Meredith,	Ia.	1920
Harding,	Henry C. Wallace,	Ia.	1921

Department of Commerce. The Secretary of Commerce is charged with the work of promoting the commerce of the United States, and its mining, manufacturing, shipping, fishery, and transportation interests. His duties also comprise the investigation of the organization and management of corporations (excepting railroads) engaged in interstate commerce; the administration of the Light-House Service, and the aid and protection to shipping thereby; the taking of the census, and the collection and publication of statistical information connected therewith; the making of coast and geodetic surveys; the collecting of statistics relating to foreign and domestic commerce; the inspection of steamboats, and the enforcement of laws relating thereto for the protection of life and property; the supervision of the fisheries as administered by the Federal Government; the supervision and control of the Alaskan fur-seal, salmon, and other fisheries; the jurisdiction over merchant vessels and seamen of the United States; the custody, construction, maintenance, and application of standards of weights and measurements; and the gathering and supplying of information regarding industries and markets.

SECRETARIES OF COMMERCE*

Presidents	Cabinet Officers	Residences	Appointed
Roosevelt,	George B. Cortelyou,	N. Y.	1903
Roosevelt,	Victor H. Metcalf,	Cal.	1904
Roosevelt,	Oscar S. Straus,	N. Y.	1906
Taft,	Charles Nagel,	Mo.	1909
Wilson,	William C. Redfield,	N. Y.	1913
Wilson,	Joshua W. Alexander,	Mo.	1919
Harding,	Herbert C. Hoover,	Cal.	1921

*Prior to 1913 these officers were known as Secretaries of Commerce and Labor.

Department of Labor. The Secretary of Labor is charged to foster, promote, and develop the welfare of the wage-earners of the United States, to improve the working conditions, and to advance their opportunities for profitable employment; to gather and publish information regarding labor interests, and to act as mediator in labor disputes. He also has supervision over the bureaus of immigration and naturalization.

SECRETARIES OF LABOR

Presidents	Cabinet Officers	Residences	Appointed
Wilson, . . .	William B. Wilson, . .	Pa.	1913
Harding, . .	James J. Davis, . . .	Pa.	1921

Speaker of the House of Representatives. The title of the presiding officer of the House of Representatives. He is elected by the members of that body.

SPEAKERS OF THE HOUSE

Name	State	Born	Died	Congress	Years
F. A. Muhlenberg,	Pa.	1750	1801	1	1789–91
Jonathan Trumbull,	Conn.	1740	1809	2	1791–93
F. A. Muhlenberg,	Pa.	1750	1801	3	1793–95
Jonathan Dayton, .	N. J.	1760	1824	4, 5	1795–99
Theo. Sedgwick, . .	Mass.	1746	1813	6	1799–01
Nathaniel Macon, .	N. C.	1758	1837	7–9	1801–07
Joseph B. Varnum,	Mass.	1750	1821	10, 11	1807–11
Henry Clay, . . .	Ky.	1777	1852	12, 13	1811–14
Langdon Cheves, .	S. C.	1776	1857	13	1814–15
Henry Clay, . . .	Ky.	1777	1852	14–16	1815–20
John W. Taylor, .	N. Y.	1784	1854	16	1820–21
Philip P. Barbour,	Va.	1783	1841	17	1821–23
Henry Clay, . . .	Ky.	1777	1852	18	1823–25
John W. Taylor, .	N. Y.	1784	1854	19	1825–27
Andrew Stevenson,	Va.	1784	1857	20–23	1827–34
John Bell, ...	Tenn.	1797	1869	23	1834–35
James K. Polk, . .	Tenn.	1795	1849	24, 25	1835–39
R. M. T. Hunter, .	Va.	1809	1887	26	1839–41
John White, . . .	Ky.	1805	1845	27	1841–43
John W. Jones, . .	Va.	1791	1848	28	1843–45
John W. Davis, . .	Ind.	1799	1859	29	1845–47
Robert C. Winthrop,	Mass.	1809	1894	30	1847–49
Howell Cobb, . . .	Ga.	1815	1868	31	1849–51
Linn Boyd, . . .	Ky.	1800	1859	32, 33	1851–55
Nathaniel P. Banks,	Mass.	1816	1894	34	1855–57
James L. Orr, . .	S. C.	1822	1873	35	1857–59
Wm. Pennington, .	N. J.	1796	1862	36	1859–61
Galusha A. Grow, .	Pa.	1823	1907	37	1861–63
Schuyler Colfax, .	Ind.	1823	1885	38–40	1863–69
James G. Blaine, .	Me.	1830	1893	41–43	1869–75
Michael C. Kerr, .	Ind.	1827	1876	44	1875–76
Samuel J. Randall,	Pa.	1828	1890	44–46	1876–81
Joseph W. Keifer, .	Ohio	1836	....	47	1881–83
John G. Carlisle, .	Ky.	1835	1910	48–50	1883–89
Thomas B. Reed, .	Me.	1839	1902	51	1889–91
Charles F. Crisp, .	Ga.	1845	1896	52, 53	1891–95
Thomas B. Reed, .	Me.	1839	1902	54, 55	1895–99
David B. Henderson,	Iowa	1840	1906	56, 57	1899–03
Joseph G. Cannon, .	Ill.	1836	....	58–61	1903–11
Champ Clark, . .	Mo.	1850	1921	62–65	1911–19
Fred. H. Gillett, .	Mass.	1851	....	66–	1919–

JUSTICES OF THE SUPREME COURT

(Names of the Chief Justices in *italics*.)

Name	Service		Born	Died
	Term	Yrs		
John Jay, N. Y., ...	1789–1795	6	1745	1829
John Rutledge, S. C., . .	1789–1791	2	1739	1800
William Cushing, Mass., .	1789–1810	21	1733	1810
James Wilson, Pa., . . .	1789–1798	9	1742	1798
John Blair, Va., ...	1789–1796	7	1732	1800
Robert H. Harrison, Md.,	1789–1790	1	1745	1790
James Iredell, N. C., . .	1790–1799	9	1751	1799
Thomas Johnson, Md., .	1791–1793	2	1732	1819
William Paterson, N. J., .	1793–1806	13	1745	1806
John Rutledge, S. C., . .	1795–1795	..	1739	1800
Samuel Chase, Md., . .	1796–1811	15	1741	1811
Oliver Ellsworth, Ct., . .	1796–1800	4	1745	1807
Bushrod Washington, Va.,	1798–1829	31	1762	1829
Alfred Moore, N. C., . .	1799–1804	5	1755	1810
John Marshall, Va., . .	1801–1835	34	1755	1835
William Johnson, S. C., .	1804–1834	30	1771	1834
Brock. Livingston, N. Y.,	1806–1823	17	1757	1823
Thomas Todd, Ky., . .	1807–1826	19	1765	1826
Joseph Story, Mass., . .	1811–1845	34	1779	1845
Gabriel Duval, Md., . .	1811–1835	25	1752	1844
Smith Thompson, N. Y.,	1823–1843	20	1767	1843
Robert Trimble, Ky., . .	1826–1828	2	1777	1828
John McLean, Ohio, . .	1829–1861	32	1785	1861
Henry Baldwin, Pa., . .	1830–1844	14	1779	1844
James M. Wayne, Ga., .	1835–1867	32	1790	1867
Roger B. Taney, Md., . .	1836–1864	28	1777	1864
Philip P. Barbour, Va., .	1836–1841	5	1783	1841
John Catron, Tenn., . .	1837–1865	28	1786	1865
John McKinley, Ala., . .	1837–1852	15	1780	1852
Peter V. Daniel, Va., . .	1841–1860	19	1785	1860
Samuel Nelson, N. Y., .	1845–1872	27	1792	1873
Levi Woodbury, N. H., .	1845–1851	6	1789	1851
Robert C. Grier, Pa., . .	1846–1870	23	1794	1870
Benj. R. Curtis, Mass., .	1851–1857	6	1809	1874
John A. Campbell, Ala., .	1853–1861	8	1811	1889
Nathan Clifford, Me., . .	1858–1881	23	1803	1881
Noah H. Swayne, Ohio, .	1862–1881	20	1804	1884
Samuel F. Miller, Iowa, .	1862–1890	28	1816	1890
David Davis, Ill., ...	1862–1877	15	1815	1886
Stephen J. Field, Cal., .	1863–1897	34	1816	1899
Salmon P. Chase, Ohio, .	1864–1873	9	1808	1873
William Strong, Pa., . .	1870–1880	10	1808	1895
Joseph P. Bradley, N. J.,	1870–1892	22	1813	1892
Ward Hunt, N. Y., . . .	1872–1882	10	1811	1886
Morrison R. Waite, Ohio,	1874–1888	14	1816	1888
John M. Harlan, Ky., .	1877–1911	34	1833	1911
William B. Woods, Ga., .	1880–1887	7	1824	1887
Stanley Matthews, Ohio,	1881–1889	8	1824	1889
Horace Gray, Mass., . .	1881–1902	21	1828	1902
Samuel Blatchford, N. Y.,	1882–1893	11	1820	1893
Lucius Q. C. Lamar, Miss.,	1888–1893	5	1825	1893
Melville W. Fuller, Ill., .	1888–1910	22	1833	1910
David J. Brewer, Kan., .	1889–1910	21	1837	1910
Henry B. Brown, Mich.,	1890–1906	16	1836	1913
George Shiras, Jr., Pa., .	1892–1903	11	1832	....
Howell E. Jackson, Tenn.,	1893–1895	2	1832	1895
Edward D. White, La., .	1894–1921	27	1845	1921
Rufus W. Peckham, N. Y.,	1895–1909	14	1837	1909
Joseph McKenna, Cal., .	1898–....	..	1843	....
Oliver W. Holmes, Mass.,	1902–....	..	1841	....
William R. Day, Ohio, .	1903–....	..	1849	....
William H. Moody, . .	1906–1910	4	1853	1917
Horace H. Lurton, Tenn.,	1909–1914	5	1844	1914
Charles E. Hughes, N. Y.,	1910–1916	6	1862	....
Willis VanDevanter, Wyo.,	1910–....	..	1859	....
Joseph R. Lamar, Ga., .	1910–1916	6	1857	1916
Mahlon Pitney, N. J., .	1912–....	..	1858	....
Jas. C. McReynolds, Tenn.,	1914–....	..	1862	....
Louis D. Brandeis, Mass.,	1916–....	..	1856	....
John H. Clarke, Ohio, .	1916–....	..	1857	....
William H. Taft, Conn., .	1921–....	..	1857	....

Uruguay. The Republic of Uruguay declared its independence August 25, 1825. By its Constitution the legislative power is vested in a Parliament, composed of two Houses, the Senate and the Chamber of Representatives, which meet in annual session. In the interval of the session, a permanent committee of two senators and five members of the lower house assumes the executive power. The representatives are chosen for three years, in the proportion of one to every 12,000 inhabitants of male adults who can read and write. The senators are chosen by an electoral college, directly elected by the people. There is one senator for each department, chosen for six years, one-third retiring every two years. There are ninety representatives and nineteen

senators. The executive is given by the Constitution to the president of the Republic, elected for the term of four years. The president is assisted in his executive functions by a council of ministers divided into seven departments, namely, those of the interior and worship, foreign affairs, finance, war and marine, justice and public instruction, industry, labor and communications, and public works.

Utah. The original Constitution of 1895 is in force as since amended. The Legislature consists of a Senate and a House of Representatives; but the Constitution provides for the initiation of any desired legislation by the legal voters or such number of them as may be determined by law, and such voters may require any law passed by less than a two-thirds vote of each House of the Legislature to be submitted to the voters of the State before coming into effect. The Senate (in part renewed every two years) consists of eighteen members, elected for four years; the House of Representatives has forty-six members elected for two years. Bills may originate in either House. The House of Representatives may impeach; the Senate tries impeachments. Eligible to either House are citizens 25 years of age, three years resident in the State, and one year in the district next before the election. Amendments to the Constitution may be proposed in either branch of the Legislature, but to be embodied in the Constitution, they must be carried by a two-thirds vote of all the members of each House and ratified by a majority vote of the people. The chief executive power is vested in a governor elected for four years. He is commander-in-chief of the militia. With the consent of the Senate he has the appointment of various officials. The governor, justices of the Supreme Court, and attorney-general constitute a board of pardons. The governor has the power of veto but its exercise may be overridden by a two-thirds vote of all the members of each House. Other State officials are the secretary of state, auditor, the treasurer, the attorney-general, and the superintendent of public instruction, all elected for four years. There are twenty-seven counties in the State.

Venezuela. The Republic of Venezuela was formed in 1830, by secession from the other members of the Republic of Colombia. The Constitution in force is that of 1914. Legislative authority is vested in a congress of two chambers, the senate and the chamber of deputies. The former consists of forty members elected for three years, two for each state, Venezuelans by birth and over 30 years of age. The latter is constituted as follows: Each state chooses by direct election for three years one deputy, a Venezuelan by birth and over 21 years of age, for every 35,000 inhabitants, and one more for an excess of 15,000. The federal district and the territories which are sufficiently populous elect deputies in manner prescribed by law. Executive power is in the hands of the president and cabinet of ministers. The president is elected by congress and holds office for seven years; there is no restriction as to reelection. He must be a Venezuelan by birth and over 30 years of age. In case of temporary or permanent disability to act, the president may nominate any member of the cabinet to act in his place. The states are autonomous and politically equal. Each has a legislative assembly, a president and a general secretary. The cabinet consists of the ministers of the interior, foreign affairs, finance and public credit, war and marine, development, public works, public instruction.

Vermont. The Constitution in force at the time of admission was that of 1786. In 1793 a new Constitution was adopted which, with numerous amendments since made from time to time, is still in force. The State Legislature consists of a Senate and a House of Representatives having, the former thirty and the latter 246 members. Senators must be 30 years of age and Representatives 21. The governor is elected for two years. He exercises the chief executive power and appoints all State officers not otherwise provided for by law. He has power to pardon, or in certain cases only to reprieve; his veto can be overridden by a majority vote of each House. Other important officials are the lieutenant-governor, treasurer, and auditor. The state is divided into fourteen counties.

Virginia. The first Constitution of Virginia was adopted on June 29, 1776, and with little change it survived till recent years. The Constitution now in force was adopted by the Convention of 1902. It provides for a Legislature called the General Assembly, consisting of a Senate and a House of Delegates, the former containing not more than forty nor less than thirty-three members, and the latter not more than a hundred nor less than ninety. Senators are elected for four years, one-half retiring every two years. Eligible to either House are persons resident in the district and qualified to vote for members of the General Assembly, except paid office-holders of the State or of the Union. The executive power resides in a governor, elected for four years by the voters of the State. He must be 30 years of age, must have been a citizen of the United States for ten years, and have resided in the State for five years. He is not eligible for the succeeding term. He is required to take care that the laws are faithfully administered; he recommends the legislative measures which he considers necessary; is commander-in-chief of the military forces; has power to grant reprieves and pardons after conviction, but must report to the Legislature on each case. In legislation he has a limited power of veto, which may be overridden by a two-thirds majority of each House, if such majority includes a majority of the elected members. There is a lieutenant-governor, a secretary of the commonwealth, and a State treasurer, each of whom is elected for the same term and in the same manner as the governor. The auditor is appointed for four years by the two Houses sitting together.

Washington was admitted into the Union as a State in 1889. The Constitution of that year has been variously amended from time to time. Legislative authority is vested in a Legislature consisting of a Senate and a House of Representatives, the latter composed of not less than sixty-three nor more than ninety-nine members (actually ninety-seven in 1915), the number of Senators being not more than half nor less than one-third of that of members of the

House of Representatives (actually forty-one in 1915). The membership of both Houses is apportioned anew every five years according to the results of the federal decennial census and of the intervening decennial State census. Eligible for either house are citizens of the United States who are qualified voters in the districts for which the election is held. But members of the United States Congress and holders of United States or State offices are disqualified. The chief executive authority resides in a governor, chosen by the qualified electors of the State and holding office for four years. He is charged to watch over the faithful execution of the laws; he recommends legislative measures, communicating by message every session with the Legislature. He is commander-in-chief of the State military forces; he has pardoning powers as to the use of which he reports to the Legislature; he has a veto in legislation, but his veto may be overridden by a two-thirds majority of each House. He signs all commissions. In 1912 the Constitution was amended to provide for the initiative and referendum, for the recall of all elective public officers, except judges, and for a mandatory system of official publicity touching measures submitted to the electorate.

West Virginia. The Constitution framed and adopted in 1872, superseding the Constitution of 1862, as variously amended from time to time, is now in force. The Legislature consists of a Senate and a House of Delegates. The members of both Houses are elected by the general electors. The Senate is composed of thirty members elected for a term of four years in such a manner that half the Senate is renewed biennially. Senators must be at least 25 years of age and have been resident five years in the State and in the senatorial districts for which they are severally chosen. The House of Delegates consists of ninety-four members. Every bill passed by both Houses requires the assent of the governor, but if this is refused the bill may become law on being revoted by a majority in the Legislature. The executive department consists of a governor, secretary of state, superintendent of free schools, auditor, treasurer, and attorney-general, each elected for four years. The governor must be at least 30 years of age and is not eligible for reëlection. He is commander-in-chief of the State military establishment, convenes the Legislature in extra session, approves or disapproves all acts of the Legislature, fills vacant State offices by appointment, and is president of the board of public works.

Wisconsin was admitted to the Union in 1848. The Constitution of that year is in force, but has been frequently amended. The legislative power is vested in a Senate and an Assembly. The Senate consists of thirty-three members elected for a term of four years, only about one-half of the members being elected at one time. The Assembly consists of 100 members, elected for a term of two years, all of the members being elected at the same time. The powers of the two Houses as to appropriations and revenue bills are the same. Eligible to the Legislature are all males who are qualified electors in the district to be represented and who have resided one year within the State, except members of Congress and office holders under the United States. The chief executive authority in the State is vested in the governor, who is elected for two years and has the powers usually resident in State governors, including the limited veto and pardoning power. The secretary of state is elected for two years. Other important elective offices are those of lieutenant-governor, treasurer, attorney-general, superintendent of schools, and insurance commissioner. Among the more important appointive offices are the following: commissioner of labor and industrial statistics, appointed for four years, commissioner of banking, dairy and food commissioner, superintendent of public property, and adjutant-general. The railroad commission consisting of three members is appointed by the governor, with the consent of the Senate, for a term of six years. The tax commission is composed of three members similarly appointed for a term of eight years. The civil service commission is appointed for a term of six years, and the board of control for five years.

Wyoming was admitted into the Union as a State in 1890. The original Constitution, adopted in 1889, is still in force. Constitutional amendments proposed in either House of the Legislature, agreed to by a two-thirds vote of all the members of each House, and approved by a majority vote of the people, become part of the Constitution. The Legislature consists of a Senate of twenty-seven members, elected for four years (about one-half retiring every two years), and a House of Representatives of fifty-seven members elected for two years. Legislators must be citizens (Senators 25 and Representatives 21 years of age), and must have resided in the county or district one year next preceding the election. Revenue bills must originate in the House of Representatives. The Senate tries cases of impeachment brought by the other House. The chief executive officer of the State is the governor, elected for four years. He may appoint to offices not otherwise provided for by law, has a limited power of pardoning, etc., may call special sessions of the Legislature, and has a veto which may be overridden by a two-thirds vote of each House. Other officials elected for four years, are the secretary of state, auditor, treasurer, and superintendent of public instruction. The treasurer is not eligible for the succeeding term.

Zanzibar. The dominions of the Sultan of Zanzibar include only the islands of Zanzibar and Pemba, and the coast of the British East Africa up to ten miles inland. The Sultan is still the titular sovereign, under a British Protectorate. In October, 1891, a regular government was formed for Zanzibar. All accounts are now kept in English and Arabic, and are always open to the inspection of the British agent and consul-general, and no new undertakings or additional expenditure can be incurred without his consent. On February 1, 1892, Zanzibar was declared a free port, and it remained so until October 1, 1899. One court, His Britannic Majesty's, deals with all actions to which a British, or British protected, person or the subject of a foreign power is a party, and others; the sultan's local courts deal with cases between natives.

YOUNG WATT AND THE TEA KETTLE

INDUSTRY, INVENTION, COMMERCE

Adulteration. A term applied to the fraudulent mixture of articles of commerce, particularly food, drink, drugs, and seeds, with harmful or inferior ingredients. The chief objects of adulteration are to increase the weight or volume of the article, to give color which either makes a good article more pleasing to the eye or else disguises an inferior one, to substitute a cheaper form of the article, or to sell a substance from which the strength has been extracted, or to give it a false strength.

According to the Federal Food and Drugs act of 1906, a food is said to be adulterated under the following conditions: "First, if any substance has been mixed and packed with it, so as to reduce or lower or injuriously affect its quality or strength; second, if any substance has been substituted wholly or in part for the article; third, if any valuable constituent of the article has been wholly or in part abstracted; fourth, if it be mixed, colored, powdered, coated, or stained in a manner whereby damage or inferiority is concealed; fifth, if it contains any added poisonous or other added deleterious ingredient which may render such article injurious to health . . . . . when such products are ready for consumption; sixth, if it consists in whole or in part of a filthy, decomposed, or putrid animal or vegetable substance, whether manufactured or not, or if it is the product of a diseased animal or one that has died otherwise than by slaughter."

The term adulteration is to be distinguished from misbranding which is applied to false or misleading statements placed on the package or label concerning the contents, weight, place of manufacture, or qualities of the article.

The following are some of the more frequent forms of adulteration, many of which are not illegal, if the articles are correctly labeled.

Butter. Much inferior country butter and also superior grades which have become stale are subjected to a renovating process. Alkali is used to remove rancidity and the fat is then churned with fresh milk. Federal legislation has greatly lessened the selling of the product as fresh butter. However, when labeled "renovated butter" it may be manufactured and sold under Federal license. As a result of Federal and state legislation, the sale of oleomargarine and other artificial butters or butter substitutes as genuine butter has become infrequent.

Canned vegetables are generally free from adulteration. Being hermetically sealed, no artificial preservative is required, but artificial color is sometimes used in the case of tomatoes and with some imported products, such as peas. In canning sweet corn a small amount of sugar is sometimes used, but this must be specified on the label. The use of saccharin is prohibited.

Cheese. By removing the cream from milk and replacing the cream by some other fat, so-called "filled cheese" is made. When properly labeled, this product may be manufactured and sold under Federal license.

Cocoa and Chocolate. Various preparations of these have been mixed with starchy cereal products or ingredients, including wheat, rice, maize, arrowroot, and potato starch.

Coffee. In the ground state coffee is readily adulterated. Formerly chicory was widely used for this purpose, also ground peas, beans, wheat, barley, and various other materials. At the present time the chief offense in the coffee trade is misbranding; as, for example, the sale of coffee from Brazil as Java or Mocha.

Confectionery. Under Federal law candies are regarded as adulterated if they contain talc, barytes, terra alba, chrome yellow, or other mineral substances, poisonous color, flavor, or other ingredient harmful to health or any alcoholic liquor or narcotic drugs.

Flavoring Extracts. An extract of the tonka bean is often used in place of vanilla extract, and an entirely artificial vanillin much cheaper still is employed. Lemon and other extracts are easily adulterated with cheaper products.

Jellies, Jams, and Marmalades. In the cheapest forms of these products no fresh fruit is used. They consist entirely of a preparation made from dried apple peelings and cores and glucose, always artificially colored and sometimes artificially flavored. Recent laws have compelled their more correct labeling.

Lard. The adulteration of lard is now infrequent owing to the enactment of numerous state laws. However, cooking fats are extensively prepared by mixtures of cotton-seed oil, beef suet, and other substances, but they are generally sold as compound lards or lard substitutes. In order to overcome the excessive softness of the lard, particularly in warm climates, high-melting stearin from beef fat is often added.

Milk is most frequently adulterated by adding water or by removing the cream. Further, the added water may be a source of typhoid fever or other diseases. Milk is often treated with chemical preservatives, usually formaldehyde, enabling the dealers to keep and ship milk without the use of refrigeration. To some extent it also overcomes lack of cleanliness in the dairy. The practise of adding preservatives to milk is indefensible and is steadily decreasing.

Spices are often adulterated with various ground cereals, nut shells, and sawdust.

Syrups and Strained Honey are frequently mixed with glucose or corn syrup.

Vinegar. In the United States vinegar is supposed to be made from apple juice without any addition whatever. The addition of water, boiled cider or coloring matter is considered an adulteration unless labeled artificial or imitation products. Vinegar made from the juice of grapes, malt, or glucose must be labeled accordingly.

Aerial Navigation. The invention of the balloon was due to Stephen and Joseph Montgolfier, sons of a paper manufacturer at Annonay, near Lyons, France. The first balloon was sent up June 5, 1783, and reached an altitude of about a mile; it was inflated with heated air for which hydrogen gas was later substituted. In place of heated air or hydrogen, common coal

gas is sometimes used. As 13.3 cu. ft. of air weigh about 1 lb. while the same volume of hydrogen weighs only an ounce, 13.3 cu. ft. of hydrogen can lift about 15 ounces.

Pilatre de Rozier, on October 15, 1783, was the first human to ascend in a balloon. This was held captive by ropes, but on November 21, De Rozier together with the Marquis d'Arlandes made the first ascension in a free, hot air balloon. Ten days later Robert and Charles were carried for two hours in the first balloon filled with hydrogen.

By the use of free balloons scientific knowledge of great value has been obtained concerning the height, density, and thickness of clouds, the direction and velocity of air currents, magnetic and electrical conditions in the air, and comparison of aneroid and mercury barometers. A height of 10,800 meters (6.7 miles) was attained, July 31, 1901. A record for distance traveled was made March 24, 1913, when Rumpelmayer drifted 1492 miles from Paris to a point near Kharkov, Russia. In military operations captive balloons have frequently been of value for observational purposes. The dirigible balloon, driven by powerful gasoline engines, has proven its value both in military and passenger service. The huge Zeppelin dirigibles have a rigid framework filled by a number of gas bags or balloonets in separate compartments.

The world's largest airship, the R-38, built for the U. S. Government by the British Royal Aircraft Works, while on its fourth trial trip, August 24, 1921, collapsed, exploded, and fell into the river Humber. Of the crew of 49, only 5 were saved. The R-38 was 698 feet long, 85 feet in diameter and had a capacity of 2.7 million cu. ft. On February 21, 1922, the Roma, the largest existing semi-rigid dirigible, plunged from a height of 1000 feet when flying near its base at Hampton Roads, Va. The falling hydrogen-filled machine crashed into high tension electric wires, and was completely destroyed by fire. Only 11 of the crew of 45 were saved.

Among notable attempts to solve the problem of artificial flight by heavier than air machines was the work of Lilienthal, Chanute, Langley, Maxim, and Ader. The Wright brothers, Orville and Wilbur, bicycle manufacturers of Dayton, Ohio, tested the results of earlier investigators and gradually evolved a system of flying. On December 17, 1903, they achieved flights of from 12 to 59 seconds and were the first to fly successfully in heavier than air machines. They first succeeded in making a turn, September 15, 1904, and ten days later made a circle. They made no public exhibitions until 1908. The hydroaeroplane or flying boat, capable of landing and starting from the water, was developed by Glenn H. Curtiss.

From 1908 the development of the airplane was very rapid, especially in France and Germany. An aeroplane was first used for dropping bombs by the Italians in 1912, in the Italian-Turkish war. At the beginning of the World War very few aeroplanes carried machine guns, but heavy fighting machines were developed which carried a ton or more of bombs as well as several machine guns. These guns were often geared so as to fire between the revolving blades of the propeller.

Airplanes equipped with photographic and wireless telegraph or telephone apparatus were of greatest value for finding ranges, locating enemy concentrations, and destroying morale by bombing operations.

In May 1919, just 100 years after the first steamship crossed the Atlantic, the U. S. naval flying boat NC-4 (Navy Curtiss) under command of Com. A. C. Read, flew from Rockaway, N. Y., to Plymouth, Eng., via Halifax, Newfoundland, the Azores, Portugal, and Spain. The total flying time was 41 hours, 58 minutes. Four Liberty motors, of 400 horse power each, were used. On June 14, 1919, Capt. John Alcock and Lt. Arthur Brown, R. A. F., in a Vickers "Vimy" Bomber, made a non-stop flight from St. Johns, N. F., to Clefden, Ireland, in 16 hours, 12 minutes. On July 2, 1919, a British rigid dirigible, the R-34, flew from Scotland to Mineola, N. Y., and after three days returned to England, completing a round trip of some 6500 miles.

A record for speed was made by Sadi Lecointe, who on Sept. 26, 1921, flew 4 kilometers at the rate of 205.7 miles per hour. On Sept. 23, 1921, Lt. John A. MacReady, U. S. A., reached an altitude of 40,800 feet. At this height his engine stopped but he glided safely to earth. He was protected from the intense cold by electrically heated clothes. The engine was supplied with air at sea level pressure by means of a compressor operated by the gases from the exhaust.

A competitive speed record was made November 3, 1921, when Bert Acosta in a Curtiss-Navy machine covered 153.5 miles at an average speed of 176.7 miles per hour. The first permanent and regular air mail service in the U. S. was begun May 15, 1918, between New York and Washington. So unusual an occasion was commemorated by a special issue of postage stamps which were at first 24 cents, then 16 cents, and later only 6 cents. During the year 7,720,840 letters were carried.

Agriculture, the art of farming. From Egypt a knowledge of agriculture extended to Greece, where it flourished 1,000 years before Christ. Hesiod describes a plough consisting of a beam, a share, and handles. The Greek farmers composted with skill, and saved the materials for the compost with care. A high appreciation of agriculture seems to have been a fundamental idea among the early Romans. A tract of land was allotted to every citizen by the state itself, and each one was carefully restricted to the quantity granted. The Roman agriculturists whose works have come down to us are Cato, Varro, Virgil, Columella, Pliny, and Palladius. The difference of soils and their adaptation to particular crops were well understood. Manures were saved with care. Composts were made in suitable places, hollows being scraped out in the form of a bowl to receive the wash from the house, and properly protected from the heat of the sun. But the inhabitants of the East were familiar with many mechanical appliances unknown to the Romans, and proba-

ably their agricultural systems were more complete.—In Britain, the Romans made many improvements during their 400 years of occupation. The agriculture of the island was rude even when they left it, by far the greater part of the island being covered with forests and marshes. Then the Saxons overran the country, subsisting mainly by the chase and by keeping cattle, sheep, and especially swine, which readily fatten on the mast of the oak and the beech. In general, the only grains raised were wheat, barley, and oats, and they had but small quantities of these. No hoed crops of edible vegetables were cultivated, and even as late as the reign of Henry VIII. Queen Catharine was obliged to send to Flanders or Holland for salad. Indian corn, potatoes, squashes, carrots, cabbages, and turnips were unknown in England until after the beginning of the sixteenth century. From that time to the present, the gradual elevation of the middle and lower classes has continued, and agriculture has steadily advanced. The first work on agriculture published in England was the "Boke of Husbandrie," in 1523, by Sir Anthony Fitzherbert.

The advance in the art and science of agriculture in the United States during the last half dozen years has been remarkable, and has had a tremendous effect upon the nation's prosperity. This marked progress is due to a number of circumstances and conditions, chief of which are our great variety of soil and climate, superior intelligence of the American farmer, improved machinery and implements, scientific education in all branches of agriculture, and increased pride of occupation. Increased facilities for transportation and lower freight charges have widened the farmer's market. The processes of canning, preserving, and refrigerating have produced a similar effect, and have also provided a means for disposal of surplus perishable products that otherwise would be lost. The utilization of by-products, as, for example, the conversion of cotton seed into oil, fertilizers and food for live stock, has become another source of profit.

Among the chief improvements we may mention deep plowing, extensive irrigation of arid lands and the use of the tractor or traction-engine. By the introduction of new or improved implements the labor necessary to the carrying out of agricultural operations has been greatly diminished. Science, too, has been called in to act as the handmaid of art, and it is by the investigations of the chemist that agriculture has been put on a really scientific basis. The organization of plants, the primary elements of which they are composed, the food on which they live, and the constituents of soils, have all been investigated, and most important results obtained, particularly in regard to manures and rotations. Artificial manures, in great variety, to supply the elements wanted for plant growth, have come into common use, not only increasing the produce of lands previously cultivated, but extending the limits of cultivation itself. An improvement in all kinds of stock is becoming more and more general, feeding is conducted on more scientific principles, and improved varieties of plants used as field crops have been introduced. The introduction of the system of ensilage for preserving fodder in a green state has proved eminently practical.

As a result of the new conditions, to be a thoroughly trained and competent agriculturist requires a special education, partly theoretical and partly practical. In particular, no scientific cultivator can now be ignorant of agricultural chemistry, which teaches the constituents of the various plants grown as crops, their relation to the various soils, the nature and function of different manures, etc. In some countries there are now agricultural schools or colleges supported by the state. In the United States nearly all the states have colleges, or departments of colleges, devoted to the teaching of agriculture, and large allotments of public land have been made for their support. In Germany such institutions are numerous and highly efficient. For teaching agriculture practically model farms are commonly established. In many countries, too, there is a ministry of agriculture as one of the chief departments of government. Our own department of agriculture has achieved the foremost place in the world for its scientific work in practical husbandry and its stimulating influence.

AGRICULTURAL IMPLEMENTS AND MACHINERY, VALUE OF, 1920 CENSUS REPORT.

States	Value of, on Farms
Alabama	$34,366,217
Arizona	8,820,667
Arkansas	43,432,237
California	136,069,290
Colorado	49,804,509
Connecticut	13,248,097
Delaware	6,781,318
District of Columbia	104,252
Florida	13,551,773
Georgia	63,343,220
Idaho	38,417,253
Illinois	222,619,605
Indiana	127,403,086
Iowa	309,172,398
Kansas	154,716,977
Kentucky	48,354,857
Louisiana	32,715,010
Maine	26,637,660
Maryland	28,970,020
Massachusetts	19,359,755
Michigan	122,389,936
Minnesota	181,087,968
Mississippi	39,881,256
Missouri	138,261,340
Montana	55,004,212
Nebraska	153,104,448
Nevada	3,630,927
New Hampshire	9,499,322
New Jersey	25,459,205
New Mexico	9,745,369
New York	169,866,766
North Carolina	54,621,363
North Dakota	114,186,865
Ohio	146,575,269
Oklahoma	80,630,547
Oregon	41,567,125
Pennsylvania	163,826,365
Rhode Island	2,408,561
South Carolina	48,062,387
South Dakota	112,408,268
Tennessee	53,462,556
Texas	154,320,996
Utah	13,514,787
Vermont	21,234,130
Virginia	50,151,466
Washington	54,721,377
West Virginia	18,395,058
Wisconsin	167,088,909
Wyoming	11,777,949

AGRICULTURE, GOLD AND

From statistics given in the Fourteenth Census of the United

States	Corn	Winter Wheat	Spring Wheat	Oats	Rye	Buck-Wheat	Flax-seed	Rice
	Total Farm Value	Total Farm Value	Total Farm Value	Total Farm Value	Total Farm Value	Total Farm Value	Total Farm Value	Total Farm Value (Rough)
Alabama,	$ 80,843,335	$ 530,356	.....	$ 1,232,426	$ 19,797	$ 974	.....	$ 32,846
Arizona,	870,105	1,660,704	$ 260,654	434,456	6,770	970	.....	.....
Arkansas,	61,608,482	4,266,922	.....	2,703,753	27,800	2,766	.....	18,352,240
California,	5,862,383	31,998,151	4,940,326	2,966,776	343,770	.....	.....	20,432,627
Colorado,	14,147,875	28,170,155	9,446,805	4,308,752	1,578,424	936	$ 316	.....
Connecticut,	3,815,615	100,898	16,843	309,803	159,561	43,365	.....	.....
Delaware,	5,897,774	3,457,447	.....	67,251	101,912	108,836	.....	.....
Florida,	14,129,774	548	.....	266,674	.....	.....	.....	107,687
Georgia,	90,111,074	2,823,527	.....	3,172,680	225,491	4,522	.....	167,189
Idaho,	1,088,972	12,727,881	23,920,206	3,222,592	151,430	.....	.....	.....
Illinois,	413,751,746	137,925,428	18,034,586	103,283,734	6,002,566	79,171	4,484	.....
Indiana,	229,975,713	97,207,962	893,094	42,023,780	6,648,162	113,558	100	.....
Iowa,	501,339,232	34,394,715	10,084,657	140,284,289	1,666,128	169,302	262,334	.....
Kansas,	86,593,760	320,264,808	442,772	29,005,885	2,955,489	2,711	291,792	.....
Kentucky,	125,157,359	22,929,042	.....	2,931,018	445,032	106,380	.....	.....
Louisiana,	36,848,526	13,603	.....	538,319	3,419	.....	.....	42,751,150
Maine,	504,495	149,724	464,061	3,780,648	9,346	520,291	.....	.....
Maryland,	32,678,769	21,357,568	.....	1,028,845	380,486	252,963	.....	.....
Massachusetts,	2,880,274	49,076	27,408	302,276	87,896	40,668	.....	.....
Michigan,	67,633,385	43,080,044	2,642,444	31,412,962	18,252,291	812,203	42,247	.....
Minnesota,	110,221,931	3,207,594	85,190,914	66,831,124	12,962,560	466,449	8,885,642	.....
Mississippi,	70,476,177	121,402	.....	836,466	5,556	.....	.....	42,631
Missouri,	219,513,084	140,072,434	130,067	32,394,961	1,468,304	18,983	12,110	79,036
Montana,	270,998	6,679,706	11,961,450	2,583,908	376,115	2,824	1,449,982	.....
Nebraska,	216,528,274	115,566,083	8,797,652	44,864,671	4,563,143	31,380	16,530	.....
Nevada,	26,484	157,933	909,617	86,252	8,222	5,268	.....	.....
New Hampshire,	844,793	50,526	.....	485,367	12,844	20,786	.....	.....
New Jersey,	14,480,577	3,084,827	2,497	1,403,453	1,722,461	182,009	.....	.....
New Mexico,	7,105,781	3,499,904	1,374,522	1,139,580	86,074	3,978	.....	5,433
New York,	24,691,113	18,779,028	1,777,593	21,595,461	2,660,972	6,242,370	298	.....
North Carolina,	79,946,722	11,861,354	.....	1,838,447	819,263	101,565	.....	10,545
North Dakota,	5,427,636	385,200	147,311,770	24,235,260	23,626,848	14,736	13,225,765	.....
Ohio,	217,274,709	125,870,179	2,003,395	39,795,590	2,582,991	993,034	2,656	.....
Oklahoma,	72,698,979	140,665,307	65,043	36,376,150	1,022,434	.....	3,255	.....
Oregon,	1,396,959	33,972,786	7,228,694	7,939,537	656,174	5,250	7,270	.....
Pennsylvania,	95,247,521	52,338,606	432,860	26,264,857	5,293,211	7,133,626	3,328	.....
Rhode Island,	606,256	5,232	.....	37,958	11,300	583	.....	.....
South Carolina,	54,944,026	1,634,062	.....	4,317,400	143,477	.....	.....	355,150
South Dakota,	89,779,016	2,605,541	66,718,455	38,318,937	5,961,741	43,241	4,880,931	.....
Tennessee,	127,150,649	14,506,174	.....	2,534,082	333,693	78,256	.....	.....
Texas,	146,309,341	74,973,555	430,866	51,191,535	355,395	.....	.....	14,857,832
Utah,	517,456	4,180,915	4,841,239	2,069,269	148,642	242	2,457	.....
Vermont,	1,687,275	404,808	.....	2,396,349	13,190	150,481	.....	.....
Virginia,	78,260,514	26,783,702	.....	2,154,475	822,039	360,390	.....	.....
Washington,	1,623,433	53,584,302	37,622,340	8,073,481	459,306	4,554	1,144	.....
West Virginia,	29,768,131	8,395,097	.....	3,054,668	326,749	860,616	.....	.....
Wisconsin,	64,593,729	3,654,974	12,834,042	58,051,788	10,675,814	733,342	253,445	.....
Wyoming,	641,046	441,419	2,680,274	1,107,208	336,933	.....	13,485	.....
United States,	$3,507,771,258	$1,610,591,209	$463,487,146	$855,255,153	$116,521,221	$ 19,713,579	$ 29,359,571	$ 97,194,366

SILVER IN THE UNITED STATES.

States, 1920, and from Reports of the Director of the Mint.

Tobacco	Hay & Forage	Potatoes (Irish)	Barley	Wool (pounds)	Cotton (bales)	Gold	Silver	States
Total Farm Value	Total Farm Value	Total Farm Value	Total Farm Value					
$ 710,933	$ 13,938,036	$ 2,304,769	$ 10,093	247,241	718,163	$ 200	$ 5	Alabama,
.....	10,658,211	435,755	952,415	3,130,795	59,351	4,961,900	5,965,404	Arizona,
93,472	22,760,223	4,812,243	4,641	374,595	869,350	.....	.....	Arkansas,
284,166	96,121,846	18,901,258	35,035,654	15,216,957	46,418	14,810,900	1,817,256	California,
.....	60,769,080	19,524,525	3,641,948	9,755,312	.....	7,508,400	5,674,622	Colorado,
15,189,551	13,711,567	3,362,500	7,340	52,801	.....	.....	.....	Connecticut,
.....	4,366,174	950,953	812	15,875	.....	.....	.....	Delaware,
2,371,061	2,510,772	5,301,588	1,840	162,294	19,538	.....	.....	Florida,
5,292,510	17,284,086	1,665,257	130	166,720	1,681,907	700	4	Georgia,
.....	50,802,765	13,546,798	2,023,329	17,860,527	.....	468,600	8,088,523	Idaho,
198,202	120,790,711	11,277,926	5,494,990	4,183,214	.....	.....	9,473	Illinois,
4,688,064	79,874,640	6,068,734	1,998,883	4,069,378	.....	.....	.....	Indiana,
7,643	146,959,888	10,874,361	6,423,366	6,967,566	.....	.....	.....	Iowa,
38,585	105,123,767	7,084,888	8,741,027	2,076,337	.....	.....	.....	Kansas,
117,730,675	43,399,964	7,671,876	191,266	3,001,263	2,967	.....	.....	Kentucky,
143,832	7,083,068	2,137,749	10,032	402,430	306,791	.....	.....	Louisiana,
.....	29,568,372	52,339,514	183,597	665,453	.....	.....	.....	Maine,
5,721,164	16,245,825	9,591,592	144,589	551,194	.....	.....	.....	Maryland,
4,713,255	20,149,137	4,619,855	18,930	88,358	.....	200	1,274	Massachusetts,
.....	105,280,992	49,055,600	6,483,742	7,835,558	.....	.....	561,945	Michigan,
98,347	115,665,984	57,383,621	18,561,350	3,054,384	.....	.....	.....	Minnesota,
275,725	14,744,951	1,692,523	.....	478,520	957,527	.....	.....	Mississippi,
1,385,497	95,897,050	10,144,410	203,695	7,705,993	63,808	300	135,190	Missouri,
.....	36,115,771	3,898,690	520,472	18,267,200	.....	1,897,700	14,566,746	Montana,
.....	96,965,224	10,685,998	4,845,864	2,562,280	.....	.....	.....	Nebraska,
.....	10,964,159	1,099,228	259,379	6,401,817	.....	3,626,900	8,217,109	Nevada,
40,554	13,616,378	2,952,351	33,057	161,681	.....	.....	.....	New Hampshire,
154	14,017,095	21,670,546	21,923	58,219	.....	.....	.....	New Jersey,
.....	12,852,751	260,239	252,280	8,300,804	5,399	449,000	768,509	New Mexico,
804,949	169,494,524	69,812,321	3,295,871	3,350,824	.....	.....	.....	New York,
151,288,264	18,966,611	6,278,351	6,494	342,302	858,406	1,100	11	North Carolina,
.....	56,555,024	10,142,747	13,860,815	1,826,352	.....	.....	.....	North Dakota,
13,528,302	130,187,929	17,657,811	3,256,468	15,264,513	.....	.....	.....	Ohio,
15,417	50,072,900	4,040,810	2,049,119	604,824	1,006,242	.....	.....	Oklahoma,
.....	41,835,706	7,431,756	2,215,065	16,039,048	.....	1,027,700	111,648	Oregon,
10,073,852	115,341,367	47,411,127	379,677	3,443,973	.....	.....	99	Pennsylvania,
90	2,319,136	674,100	4,416	13,488	.....	.....	.....	Rhode Island,
23,493,714	11,778,637	3,018,221	.....	67,913	1,476,645	300	1	South Carolina,
.....	71,988,845	7,157,983	15,378,922	5,112,798	.....	4,337,800	96,234	South Dakota,
24,720,869	49,649,657	4,439,820	158,687	1,329,315	306,974	5,900	117,790	Tennessee,
13,545	73,324,319	3,841,341	2,407,086	14,900,478	2,971,757	100	574,195	Texas,
.....	24,759,397	3,494,607	620,814	11,690,303	.....	2,128,700	12,910,615	Utah,
42,074	29,581,464	5,010,252	344,431	417,955	.....	.....	.....	Vermont,
48,123,877	41,847,594	26,979,423	332,490	1,520,109	24,887	.....	.....	Virginia,
.....	47,717,065	12,320,093	3,374,792	5,008,945	.....	148,000	195,226	Washington,
2,731,338	23,746,574	6,461,619	37,232	2,442,090	.....	.....	.....	West Virginia,
11,539,932	164,993,480	60,664,851	16,459,014	3,191,940	.....	.....	.....	Wisconsin,
.....	20,612,504	2,000,443	179,218	18,411,773	.....	200	62,556	Wyoming,
$445,359,613	$2,523,017,220	$640,153,023	$160,427,255	228,793,709	11,376,130	$ 41,374,600	$ 59,874,435	United States,

Air-brake. A device invented by George Westinghouse, Jr. in 1869 for applying the brakes to the cars of a railroad train by means of compressed air. Although the original system has been greatly improved in many ways by Westinghouse and others, the following description applies to the mechanism common both to passenger and freight trains.

Each car is equipped with a *brake cylinder* in which there is a piston connected to the brake shoes by a rod; an *auxiliary reservoir* to hold compressed air; a *triple valve;* and a train pipe with flexible couplings at each end. On the locomotive, in addition to its own brakes, are a steam driven *air compressor* which supplies air to the whole system, a *main air reservoir,* and the *control valve* operated by the engineer.

Under normal conditions equal pressure of about 70 pounds is maintained in the train pipe and the auxiliary reservoirs, and this condition of equal pressure holds the triple valve in a position closing the brake cylinder. To *set* the brakes, the engineer allows air to *escape* from the train pipe, thus reducing the pressure below that of the auxiliary reservoir. The triple valve then changes so that air enters the brake cylinder and forces the brake shoe against the wheels.

To *release* the brakes, the engineer allows air from the main reservoir which has about 110 pounds pressure, to enter the train pipe until it again has a pressure equal to that in the auxiliary reservoir. The triple valve then resumes its normal position and the pressure is removed from the brakes. It is obvious that if the coupling of a car becomes detached or broken the train pipe pressure is lowered and the brakes are immediately applied.

This system has been of great importance in the development of the railroads because it allows the engineer to have complete control of his train, and permits of quick stops at high speed, either in an emergency or under ordinary running conditions.

Air-compressor. A machine or other device, usually in the form of a pump, for increasing the pressure of air by compressing it into a smaller volume. Although a pressure of from 80 to 125 lbs. per sq. in. is most commonly used, highly powerful pumps are capable of compressing air and storing it in heavy steel cylinders at pressures as high as 3000 lbs. per sq. in. The highest known pressure to which air has been compressed is about 60,000 lbs. per sq. in.

Compressed air as a source of power is reliable, clean, easily controlled, and free from danger of fire. It is most effective where the transmission lines are short and the motion to be produced is either reciprocating or rotary. It consequently has many uses, perhaps the best known being that of the air-brake. The power of a Whitehead torpedo is supplied by a flask of air at 2500 lbs. pressure. Pneumatic machines are used for riveting, drilling, hammering, caulking, and expanding boiler tubes. Those of the hammer type strike from 1500 to 20,000 blows per minute. Paint sprayers, sand blasters, the pneumatic delivery tube, and some systems of refrigeration are also operated by means of compressed air.

Air-pump, an instrument for removing the air from a vessel. The essential part is a hollow brass or glass cylinder, in which an air-tight piston is made to move up and down by a rod. From the bottom of the cylinder, a connecting tube leads to the space which is to be exhausted, which is usually formed by placing a bell-glass, called the receiver, with edges ground smooth, and smeared with lard, on a flat, smooth plate or table. When the piston is at the bottom of the barrel, and is then drawn up, it lifts out the air from the barrel, and a portion of the air under the receiver, by its own expansive force, passes through the connecting tube, and occupies the space below the piston, which would otherwise be a vacuum. The air in the receiver and barrel is thus *rarefied.* The piston is now forced down and the effect of this is to close a valve placed at the mouth of the connecting tube, and opening inwards into the barrel. The air in the barrel is thus cut off from returning into the receiver, and, as it becomes condensed, forces up a valve in the piston, which opens outwards, and thus escapes into the atmosphere. When the piston reaches the bottom, and begins to ascend again, this valve closes; and the same process is repeated as at the first ascent. Each stroke thus diminishes the quantity of air in the receiver; but from the nature of the process, it is evident that the exhaustion can never be complete. Even theoretically, there must always be a portion left, though that portion may be rendered less than any assignable quantity; and practically the process is limited by the elastic force of the remaining air being no longer sufficient to open the valves. The degree of rarefaction is indicated by a *gauge* on the principle of the barometer. The air-pump was invented by Otto Guericke, 1654.

Alcohol, the purely spirituous or intoxicating part of all liquids that have undergone vinous fermentation, extracted by distillation — a limpid colorless liquid, of an agreeable smell and a strong, pungent taste. When brandy, whisky, and other spirituous liquors, themselves distilled from cruder materials, are again distilled, highly volatile alcohol is the first product to pass off. The alcohol thus obtained contains much extraneous matter, including a proportion of water, from the first as high as 20 or 25 per cent., and increasing greatly as the process continues. Charcoal and carbonate of soda put in the brandy or other liquor, partly retain the fusel-oil and acetic acid it contains. The product thus obtained by distillation is called *rectified spirits* or *spirits of wine,* and contains from 55 to 85 per cent. of alcohol, the rest being water. By distilling rectified spirits over carbonate of potassium, powdered quicklime, or chloride of calcium, the greater part of the water is retained, and nearly pure alcohol passes over. It is only, however, by very prolonged digestion with desiccating agents and subsequent distillation that the last traces of water can be removed.

Alcohol mixes in all proportions with water, ether, chloroform, and numerous other liquids. It dissolves a vast number of substances, especially oils, gums, and resins, and hence is largely used in making tinctures, varnishes, dyes, and perfumes.

The specific gravity of alcohol varies with its purity, decreasing as the quantity of water it contains decreases. This property is a convenient test of the alcoholic strength of liquors that contain only alcohol and water; but on account of the condensation that invariably takes place on the mixture of these two liquids, it can be applied only in connection with special tables of reference, or by means of an instrument specially adapted for the purpose. Its very low freezing point renders it valuable for use in thermometers for very low temperatures. Alcohol is extremely inflammable, and burns with a pale blue flame, scarcely visible in bright daylight. It occasions no carbonaceous deposit upon substances held over it, and the products of its combustion are carbonic acid and water. The steady and uniform heat which it gives during combustion makes it a valuable material for lamps. It dissolves the vegetable acids, the volatile oils, the resins, tannin, and extractive matter, and many of the soaps; the greater number of the fixed oils are taken up by it in small quantities only, but some are dissolved largely. When alcohol is submitted to distillation with certain acids a peculiar compound is formed, called *ether*. It is alcohol which gives all intoxicating liquors the property whence they are so called. Alcohol acts strongly on the nervous system, and though in small doses it is stimulating and exhilarating, in large doses it acts as a poison. In medicine it is often of great service.

Annuity, a sum of money paid annually to a person, and continuing either a certain number of years or for an uncertain period, to be determined by a particular event, as the death of the recipient or annuitant, or that of the party liable to pay the annuity; or the annuity may be perpetual. Annuities for uncertain periods, and particularly life annuities, are more frequent, and the value of the annuity is computed according to the probable duration of the life by which it is limited. Such annuities are often created by contract, whereby the government or a private annuity office agrees, for a certain sum advanced by the purchaser, to pay a certain sum in yearly, quarterly, or other periodical payments, to the person advancing the money, or to some other named by him, during the life of the annuitant. Or the annuity may be granted to the annuitant during the life of some other person, or during two or more joint lives, or during the life of the longest liver or survivor among a number of persons named. If a person having a certain capital, and intending to spend this capital and the income of it during his own life, could know precisely how long he should live, he might lend this capital at a certain rate during his life, and by taking every year, besides the interest, a certain amount of the capital, he might secure the same annual amount for his support during his life in such manner that he should have the same sum to spend every year, and consume precisely his whole capital during his life. But since he does not know how long he is to live he agrees with the government or an annuity office to take the risk of the duration of his life, and agree to pay him a certain annuity during his life in exchange for the capital which he proposes to invest in this way. The probable duration of his life therefore becomes a subject of computation. The following are the approximate rates of the best managed companies: In consideration of $1,000 paid to a company, the annuity granted to a person aged 40 would be $52.75; aged 45, $58.10; aged 50, $64.70; aged 55, $73.50; aged 60, $86.20; aged 65, $100; aged 70, $123.45; aged 75, $145.95; aged 80, $180.15.

Automobiles or Motor Cars. Automatic propelling vehicles whose motive power is furnished by gasoline, petroleum, electric storage battery, steam, or compressed air. In 1680 Sir Isaac Newton proposed the construction of a self-propelling steam carriage. A rudimentary one was built by Cugnot, a Frenchman, in 1769; the first practical one by Trevithick in England, in 1802. Several steam motor stage coaches, with heavy boilers and engines, were built in England, 1824–36. They had room for but few passengers. In 1885 Daimler invented an internal combustion motor which he fitted to a bicycle. French manufacturers of motor cars seized upon the idea but development was slow until after 1894. The use of the electric vehicle was attempted in France and England in 1887 but the manufacture of cars having internal combustion motors progressed much more rapidly. By 1907 the automobile was in established use in Japan and China, and London had introduced motor cabs. During the next few years standardization of types, specialized manufacture of parts, and increased production tended to reduce the price. The use of motor cars for travel, for heavy trucking, for agricultural purposes, and for military transportation is now universal. In fact, the growth of the automobile industry is one of the most remarkable in the history of manufacturing.

In 1910, the automobile industry represented a capital investment of $173,000,000, employed 75,000 wage earners, paid wages amounting to $48,000,000, and produced 126,000 cars valued at $249,000,000. In 1920, according to the statistics of the National Automobile Chamber of Commerce, the capital invested in the industry had increased to $2,100,000,000. More than 700,000 persons were engaged in the manufacture of automobiles, receiving wages and salaries to the amount of $1,040,000,000, with total products, inclusive of parts and accessories, valued at upwards of $2,950,000,000. During this same year, a total of 1,883,158 passenger cars, with a wholesale value of $1,809,-170,963, were manufactured; also 322,039 motor trucks, with a value of $423,756,715.

From 1889 to 1921 inclusive, a total of 14,044,-680 motor vehicles were manufactured in the United States.

Statistics gathered by Automotive Industries for 1921 show that of 12,588,949 motor vehicles there are in use in the world, 10,505,660, or more than 83 per cent, were in the United States. Of the remainder, 961,030 were in other English speaking countries, leaving only 1,122,030 for the rest of the world. Countries other than the United States in which automobiles were most numerous were Great Britain, 497,582; Canada, 463,448; France, 236,146; Germany, 91,384; Argentina, 75,000; Australia, 73,900; Italy, 53,000; India, 45,983; East Indies, 45,000;

Spain, 37,560; New Zealand, 37,500; Russia, 35,000; Belgium, 33,200; Union of South Africa, 26,000; Brazil, 25,000; Mexico, 25,000.

In comparison with other countries of the world, the density of the motor population in the United States is startling. The registrations for 1921 show one motor vehicle for every 10.2 persons. Iowa had one for every 5.28; South Dakota, one for every 5.38; Nebraska, one for every 5.49; Colorado, one for every 5.78, and Kansas, one for every 6.14.

New York led in total registrations, with 812,031, followed by Ohio, 720,632; Pennsylvania, 689,589; California, 673,830; Illinois, 670,834; Michigan, 477,037; Texas, 467,616, Iowa, 460,528, and Indiana, 400,342.

Banking was authorized in the United States during the war of the Revolution, a resolution being adopted in congress on May 26, 1781, approving a plan for a national bank proposed by Robert Morris of Philadelphia. As a result the Bank of North America was incorporated on December 31 following, with a capital of $400,000, of which $254,000 had been subscribed by the United States government. This bank, rechartered from time to time, is one of the national banks of Philadelphia. Another bank, known as the Bank of the United States, was projected by Alexander Hamilton when the government had been organized under the constitution. It was established in 1791 but closed in 1811, failing to obtain a renewal of its charter. A second Bank of the United States was incorporated on April 3, 1816. Meanwhile other banks had been established in various parts of the country, and these, driven to suspension of specie payments by the war of 1812, were aided by the operation of the new bank to an extent which enabled them to resume. This bank, however, was driven to the wall in 1840 by political opposition under President Jackson.

The system of national banks was inaugurated in 1864 under exigencies created by the civil war. The minimum capital required of national banks varies with the population. In towns of 3,000 or less, $25,000 capital; 3,000 to 6,000, $50,000; 6,000 to 50,000, $100,000; over 50,000, $200,000. State banks, trust companies, and savings banks operate under state charter.

The currency law of 1913 aims to provide means for making the banking system responsive to the needs of trade, and a monetary system elastic enough to prevent panics. There are 12 federal reserve banks in 12 federal reserve districts covering the entire United States. They are located as follows: Boston, New York, Philadelphia, Cleveland, Richmond, Atlanta, Chicago, St. Louis, Minneapolis, Kansas City, Dallas, San Francisco. Each bank must have a capital of at least $4,000,000. All national banks must merge into this system. Any state bank, with specified requirements, may become a member bank. Each federal reserve bank is controlled by a board of 9 directors, holding office for 3 years: three members are chosen by and are representative of the stock-holding banks; three members at the time of their election must be actively engaged in their district in commerce, agriculture or some other industry; three members are named by the federal reserve board. The entire system is under the supervision of a central board in Washington known as the federal reserve board, consisting of the secretary of the treasury and the comptroller of the currency acting ex-officio, and five members named by the president with the approval of the senate. The five members, at least two of whom must be experienced in banking or finance, receive each $12,000 annually, with necessary traveling expenses; the comptroller of the currency, $7,000. No senator or representative in congress can be a member of the federal reserve board or an officer or a director of a federal reserve bank.

Canal, an artificial water-course for the transportation of goods or passengers by boats or ships, or for purposes of drainage or irrigation. The canals most familiar to ordinary readers are for navigation. These consist usually of a number of different sections, each on one level throughout its course, but differing in relative height from the others. From one section to another boats are transferred by means of *locks*, or it may be by *inclines* or *lifts*. The lock is a water-tight inclosure with gates at each end, constructed between two successive sections of a canal. When a vessel is descending, water is let into the lock till it is on a level with the higher water, and thus permits the vessel to enter; the upper gates are then closed, and by the lower gates being gradually opened, the water in the lock falls to the level of the lower water, and the vessel passes out. In ascending the operation is reversed. The *incline* conveys the vessel from one reach to another generally on a specially-constructed carriage running on rails, by means of drums and cables. The *lift* consists of two counterbalancing troughs, one going up as the other descends, carrying the vessel from the higher to the lower level, or *vice versa*. Works of great magnitude in the way of cuttings, embankments, aqueducts, bridges, tunnels, reservoirs for water-supply, etc., are often necessary in constructing canals. Canals have been known from remote times, Egypt being intersected at an early period by canals branching off from the Nile to distant parts of the country, for purposes of irrigation and navigation. Under the Ptolemies, before the Christian era, there existed a canal between the Red sea and the Nile. In China, also, canals were early made on a very large scale. In Holland, where the country is flat and water abundant, canals were constructed as early as the twelfth century. The lock, however, was not invented until the fifteenth century, both the Dutch and the Italians claiming the honor. Since then Europe has been provided with numerous canals, which, being connected usually with navigable rivers, give access by water to most parts of its interior. Among the numerous canals of Holland, the most important is now the great ship canal, from 200 to 300 feet wide and twenty-three feet deep, which connects Amsterdam with the North sea. In France there are many canals and canalized rivers, the principal being the Canal du Midi, branching off from the Garonne at Toulouse, and falling into the gulf of Lyons at Narbonne, thus connecting the bay of Biscay and Mediterranean, and

three canals connecting the basins of the Rhone, Loire, Seine, and Rhine. The canals of France have a total length of over 3,000 miles. In Belgium there is the Ghent-Terneuzen canal, which allows large vessels to sail to Ghent from the Scheldt estuary. The chief canals in Germany are the Ludwigs canal in Bavaria, connecting the Rhine and the Danube; and the Baltic-North sea, or Kaiser Wilhelm, canal for seagoing vessels, connecting the mouth of the Elbe with the Baltic near Kiel. This was constructed in 1887-95; as enlarged, 1910-14, it permits the largest vessels to pass. In Russia there is canal and river communication between the Caspian and the Baltic, a large part of the route consisting of the Volga. In Britain one of the earliest and most celebrated is the Bridgewater canal (1761-65), in Lancashire and Cheshire, with a length of thirty-eight miles. In Scotland there are the Forth and Clyde canal, thirty-five miles long, joining these two rivers; and the Caledonian, sixty and one-half miles, from the Moray Firth on the east coast to Loch Eil on the west, passing through Loch Ness, Loch Oich, and Loch Lochy. In the British Islands there is a total length of canal of about 4,000 miles, more than five-sixths being in England. The Manchester Ship canal, a waterway for ocean-going steamers from the estuary of the Mersey to Manchester, was begun in 1887. The Panama canal was constructed 1904-14 (See Panama canal). The New York state barge canal system includes the Erie, Oswego, Champlain and Cayuga-Seneca canals; including lakes and rivers it furnishes about 790 miles of continuous waterway for boats of 10 feet draft.

CANALS

Canals	Cost of Construction*	When Completed	Length Miles	No. of Locks	Depth Feet†	Location
Albemarle and Chesapeake,	$1,641,363	1860	44	1	7½	Norfolk, Va., to Currituck Sound, N. C.
Augusta,	1,500,000	1847	9	....	11	Savannah River, Ga., to Augusta, Ga.
Black River,	3,581,954	1849	35	109	4	Rome, N. Y., to Lyons Falls, N. Y.
Cayuga and Seneca,	2,232,632	1839	25	11	7	Montezuma, N. Y., to Cayuga and Seneca Lakes, N. Y.
Champlain,	4,044,000	1822	81	32	6	Whitehall, N. Y., to West Troy, N. Y.
Chesapeake and Delaware,	3,730,230	1829	14	3	9	Chesapeake City, Md., to Delaware City, Del.
Chesapeake and Ohio,	11,290,327	1850	184	73	6	Cumberland, Md., to Washington, D. C.
Companys,	90,000	1847	22	1	6	Mississippi River, La., to Bayou Black, La.
Dalles-Celilo,	4,800,000	1915	8½	5	8	Columbia river, from Big Eddy to Celilo Falls, Oregon.
Delaware and Raritan,	4,888,749	1838	66	14	8–9	New Brunswick, N. J., to Bordentown, N. J.
Delaware Division,	2,433,350	1830	60	33	6	Easton, Pa., to Bristol, Pa.
Des Moines Rapids,	4,582,009	1877	7½	3	5	At Des Moines Rapids, Mississippi River.
Dismal Swamp,	2,800,000	1822	22	7	6	Connects Chesapeake Bay with Albemarle Sound.
Erie,	52,540,800	1825	363	72	7	Albany, N. Y., to Buffalo, N. Y.
Fairfield,	....	....	4½	None	..	Alligator River to Lake Mattimuskeet, N. C.
Galveston and Brazos,	340,000	1851	38	....	3½	Galveston, Texas, to Brazos River, Tex.
Hocking,	975,481	1843	42	26	4	Carroll, O., to Nelsonville, O.
Illinois and Michigan,	7,357,787	1848	102	15	6	Chicago, Ill., to La Salle, Ill.
Illinois and Mississippi,	7,250,000	1895	75	3	7	Around lower rapids of Rock River. Ill., connects with Mississippi River.
Lake Washington,	5,000,000	1917	8½	2	36	Seattle, Wash., connects Puget Sound and Lake Washington.
Lehigh Coal and Navigation Co.,	4,455,000	1821	108	57	6	Coalport, Pa., to Easton, Pa.
Louisville and Portland,	5,578,631	1872	2½	2	..	At Falls of Ohio River, Louisville, Ky.
Miami and Erie,	8,062,680	1835	274	93	5½	Cincinnati, O., to Toledo, O.
Morris,	6,000,000	1836	103	33	5	Easton, Pa., to Jer sey City, N. J.
Muscle Shoals and Elk River Shoals,	3,156,919	1889	16	11	..	Big Muscle Shoals, Tenn., to Elk River Shoals, Tenn.
Newbern and Beaufort,	.....	....	3	None	..	Clubfoot Creek to Harlow Creek, N. C.
New York State Barge Canal System	154,800,000	1918	800	57	12	Connects Lakes Erie, Ontario, Champlain, Cayuga, and Seneca with Hudson River.
Ogeechee,	407,810	1840	16	5	3	Savannah River, Ga., to Ogeechee River, Ga.
Ohio,	4,695,204	1835	317	150	4	Cleveland, O., to Portsmouth, O.
Oswego,	5,239,526	1828	38	18	7	Oswego, N. Y., to Syracuse, N. Y.
Pennsylvania,	7,731,750	1839	193	71	6	Columbia, Northumberland, Wilkesbarre, Huntingdon, Pa.
Portage Lake and Lake Superior,	528,892	1873	25	None	15	From Keweenaw Bay to Lake Superior.
Port Arthur,	.....	1899	7	..	26	Port Arthur, Tex., to Gulf of Mexico.
Santa Fé,	70,000	1880	10	..	5	Waldo, Fla., to Melrose, Fla.
Schuylkill Navigation Co.,	12,461,600	1826	108	71	6¼	Mill Creek, Pa., to Philadelphia, Pa.
Sturgeon Bay and Lake Michigan,	99,661	1881	1¼	None	15	Between Green Bay and Lake Michigan.
St. Mary's Falls,	7,909,667	1896	1⅓	1	21	Connects Lakes Superior and Huron at Sault Ste. Marie, Mich.
Susquehanna and Tidewater,	4,931,345	1840	45	32	5½	Columbia, Pa., to Havre de Grace, Md.
Walhonding,	607,269	1843	25	11	4	Rochester, O., to Roscoe, O.

* And improvements. † Navigable depth.

The Harlem River Ship Canal, connecting the Hudson River and Long Island Sound, by way of Spuyten Duyvil Creek and Harlem River, was opened for traffic on June 17, 1895, and cost about $2,700,000.

THE GREAT SHIP CANALS OF THE WORLD

Canal	Completed	Connecting	Length Miles	Width Feet*	Depth Feet	No. of Locks	Cost†
Suez,	1869	Mediterranean and Red Seas,	99	121⅓	30	None	$100,000,000
Cronstadt and Petrograd,	1884	Bay of Cronstadt and Petrograd,	18¾	275	22	None	7,200,000
Corinth,	1893	Gulfs of Corinth and Ægina,	4	72	26¼	None	5,000,000
Manchester,	1894	Manchester, England, and the Mersey,	35.50	120	26	5	75,000,000
Kaiser Wilhelm (Kiel),	1895	Baltic and North Seas,	60	144	36	..	95,000,000
Elbe and Trave,	1900	Baltic and North Seas,	41	72	10	..	6,000,000
Welland,	1833	Lakes Ontario and Erie,	25	200	25	7	75,000,000
Sault Ste. Marie (American),	1855	Lakes Superior and Huron,	1.6	160	25	1	10,000,000
Sault Ste. Marie (Canadian),	1895	Lakes Superior and Huron,	1.415	141	20¼	1	3,770,621
Cape Cod,	1914	Buzzards Bay and Barnstable Bay,	8	100	25	..	12,000,000
Panama,	1914	Atlantic and Pacific,	50	300-1,000	41	6	400,000,000

* Minimum width, or width at bottom, given wherever possible. † Cost of construction to state.

Celluloid is an artificial substance extensively used as a substitute for ivory, bone, hard rubber, coral, etc., having a close resemblance to these substances in hardness, elasticity, and texture. It was invented by J. W. and Isaac Hyatt in 1870. It is composed of cellulose or vegetable fibrine reduced by acids to pyroxyline (or gun-cotton), camphor is then added, and the compound molded by heat and pressure to the desired shape. It is used chiefly for such articles as buttons, handles for knives, forks, and umbrellas, billiard-balls, backs to brushes, piano keys, napkin-rings, opera-glass frames, etc.

Champagne takes its name from the province of Champagne, France, where it was originally produced. There are white and red champagnes; the white is either sparkling or still. Sparkling or effervescent champagne is the result of a peculiar treatment during fermentation. In December, the wine is racked off, and clarified with isinglass, and in March it is bottled and tightly corked. The fermentation being incomplete when the wine is bottled, the carbonic acid gas generated in a confined space dissolves in the wine, and communicates the sparkling property to champagne. To clear the wine of sediment, the bottles are first placed in a sloping position with the necks downward, so that the sediment may be deposited in the necks of the bottles. When this sediment has been poured off, a solution of sugar-candy in cognac is added to the wine, and every bottle is filled up with bright clarified wine, and securely recorked. The effervescence of the wine thus prepared bursts many bottles, wine which breaks most bottles being considered best. Still or non-effervescent champagne is first racked off in the March after the vintage. Creaming or slightly effervescent champagne has more alcohol but less carbonic acid gas than sparkling champagne. The best varieties of this wine are produced at Rheims and Epernay, and generally on a chalky soil. The fact that the sale of champagne is very extensive and lucrative has naturally given rise to adulterations. Sugar, and the juices of pears or gooseberries, or birch-juice, etc., have been used for making spurious champagne. Probably not even a third part of the wine sold for champagne is genuine. The greater part of it is readily manufactured by simply charging other light wines with carbonic acid gas. German purveyors have succeeded in preparing light wines—such as Rhenish, Main, Necker, Meissner, and Naumburg—much like genuine champagne. In recent years a considerable amount of champagne of excellent quality has been produced in the United States.

Charcoal, a term applied to an impure variety of carbon, especially such as is produced by charring wood. One kind of it is also obtained from bones; lampblack and coke are also varieties. Wood charcoal is prepared by piling billets of wood in a pyramidal form, with vacuities between them for the admission of air, and causing them to burn slowly under a covering of earth. In consequence of the heat, part of the combustible substance is consumed, part is volatilized, together with a portion of water, and there remains behind the carbon of the wood, retaining the form of the ligneous tissue. Another process consists in heating the wood in close vessels, by which the volatile parts are driven off, and a charcoal remains in the retorts, not so dense as that obtained by the other process. Wood charcoal, well prepared, is of a deep-black color, brittle and porous, tasteless and inodorous. It is infusible in any heat a furnace can raise; but by the intense heat of a powerful galvanic apparatus it is hardened, and at length is volatilized, presenting a surface with a distinct appearance of having undergone fusion. Charcoal is insoluble in water, and is not affected by it at low temperatures; hence, wooden stakes which are to be immersed in water are often charred to preserve them, and the ends of posts stuck in the ground are also thus treated. Owing to its peculiarly porous texture, charcoal possesses the property of absorbing a large quantity of air or other gases at common temperatures, and of yielding the greater part of them when heated. Charcoal likewise absorbs the odoriferous and coloring principles of most animal and vegetable substances, and hence is a valuable deodorizer and disinfectant. Water which, from having been long kept in wooden vessels, as during long voyages, has acquired an offensive smell, is deprived of it by filtration through charcoal powder. Charcoal can even remove or prevent the putrescence of animal matter. It is used as fuel in various arts, where a strong heat is required, without smoke, and in various metal-

lurgic operations. By cementation with charcoal, iron is converted into steel. It is used in the manufacture of gunpowder. In its finer state of aggregation, under the form of ivory-black, lampblack, etc., it is the basis of black paint; and mixed with fat oils and resinous matter, to give a due consistency, it forms the composition of printing ink.

Clearing House. The place where is carried on the operation of clearing off balances and adjusting daily accounts between bankers of the same city, thus avoiding the inconvenience of handling large amounts in currency or convertible paper. Each bank, or banker, dispatches a clerk to the clearing house, who there draws up an abstract of the checks upon other firms, and effects a clearance by exchanging them against those drawn on the bank to which he belongs. The balance is paid over in cash. The first clearing house in the United States was established in New York in 1833. In England, the railway companies, as well as the banks, make use of the clearing system.

Clay. The name of various earths, which consist of hydrated silicate of aluminium, with small proportions of the silicates of iron, calcium, magnesium, potassium, and sodium. All the varieties are characterized by being firmly coherent, weighty, compact, and hard when dry, but plastic when moist, smooth to touch, not readily diffusible in water, but when mixed not readily subsiding in it. Their tenacity and ductility when moist, and their hardness when dry, has made them from the earliest times the materials of bricks, tiles, pottery, etc. Of the chief varieties, *porcelain clay, kaolin*, or china clay, a white clay with occasional gray and yellow tones, is the purest. *Potter's clay* and *pipe clay*, which are similar but less pure, are generally of a yellowish or grayish color, from the presence of iron. *Fire clay* is a very refractory variety, always found lying immediately below the coal; it is used for making fire bricks, crucibles, etc. *Loam* is the same substance mixed with sand, oxide of iron, and various other foreign ingredients. The *boles*, which are of a red or yellow color from the presence of oxide of iron, are distinguished by their conchoidal fracture. The *ochres* are similar to the boles, but containing more oxide of iron. Other varieties are *fuller's earth, Tripoli*, and *boulder clay*, the last a hard clay of a dark brown color, with rounded masses of rock of all sizes embedded in it, the result of glacial action. The distinctive property of clays as ingredients of the soil is their power of absorbing ammonia and other gases and vapors generated on fertile and manured lands; indeed no soil will long remain fertile unless it has a fair proportion of clay in its composition. The best wheats both in Britain and on the European continent, as well as in America and Siberia, are grown on calcareous clays, as also the finest fruits and flowers of the rosaceous kind.

Coal. A solid, opaque, inflammable substance, mainly consisting of carbon, found in the earth, largely employed as fuel, and formed from vast masses of vegetable matter deposited through the luxuriant growth of plants in former epochs of the earth's history. In the varieties of coal in common use the combined effects of pressure, heat, and chemical action upon the substance have left few traces of its vegetable origin; but in the sandstones, clays, and shales accompanying the coal, the plants to which it principally owes its origin are presented in a fossil state in great profusion, and frequently with their structure so distinctly retained, although replaced by mineral substances, as to enable the microscopist to determine their botanical affinities with existing species. The sigillaria and stigmaria, the lepidodendron, the calamite, and tree ferns are amongst the commoner forms of vegetable life in the rocks of the coal formation. Trees of considerable magnitude have also been brought to light, having a recognizable relation to the modern araucaria. The animal remains found in the coal measures indicate that some of the rocks have been deposited in fresh water, probably in lakes, whilst others are obviously of estuarine origin, or have been deposited at the mouths of rivers alternately occupied by fresh and salt water. The great system of strata in which coal is chiefly found is known as the carboniferous. There are many varieties of coal, varying considerably in their composition, as *anthracite*, nearly pure carbon, and burning with little flame, much used for furnaces and malt kilns; *bituminous* (popularly so called) or "household coal;" and *cannel*, or "gas coal," which burns readily like a candle, and is much used in gas making. All varieties agree in containing from sixty to over ninety per cent of carbon, the other elements being chiefly oxygen and hydrogen, and frequently a small portion of nitrogen. *Lignite*, or *brown coal*, may contain only fifty per cent carbon. For manufacturing purposes coals are generally considered to consist of two parts, the volatile or bituminous portion, which yields the gas used for lighting, and the substance, comparatively fixed, usually known as *coke*, which is obtained by heating the coals in ovens or other close arrangements.

China and Japan contain about 200,000 square miles of coal fields; United States, 330,000; India, 35,000; Russia, 27,000; Great Britain, 9,000; Germany, 3,600; France, 1,800; Belgium, Spain, and other countries, 1,400. Total, 578,800.

DISTRIBUTION AND PRODUCTION OF COAL IN THE UNITED STATES

Coal is found in commercial quantities in thirty of the states of the United States, and also in Alaska. The following table shows the area of coal-bearing formations in the several states and the production of coal in tons for the year 1920.

States	Area of Coal-bearing Formations (Sq. Mi.)	Short Tons (*estimated*)
Bituminous		
Alabama,	8,373	16,700,000
Alaska,	1,196	68,000
Arkansas,	1,680	2,310,000
California,	10	*
Colorado,	14,341	12,100,000
Georgia,	167	*
Idaho,	230	*
Illinois,	35,600	90,050,000

States	Area of Coal-bearing Formations (Sq. Mi.)	Short Tons (*estimated*)
Bituminous		
Indiana,	6,500	30,420,000
Iowa,	12,560	9,170,000
Kansas,	18,600	6,700,000
Kentucky,	15,170	31,000,000
Maryland,	455	4,050,000
Michigan,	11,000	1,440,000
Missouri,	23,960	5,750,000
Montana,	38,525	4,440,000
New Mexico,	13,220	3,750,000
North Dakota,	29,630	770,000
Ohio,	12,660	45,000,000
Oklahoma,	10,000	4,200,000
Oregon,	90	*
Pennsylvania,	14,200	163,000,000
South Dakota,	2,160	*
Tennessee	4,400	6,750,000
Texas,	10,200	1,800,000
Utah,	3,646	5,870,000
Virginia,	1,900	9,850,000
Washington,	1,800	3,750,000
West Virginia,	17,000	87,500,000
Wyoming,	20,660	10,000,000
Other States,		125,000
Total		556,563,000
Pennsylvania, Anthracite	480	89,100,000

* Included in "Other States".

Coal Tar, or gas tar, a substance obtained in the distillation of coal for the manufacture of illuminating gas, a dark-colored more or less viscid mass, consisting principally of oily hydrocarbons. It passes over with the gas into the condensers along with ammonia liquor, but being heavier than the latter, it is easily separated from it when the whole is allowed to stand. It was formerly of comparatively little use; but in recent years a great number of valuable products have been derived from it by distillation, such as ammonia, naphtha, creosote, carbolic acid, and benzine, while it is also the source of the whole series of aniline colors, and other dyes, of alizarine, salicylic acid, etc.

Coins and Coinage. Coins were probably used as early as the Eighth Century B. C., and by the Fourth Century every civilized state had its proper coinage. Most of the commoner metals have in turn been used for making coins. The early coins of Asia Minor were of electrum, a mixture of gold and silver, in the proportion of three of the former to one of the latter. Lycurgus made the money of Sparta of iron. Copper formed the early money of the Romans; and when Cæsar landed in Britain, coins of brass and iron were found in use. Tin was coined by Charles II., and James II. even resorted to gun metal and pewter. At the present day, gold and silver, with copper for the lowest denomination, are almost universally employed. Coins of platinum were formerly struck in Russia. Although in a few countries coins have been issued of almost absolute purity, such as the gold sequins of Tuscany, yet for the most part the gold and silver are alloyed with some other metal, generally copper, in definite proportions fixed by law. In the United States an alloy of about nine-tenths copper and one-tenth silver is used with gold. The proportion of alloy varies in different countries. In Great Britian it is one-twelfth; while in the United States, France, Belgium, and some other countries, one-tenth has been adopted. In the United States the power to coin money is vested by the Constitution in Congress, and is expressly withheld from the States. The earliest colonial coinage was in Massachusetts. From 1778 to 1787 the power of coinage was exercised not only by the confederation in Congress, but also by several of the individual States. In Vermont a mint was established in 1785, and copper cents were issued; a few half cents were also coined. Connecticut the same year established a mint at New Haven, and copper coins were issued. New Jersey authorized a copper coinage in 1786. In 1788 cents and half cents were coined by Massachusetts. In 1787 copper cents were coined under authority of Congress. On April 2, 1792, a code of laws was enacted for the establishment and regulation of the mint. The coinage act of 1873 consolidated the regulations governing the coinage of the United States. The following table gives a complete exhibit of the coinage of the U. S. from 1792 to 1915:

Denominations	Pieces	Values
GOLD		
Fifty-dollar piece, Panama-Pacific International exposition (act of Jan. 16, 1915),	600	$ 30,000.00
Double eagles,	120,757,306	2,415,146,120.00
Eagles,	51,122,910	511,229,100.00
Half eagles,	77,421,794	387,108,970.00
Three-dollar pieces (coinage discontinued under act of September 26,1890),	539,792	1,619,376.00
Quarter eagles,	17,250,490	43,126,225.00
Quarter eagles, Panama-Pacific International exposition,	10,000	25,000.00
Dollars (coinage discontinued under act of September 26, 1890),	19,499,337	19,499,337.00
Dollars, Louisiana Purchase exposition (act of June 28, 1902),	250,000	250,000.00
Dollars, Lewis & Clark exposition,	60,000	60,000.00
Dollars, Panama-Pacific International exposition,	5,500	5,500.00
Total gold,	286,917,729	$3,378,099,628.00
SILVER		
Dollars (coinage discontinued, act of February 12, 1873, resumed, act of February 28, 1878),	578,303,848	$578,303,848.00
Trade dollars (discontinued, act of February 19, 1887),	35,965,924	35,965,924.00
Dollars (Lafayette souvenir, act of March 3, 1899),	50,000	50,000.00
Half dollars,	379,768,022	189,884,011.00
Half dollars (Columbian souvenir),	5,000,000	2,500,000.00
Half dollars, Panama-Pacific International exposition,	60,000	30,000.00
Quarter dollars,	410,951,308	102,737,827.00
Quarter dollars (Columbian souvenir),	40,000	10,000.00
Twenty-cent pieces (coinage discontinued, act of May 2, 1878),	1,355,000	271,000.00
Dimes,	733,837,547	73,383,754.70
Half dimes (coinage discontinued, act of February 12, 1873),	97,604,388	4,880,219.40

Denominations	Pieces	Values
Three-cent pieces (coinage discontinued, act of February 12, 1873),	42,736,240	$ 1,282,087.20
Total silver,	2,285,672,277	$989,298,671.30
Minor		
Five-cent pieces, nickel,	855,008,587	$42,750,429.35
Three-cent pieces, nickel (coinage discontinued, act of September 26, 1890)	31,378,316	941,349.48
Two-cent pieces, bronze (coinage discontinued, act of September 26, 1890)	45,601,000	912,020.00
One-cent pieces, copper (coinage discontinued, act of February 21, 1857),	156,288,744	$1,562,887.44
One-cent pieces, nickel (coinage discontinued, act of April 22, 1864),	200,772,000	2,007,720.00
One-cent pieces, bronze,	2,345,481,667	23,454,816.67
Half-cent pieces, copper (coinage discontinued, act of February 21, 1857),	7,985,222	39,926.11
Total minor,	3,642,515,536	$71,669,149.05
Total coinage,	6,215,105,542	$4,439,067,448.35

VALUE OF FOREIGN COINS IN UNITED STATES MONEY

Country	Legal Standard	Monetary Unit	Value in U. S. Money	Remarks
Argentine Republic,	Gold,	Peso,	$0.9648	Currency: Paper, normally convertible 44% face value; now inconvertible.
Austria-Hungary,	Gold,	Krone,	.2026	
Belgium,	Gold&sil'r	Franc,	.1930	Member Latin Union; gold is actual standard.
Bolivia,	Gold,	Boliviano,	.3893	12½ bolivianos equal 1 pound sterling.
Brazil,	Gold,	Milreis,	.5462	Currency: Gov't. paper normally convertible at about 32 cents per milreis.
British Colonies in Aust'lasia & Africa,	Gold,	Pound sterling,	4.8665	
British Honduras,	Gold,	Dollar,	1.0000	
Canada,	Gold,	Dollar,	1.0000	
Chile,	Gold,	Peso,	.3650	Currency, inconvertible paper.
China,	Silver,	Tael, Haikwan,	.8299	Other provinces between these extreme values. Customs unit is Haikwan tael; value of other taels based on their relation to value of Haikwan tael.
		Tael, Kiaochow,	.7903	
		Tael, Shanghai,	.7450	
		Dollar, Hongkong,	.5364	
		Dollar, British,	.5364	
		Dollar, Mexican,	.5404	
Colombia,	Gold,	Peso,	.9733	Currency: Government paper and gold.
Costa Rica,	Gold,	Colon,	.4653	
Cuba,	Gold,	Peso,	1.0000	
Denmark,	Gold,	Krone,	.2680	
Ecuador,	Gold,	Sucre,	.4867	
Egypt,	Gold,	Pound (100 piasters),	4.9431	Actual Standard, British pound sterling, which is legal tender for 97½ piasters.
Finland,	Gold,	Markka,	.1930	
France,	Gold&sil'r	Franc,	.1930	Member Latin Union; gold is actual standard.
Germany,	Gold,	Mark,	.2382	
Great Britain,	Gold,	Pound sterling,	4.8665	
Greece,	Gold&sil'r	Drachma,	.1930	Member Latin Union; gold is actual standard.
Guatemala,	Silver,	Peso,	.4975	Currency, inconvertible paper.
Hayti,	Gold,	Gourde,	.2000	Currency, inconvertible paper.
Honduras,	Silver,	Peso,	.4975	Currency, bank notes.
India (British),	Gold,	Rupee,	.4866	(10 rupees equal 1 pound sterling.)
Indo-China,	Silver,	Piaster,	.5373	
Italy,	Gold,	Lira,	.1930	Member Latin Union; gold is actual standard.
Japan,	Gold,	Yen,	.4985	
Liberia,	Gold,	Dollar,	1.0000	Currency: Depreciated silver token coins. Customs duties collected in gold.
Mexico,	Gold,	Peso,	.4985	
Netherlands,	Gold,	Guilder (Florin),	.4020	
Newfoundland,	Gold,	Dollar,	1.0000	
Nicaragua,	Gold,	Cordoba,	1.0000	
Norway,	Gold,	Krone,	.2680	
Panama,	Gold,	Balboa,	1.0000	
Paraguay,	Gold,	Peso (Argentine),	.9648	Currency: Depreciated Paraguayan paper currency.
Persia,	Silver,	Kran,	.0916	Currency: Silver circulating above its metallic value. Gold coin commodity only, normally worth double the silver.
Peru,	Gold,	Libra,	4.8665	
Philippine Islands,	Gold,	Peso,	.5000	
Portugal,	Gold,	Escudo,	1.0805	Currency, inconvertible paper.
Rumania,	Gold,	Leu,	.1930	
Russia,	Gold,	Ruble,	.5146	
Salvador,	Gold,	Colon,	.5000	
Santo Domingo,	Gold,	Dollar,	1.0000	
Servia,	Gold,	Dinar,	.1930	
Siam,	Gold,	Tical,	.3709	
Spain,	Gold&sil'r	Peseta,	.1930	Valuation given for gold peseta; currency is notes of the bank of Spain.
Straits Settlement,	Gold,	Dollar,	.5678	
Sweden,	Gold,	Krona,	.2680	
Switzerland,	Gold,	Franc,	.1930	Member Latin Union; gold is actual standard.
Turkey,	Gold,	Piaster,	.0440	(100 piasters equal to the Turkish £.)
Uruguay,	Gold,	Peso,	1.0342	
Venezuela,	Gold,	Bolivar,	.1930	

Coke, the carbonaceous residue of coal which has been heated in an oven or retort, or in any way by which little air is admitted, until all volatile matter has been expelled. The simplest method of producing coke is based on the preparation of wood charcoal, the coal being arranged in heaps which are smothered with clay or coal dust, and then set on fire, sufficient air being admitted to keep the mass at the proper temperature for decomposition without wasting the coke. After the volatile portions are got rid of, the heap is allowed to cool, or is extinguished with water, and the coke is then ready. Methods of heating the coal in close or open ovens until the gaseous and fluid products are driven off are also commonly used. Gas coke is that which remains in the retorts after the gas has been given off. Good oven coke has an iron-gray color, sub-metallic luster, is hard, and somewhat vesicular; but gas coke has rather a slagged and cindery look, and is more porous. Coke contains about ninety per cent. of carbon, and is used where a strong heat is wanted without smoke and flame, and it is accordingly largely consumed in drying malt and similar purposes. It used to be burned regularly in locomotive engines, but raw coal is now commonly substituted. The largest quantities are consumed in smelting operations.

Cold Storage. A system for the preservation of fruits, meats, and other food stuffs, in which the air of the storage chambers is kept near or below the freezing temperature by refrigerating methods similar to those employed in making artificial ice. By this means food can be kept in an unchanged state for an indefinite period. The system is widely applied both on land and in ocean steamers.

Copper, one of the most anciently known metals, deriving its name from *Cyprus*, large supplies having in Greek and Roman times come from that island. Next to gold, silver, and platinum it is the most ductile and malleable of metals; it is more elastic than any metal except steel, and the most sonorous of all except aluminium. Its conducting power for heat and electricity is inferior only to that of silver. It has a distinct odor and a nauseous metallic taste. It is not altered by water, but tarnishes by exposure to the air, and becomes covered with a green carbonate. It occurs native in branched pieces, dendritic, in thin plates, and rarely in regular crystals, in the primitive and older secondary rocks. Blocks of native copper have sometimes been got weighing many tons. Its ores are numerous and abundant. All the compounds of copper are poisonous. It is found in most European countries, in Australia and Japan, in Africa and in North and South America (especially in the vicinity of Lake Superior). In Britain the mines of Cornwall are the richest.

Copper is extracted from its ores either by the dry or the wet process. For the former, what is known as the Welsh process is most common in Great Britain. It consists in alternately roasting the ore, and then smelting it in a furnace with a suitable slag, until impure or blister copper is obtained. Before this stage is reached a metallic compound of copper, sulphur, and iron has been produced, technically known as matte, regulus, or coarse metal, and subsequently a tolerably pure sulphide of copper called fine metal. The blister copper is refined by burning off the sulphur, arsenic, and other volatile impurities, and by melting it along with wood charcoal and stirring it with a wooden pole. The quality is then tested, and, if found satisfactory, the copper is cast into ingots. In extracting the metal from pyrites by the wet process, the ore is first roasted to get rid of the larger proportion of sulphur, then the calcined residue still containing sulphur is mixed with common salt, ground and heated in ovens. The copper is thus converted into chloride, part of which volatilizes, but is condensed, along with arsenic and other substances, by passage through flues and water-condensers. After some hours the calcined mixture is raked out of the ovens, cooled, and transferred to tanks, where it is exhausted by successive treatment with water. The solution, containing chloride of copper, sulphate and chloride of sodium, and iron salts, is next heated along with scrap iron. Copper precipitates in the form of a ruddy, lustrous, tolerably compact mass, with a crystalline appearance, and mixed with metallic iron and oxide. The larger pieces of iron are picked out, the precipitate washed and drained, and then rendered compact by heating in a furnace. A slag containing the oxide of iron forms, and the copper, when judged sufficiently pure, is run into moulds.

Some of the alloys of copper, especially those containing tin and zinc, are of considerable importance, e. g., bronze, an alloy of copper with about eight or ten per cent. of tin; bell metal composed of eighty parts of copper and twenty of tin; British bronze coinage, copper ninety-five, tin four, zinc one.

Copper is applied to a great many useful purposes. In sheets it is used for sheathing the bottoms of ships, covering roofs and domes, the constructing of boilers and stills of a large size, etc. It is also used in electrotyping and engraving, for various household utensils and fittings; but its use for household utensils is by no means free from danger on account of the action of acids on it, which produces verdigris.

The world's copper production, in 1918, was as follows: United States, 848,000 tons; Japan, 96,000; Chile, 86,000; Mexico, 76,000; Canada, 53,000; Peru, 45,000; Spain and Portugal, 41,000; Germany, 40,000; Australasia, 34,000; Africa, 31,000, together with smaller amounts from various other countries, making a total of about 1,400,000 tons.

In the United States, Arizona, Montana, Utah, and Michigan lead in copper production.

Cotton. A soft, downy substance, consisting of fine hair growing round the seeds of plants belonging to the genus *Gossypium*, *O. Malvaceæ*. The genus is indigenous to both the American and Asiatic continents, but it has been so extensively spread by means of cultivation that it is now found throughout all parts of the world, within the limits of 36° north and south of the equator. All the species and varieties form herbaceous or shrubby perennial plants, varying in height according to the climate and soil in which they grow, some not exceeding two or three

feet, while others reach a height of fifteen or twenty feet. Their leaves grow upon stalks placed alternately upon the branches, and are generally heart-shaped, and most commonly either three or five-lobed, with the lobes sharp or rounded. The flowers are usually large and showy, and grow singly upon stalks in the axils of the leaves. They have a cup-shaped shortly five-toothed calyx, surrounded by a larger outer calyx or involucel of three broad deeply-cut segments, joined together and heart-shaped at the base; a corolla of five petals; many stamens united into a central column; and a three or five-celled ovary. The fruit is a three or five-celled capsule, which bursts open through the middle of each cell when ripe, exposing the numerous seeds covered with the beautiful cellular filaments known under the name of cotton. The seeds themselves contain a considerable quantity of bland oil, which has been brought greatly into use during the last few years; and the cake formed by pressing the decorticated seeds has proved a valuable food for cattle. *G. Barbadense* is the species cultivated in the United States, where two well-marked varieties are recognized. First, the Sea Island or long-staple cotton, which was introduced from the Bahamas in 1785, and is grown only on the low islands and sea-coast of Georgia and South Carolina; it is the most valuable kind, having a fine, soft, silky staple from one and one-half to one and three-fourths inches long, and is easily separated from the seed. Second, Upland, Georgian, Bowed, or short-staple cotton, which forms the bulk of American cotton, and is the produce of the upland or inland districts of the Southern States; the staple is only one or one and one-fourth inches long, and it adheres firmly to the seed, which is also covered with short down. Egyptian cotton, and the kind called Bourbon, are likewise referable to this species. *G. herbaceum* is the indigenous Indian species, and yields the bulk of the cotton of that country; it is also grown in the south of Europe and other countries bordering on the Mediterranean, Persia, etc. Its seeds are woolly and yield a very short-stapled cotton. *G. peruvianum* yields the cotton exported from Pernambuco, Bahia, and other parts of Brazil, from Peru, etc. It is sometimes called kidney cotton, on account of its seeds adhering firmly together in the form of a kidney. The harvest of this country commences in August, and lasts till December. After being picked and dried, the cotton is separated from the seeds by means of machines called *gins*, and is then tightly compressed into bales averaging about 500 pounds in weight. Two kinds of gins are used: the *saw gin*, invented by Eli Whitney in 1793, and the *roller gin*,— the first consisting of numerous circular saws revolving between iron grids, being used for the short-staple variety; and the latter, which is merely a pair of rollers, for the long-staple. The production of cotton in the United States has grown from 1,038,848 bales in 1831 to 12,987,000 in 1920.

Cotton-spinning, a term employed to describe in the aggregate all the operations involved in transforming raw cotton into yarn. The word "spinning" has also a more limited signification, being used to denote the concluding process of the series. The following affords a general notion of the nature and order of the successive operations carried on in the manufacture of cotton yarn:— (1) *Mixing*, the blending of different varieties of raw cotton, in order to secure economical production, uniform quality and color, and an even thread in any desired degree. (2) The *willowing*, *scratching*, or *blowing*, an operation which cleans the cotton and prepares it in the form of a continuous lap or rolled sheet for the next process. (3) *Carding*, an operation in which the material is treated in its individual fibers, which are taken from the lap, further cleansed, and laid in a position approximately parallel to each other, forming a thin film, which is afterwards condensed into a sliver — a round, untwisted strand of cotton. (4) *Drawing*, the drawing out of several slivers to the dimensions of one, so as to render the new sliver more uniform in thickness, and to place the fibers more perfectly in parallel order. (5) *Slubbing*, the further drawing or attenuation of the sliver, and slightly twisting it, in order to preserve its cohesion and rounded form. (6) *Intermediate* or *second slubbing*, a repetition of the former operation and further attenuation, not necessary in the production of coarse yarns. (7) *Roving*, a continuation of the preceding, its principal object being to still further attenuate the sliver, and give it a slight additional twist. (8) *Spinning*, which completes the extension and twisting of the yarn. This is accomplished either with the throstle or the mule. By means of the former machine the yarn receives a hard twist, which renders it tough and strong. By means of the latter yarns of less strength are produced, such as warps of light fabrics and wefts of all kinds. Up to the middle of the Eighteenth Century the only method of spinning known was that by the hand-wheel, or the still more primitive distaff and spindle. In 1763, a poor weaver of the name of Hargreaves, residing at Stanhill, near Blackburn, in Lancashire, invented a machine for spinning cotton, which he named a *spinning jenny*. It consisted at first of eight spindles, turned by a horizontal wheel, but was afterwards greatly extended and improved, so as to have the vertical substituted for the horizontal wheel, and give motion to from fifty to eighty spindles. In 1769, Arkwright, originally a barber's apprentice, took out a patent for spinning by rollers. From the circumstances of the mill erected by Arkwright at Cromford, in Derbyshire, being driven by water power, his machine received the name of the *water frame*, and the thread spun on it that of *water twist*. The next important invention in cotton-spinning was that of the mule, introduced by Samuel Crompton of Bolton, in 1775, and so called from its combining the principle of the spinning jenny of Hargreaves with the roller-spinning of Arkwright. Numerous improvements in cotton-spinning have been introduced up to the present day, but they are all modifications of the original inventions. Among these is the *throstle*, an extension and simplification of the original spinning frame, introduced about the year 1810. The first machines set up in the United States were at East Bridgewater, Mass., in 1786, by two Scotchmen. In 1812, Francis C. Lowell

introduced the Cartwright power loom at Lowell, Mass., which is now the largest cotton-manufacturing center in America. There are also extensive mills in active operation in Alabama, Georgia, and other Southern States. According to recent statistics there are about 150 million spindles in operation in the world. Of these Great Britain has about 60 million; the United States, 33 million; the continent of Europe, 44 million; and eastern Asia, 12 million.

Credit, in finance, is the postponement to a future day agreed on by the parties of the payment of a debt. It implies confidence of the creditor in the debtor; and a "credit system" is one of general confidence of people in each other's honesty, solvency, and resources. By means of a credit system a comparatively small stock of money can be made to do duty for carrying on a number of different transactions; but it is indispensable for every good system of credit that money must be instantly available when required, and this principle applies to every species of transaction where postponed payment is concerned. Public credit is the confidence which men entertain in the ability and disposition of a nation to make good its engagements with its creditors, or the estimation in which individuals hold the public promises of payment, whether such promises are expressed or implied. The term is also applied to the general credit of individuals in a nation; when merchants and others are wealthy and punctual in fulfilling engagements; or when they transact business with honor and fidelity; or when transfers of property are made with ease. So we speak of the credit of a bank when general confidence is placed in its ability to redeem its notes, and the credit of a mercantile house rests on its supposed ability and probity, which induce men to trust to its engagements.

Cutlery. A term comprising all cutting instruments made of steel, but more particularly confined to the manufacture of knives, scissors, razors, surgical instruments, and swords. Those articles which require the edge to possess great tenacity, at the same time that superior hardness is not required, are made from sheer steel. The finer kinds of cutlery are made from steel which has been in a state of fusion, and which is termed *cast steel,* no other being susceptible of a fine polish and very keen edge. Razors are made of cast steel, the edge of the razor requiring the combined advantages of great hardness and tenacity. After the razor-blade is formed, it is hardened by gradually raising it to a bright-red heat, and plunging it into cold water. It is tempered by heating it afterwards till a brightened part appears of a straw color. But the beauty and elegance of polished steel is displayed to great advantage in the manufacture of the finer kinds of scissors. Damascus was anciently famed for its razors, sabers, and swords — the last especially, which possessed all the advantages of flexibility, elasticity, and hardness, while they presented a beautiful wavy appearance called the *water.* It is not known how this effect is produced; but it is well imitated in Europe by scooping hollows in the blade and filling them up; also by welding together a bundle of steel bars, cutting and rewelding them, etc. In recent times, the English and German cutlery has been long celebrated for excellence and cheapness. The manufacture of table cutlery in the United States was introduced in 1834 by John Russell, of Greenfield, Mass., and has assumed such an importance as to command a large export.

Forestry is the act, occupation, or art of forming and cultivating forests; the systematic utilization, reproduction and improvement in productive capacity of trees in masses, including the planting and culture of new forests. The usefulness of forests to man lies: (1) In their furnishing him with timber for fuel and for manufacturing and building purposes as well as with other serviceable products, such as their bark, their sap (by distillation), turpentine, creosote, wood alcohol, vanilin, etc.; also fertilizers, fodders, materials for textile fabrics, dyes, inks, etc. (2) In their influence on climate, by furnishing large tracts of superior coolness, by conserving humidity, decreasing evaporation, breaking the force of winds, etc. (3) In their influence on the waterflow, by keeping the ground more moist, conserving the springs, making the outflow of water more steady and regular, and causing the snow within them to melt more slowly, thus preventing dangerous floods; causing the rainfall to sink slowly into the soil rather than to flow in torrents over the surface; also by holding the soil together with their roots, so keeping the hillsides from being denuded and preventing their soil from being carried down over the cultivable fields below, sanding over valleys and silting up streams. This being the case, not only private interest exists in forests but a public interest, which necessitates at times governmental action — an action to which in the United States we have but recently awaked. Such action rests on the following principles: (1) The widest scope should be allowed to private enterprise in production, care being taken that abundant statistics in regard to supply and demand and opportunity for education on the subject be furnished. (2) Adequate legal protection should be given to forest property. (3) Whenever improper management threatens damage to neighboring property the State should interfere to enforce proper management. (4) Wherever public welfare demands the reforestation of denuded tracts the State should assist individual or communal enterprise in performing this, or else do the reforesting as a work of internal improvement. (5) In cases where a permanent forest is desirable and private interest can not be relied on for its proper management, the State should own and manage it.

The forests of the United States originally covered about 820 million acres, and contained over five trillion board feet of timber. In 1921 there was left about 463 million acres of forest land, containing only about two and one-fourth trillion board feet. Of this, 137 million acres was in virgin timber, 112 million acres was culled and second-growth timber sufficiently large for lumbering, 133 million acres was partially stocked with small growth, and 81 million acres was practically waste land. The present rate of timber consumption is more than four times

the annual growth of new timber in the forests. Of the resources of standing timber in 1921, about 350 billion board feet were in the New England, Mid-Atlantic, Central, and Lake States, while over 1100 billion board feet were in the Pacific Coast States. During the period 1916-20 inclusive, forest fires burned over an area of 56 million acres, causing damage amounting to $85,000,000.

Forests, National

Forest	State	Net Area, Acres
Absaroka	Montana	841,079
Alabama	Alabama	65,167
Angeles	California	818,782
Apache	Arizona	1,236,665
Arapaho	Colorado	634,485
Arkansas	Arkansas	640,136
Ashley	Utah-Wyoming	980,096
Battlement	Colorado	653,583
Beartooth	Montana	660,680
Beaverhead	Montana	1,339,568
Bighorn	Wyoming	1,124,617
Bitterroot	Montana	1,047,420
Blackfeet	Montana	895,238
Black Hills	South Dakota-Wyo.	621,084
Boise	Idaho	1,059,719
Bridger	Wyoming	713,809
Cabinet	Montana	829,206
Cache	Idaho-Utah	769,971
California	California	817,172
Caribou	Idaho-Wyoming	708,811
Carson	New Mexico	869,320
Cascade	Oregon	1,022,431
Challis	Idaho	1,257,443
Chelan	Washington	677,592
Cherokee	Georgia-N. C.-Tenn.	179,295
Chugach	Alaska	5,130,034
Clearwater	Idaho	785,376
Cleveland	California	548,661
Cochetopa	Colorado	907,000
Coconino	Arizona	1,769,207
Cour d'Alene	Idaho	663,531
Colorado	Colorado	853,641
Columbia	Washington	785,227
Colville	Washington	754,737
Coronado	Arizona-N. M.	1,430,381
Crater	Oregon-California	851,630
Crook	Arizona	890,228
Custer	Montana-S. D.	592,501
Datil	New Mexico	2,642,245
Deerlodge	Montana	830,464
Deschutes	Oregon	1,283,808
Dixie	Utah-Arizona-Nevada	509,110
Eldorado	California-Nevada	553,718
Fillmore	Utah	700,890
Fishlake	Utah	656,901
Flathead	Montana	1,707,912
Florida	Florida	317,511
Fremont	Oregon	849,526
Gallatin	Montana	567,614
Gila	New Mexico	1,559,530
Gunnison	Colorado	905,409
Harney	South Dakota	526,055
Hayden	Wyoming-Colorado	393,571
Helena	Montana	680,134
Holy Cross	Colorado	1,171,961
Humboldt	Nevada	1,308,207
Idaho	Idaho	1,879,284
Inyo	California-Nevada	1,260,586
Jefferson	Montana	1,042,884
Kaibab	Arizona	752,339
Kaniksu	Washington-Idaho	455,083
Klamath	California-Oregon	1,533,237
Kootenai	Montana	1,332,353
La Sal	Utah-Colorado	537,629
Lassen	California	950,484
Leadville	Colorado	928,954
Lemhi	Idaho	1,095,938
Lewis & Clark	Montana	810,891
Lincoln	New Mexico	1,123,975
Lolo	Montana	850,677
Luquillo	Porto Rico	12,443
Madison	Montana	931,885
Malheur	Oregon	1,043,777
Manti	Utah	781,575
Manzano	New Mexico	697,488
Medicine Bow	Wyoming	477,794
Michigan	Michigan	89,466
Minidoka	Idaho-Utah	577,997
Minnesota	Minnesota	190,602
Missoula	Montana	1,030,717
Modoc	California	1,460,402
Mono	California-Nevada	1,250,017
Monongahela	Virginia-West Virginia	53,335
Montezuma	Colorado	698,222
Nantahala	Georgia-N. C.-S. C.	201,776
Natural Bridge	Virginia	97,328
Nebraska	Nebraska	205,944
Nevada	Nevada	1,174,621
Nezperce	Idaho	1,626,627
Ochoco	Oregon	718,024
Okanogan	Washington	1,488,410
Olympic	Washington	1,535,506
Oregon	Oregon	1,053,700
Ozark	Arkansas	286,849
Payette	Idaho	1,197,511
Pend Orielle	Idaho	674,766
Pike	Colorado	1,093,156
Pisgah	North Carolina	202,843
Plumas	California	1,144,418
Powell	Utah	683,580
Prescott	Arizona	1,447,850
Rainier	Washington	1,316,679
Rio Grande	Colorado	1,135,167
Routt	Colorado	744,856
St. Joe	Idaho	556,438
Salmon	Idaho	1,620,387
San Isabel	Colorado	598,912
San Juan	Colorado	1,240,168
Santa Barbara	California	2,021,031
Sante Fe	New Mexico	1,364,585
Santiam	Oregon	607,097
Sawtooth	Idaho	1,159,352
Selway	Idaho	1,688,287
Sequoia	California	1,879,809
Sevier	Utah	720,235
Shasta	California	824,071
Shenandoah	Virginia-West Virginia	276,404
Shoshone	Wyoming	1,579,316
Sierra	California	1,493,400
Siskiyou	California-Oregon	1,346,905
Sitgreaves	Arizona	650,115
Siuslaw	Oregon	546,292
Snoqualmie	Washington	693,733
Stanislaus	California	810,802
Superior	Minnesota	857,018
Tahoe	California-Nevada	545,063
Targhee	Idaho-Wyoming	1,321,691
Teton	Wyoming	1,924,497
Toyiabe	Nevada	1,871,464
Tongass	Alaska	15,449,302
Tonto	Arizona	1,988,806
Trinity	California	1,409,010
Tusayan	Arizona	1,298,115
Uinta	Utah	1,007,145
Unaka	Tennessee-N. C.-Va.	117,539
Umatilla	Oregon	1,228,793
Umpqua	Oregon	1,010,633
Uncompahgre	Colorado	786,239
Wallowa	Oregon	957,419
Wasatch	Utah	605,476
Washakie	Wyoming	852,315
Washington	Washington	1,459,748
Weiser	Idaho	561,575
Wenatchee	Washington	657,034
White Mountain	New Hampshire-Maine	415,254
White River	Colorado	845,104
Whitman	Oregon	1,313,738
Wichita	Oklahoma	61,480
Wyoming	Wyoming	974,514
Net total		156,666,045

Gas, Artificial. A combustible gas used for light or heat, which may be classified according to its methods of production as coal gas, water gas, oil gas, air gas, and acetylene.

When soft coal is heated in a closed container it gives off inflammable gas. *Coal gas* produced in this manner was known as early as 1691, but it was first used in 1792 by William Murdock to light his home in Cornwall, England. Pall Mall, London, was, in 1807, the first street to be lighted with gas, while Baltimore, in 1821, was the first American city to use the new system.

Much coal gas is obtained as a by-product in the manufacture of coke. Large amounts are

also produced in retorts built especially for that purpose. Before it can be used, the gas passes through cleaning devices which remove impurities such as tar, ammonia, sulphur, and carbon dioxide. It is then stored in huge tanks from which it passes to the distributing pipes.

Water Gas, which is used in many cities, is made by blowing steam through a furnace full of white hot anthracite or coke. The steam is decomposed, and combines with the carbon of the fuel to produce hydrogen and carbon monoxide, gases which burn with great heat. Coal gas and water gas are of chief importance in public gas systems.

Oil Gas is produced by heating suitable oils until they break down into permanent gases. These may be purified and compressed into cylinders. Pintsch and Blau gases are of this type. *Air gas* is formed by blowing air through a volatile inflammable liquid such as gasoline until the air contains enough vapor to burn. This type is often used in detached houses.

When it was the custom to obtain light directly from burning gas it was often necessary to add to the gas quantities of hydrocarbon such as ethylene and benzene in order that the flame should produce a certain, fixed degree of brightness or candle power. The use of the more efficient incandescent mantles which require only that the burning gas supply heat sufficient to make them glow, made desirable a standard for gas which should be based on *heating value* rather than candle power. The change to such a standard was hastened by the World War, when the government required all available benzene for making explosives.

IMPORTS AND EXPORTS OF UNITED STATES

CHIEF EXPORTS, 1920

Articles	Quantities	Values
Abrasives		$ 6,601,299
Agricultural Implements		46,277,638
Aluminum, and mfs. of		5,630,781
Animals		18,332,960
Asbestos, and mfs. of		4,572,203
Automobiles, and parts of		298,229,715
Bicycles, tricycles etc.		4,725,643
Brass and mfs. of		15,128,651
Breadstuffs, total		1,079,107,701
Corn	17,761,420 bu.	26,453,681
Oats	12,877,874 bu.	12,338,104
Wheat	218,287,334 bu.	596,975,396
Wheat flour	19,853,992 bbls.	224,472,448
Candles	7,002,651 lbs.	1,408,093
Cars, railway	28,239 cars	41,967,370
Celluloid and mfs. of		9,046,302
Cement, hydraulic	2,985,807 bbls.	10,045,369
Chemicals, drugs, dyes and medicines		168,999,706
Chewing Gum		2,612,540
Clocks and Watches		7,043,435
Coal, anthracite	4,824,776 tons	45,538,100
Coal, bituminous	34,390,254 tons	304,273,241
Coke	821,252 tons	9,993,665
Confectionery		6,255,476
Copper and mfs. of (except ore)		133,429,272
Cotton	6,159,132 bales / 3,179,313,336 lbs.	1,136,408,916
Cotton, mfs. of		402,041,277
Dairy Products		80,817,242
Earthen, stone, and china ware		9,397,623
Eggs		13,878,795
Electrical machinery & appliances		101,990,004
Explosives		56,846,698
Fertilizers	1,415,937 tons	36,555,812
Fibers, vegetable, mfs. of		25,818,058
Fire extinguishers		1,021,646
Fish		31,498,507
Fruits and nuts		84,390,424
Furs and furskins		32,886,995
Glass and glassware		30,086,211
Glucose	162,496,168 lbs.	10,067,830
Grease		14,069,506
Hats, and materials for		7,768,230
Hay	63,154 tons	1,797,396
Hides and skins (except fur)	17,401,917 lbs.	6,202,886
Hops	25,624,055 lbs.	17,088,472
India rubber, mfs. of		85,436,897
Ink, including printers		2,829,471
Instruments, scientific purposes		6,198,856
Iron and steel and mfs. of		1,112,835,237
Cutlery		13,172,927
Engines		
Gasoline	94,723	$ 35,932,304
Kerosene	26,780	10,589,787
Steam	3,537	57,639,072
Machine		
Adding & calculating	35,915	6,790,407
Cash registers	20,946	5,472,620
Sewing machines		15,581,843
Typewriting		25,041,809
Nails	245,219,219 lbs.	15,522,508
Rails, steel	594,628 tons	36,193,689
Scales and balances		3,242,459
Tools		35,453,501
Leather and mfs. of		190,318,659
Boots and shoes	16,841,592 prs.	67,144,542
Meat Products		463,256,758
Molasses and syrups	11,422,984 gals.	5,261,657
Motor Cycles	37,662	10,756,580
Musical Instruments		11,848,567
Naval stores		34,503,389
Oilcake and oilcake meal	589,562,462 lbs.	18,011,549
Oilcloth and linoleum		5,202,227
Oils, animal	1,034,580 gals.	1,308,951
Oils, mineral	3,008,845,382 gals.	549,357,212
Oils, vegetable		59,005,308
Corn	12,059,079 lbs.	2,415,398
Cottonseed	184,753,824 lbs.	34,874,790
Soya bean	43,511,862 lbs.	9,412,431
Paints		28,600,608
Paper		89,072,289
Paraffin	375,276,359 lbs.	32,619,318
Pencils and pencil leads		3,849,221
Perfumes, cosmetics and toilet preparations		8,739,593
Phonographs, records & accessories	87,571	7,876,699
Photographic Goods		25,431,652
Motion picture films	238,148,261 lin. ft.	9,598,446
Seeds		7,015,763
Soap		19,154,837
Starch	147,943,125 lbs.	8,945,524
Sugar (including maple sugar)	924,192,385 lbs.	94,877,045
Surgical appliances		6,134,763
Tobacco, unmanufactured	479,900,032 lbs.	245,532,069
Tobacco, mfs. of		43,161,730
Vegetables		32,784,416
Wood and mfs. of		186,502,152
Wood pulp	28,541 tons	2,947,267
Wool	8,845,270 lbs.	4,936,740
Wool, mfs. of		44,571,002
Zinc, except ore and dross		20,717,342
Other merchandise		293,975,052
Grand total merchandise		8,080,480,821
Specie, Gold		466,592,606
Specie, Silver		179,037,260

IMPORTS AND EXPORTS OF UNITED STATES—Continued

CHIEF IMPORTS, 1920

Articles	Quantities	Values
Abrasive materials	44,147 tons	$ 2,735,241
Aluminum	40,074,132 lbs.	14,434,273
Animals		31,552,223
Art works		28,678,604
Asbestos, mineral	149,605tons	9,120,253
Automobiles and parts of		2,278,768
Bristles	4,945,219 lbs.	10,388,199
Breadstuffs, total		125,345,323
Corn	7,784,482 bu.	9,296,991
Farinaceous substances	104,843,279 lbs.	5,928,508
Oats	6,728,200 bu.	6,549,111
Rice	142,951,130 lbs.	14,085,728
Wheat	35,808,656 bu.	75,359,220
Wheat flour	800,788 bbls.	8,669,300
Chemicals, drugs, dyes, and medicines		211,528,099
Coal-tar distillates, crude		5,513,260
Dyes, total	4,847,255 lbs.	6,389,041
Glycerin, crude	22,411,025 lbs.	2,934,371
Licorice root	56,226,008 lbs.	3,454,839
Lime	14,964,813 lbs.	3,114,696
Potash	91,346,341 lbs.	4,940,694
Soda		66,194,246
Vanilla beans	1,239,711 lbs.	2,406,335
Clocks and watches		16,289,911
Coal, anthracite and bituminous	1,139,944 tons	6,991,511
Cocoa, crude	343,666,812 lbs.	54,307,908
Coffee	1,297,439,310 lbs.	252,450,651
Copper and mfs. of		90,018,689
Corkwood and mfs. of		8,343,998
Cotton	299,994,378 lbs.	138,743,702
Cotton, mfs. of		137,431,814
Dairy Products	53,447,897 lbs.	30,337,576
Dyewoods, crude	76,977 tons	2,256,828
Earthen, stone, and chinaware		11,628,334
Eggs, dried and frozen	29,022,577 lbs.	7,233,614
Feathers		5,923,364
Fertilizers	1,116,505 tons	51,153,989
Fibers, veg. and mfs. of		234,043,189
Fish		35,151,155
Fruits and nuts		116,221,857
Furs and mfs. of		93,558,940
Glass and glassware		8,500,126
Gums, total		52,212,963
Camphor	4,977,053 lbs.	7,453,229
Chicle	9,859,788 lbs.	$6,748,955
Copal, damar, kauri	69,334,265 lbs.	9,595,583
Shellac	28,587,107 lbs.	23,088,576
Hair, unmanufactured	14,010,209 lbs.	5,031,079
Hats, bonnets, etc.,		24,189,215
Hides and skins (except fur)	510,239,620 lbs.	243,877,740
India rubber and gutta-percha, crude	603,127,906 lbs.	248,900,217
Iron and steel and mfs. of		50,305,603
Ivory, animal and veg.	50,358,003 lbs.	4,911,613
Jewelry and precious stones		77,217,163
Lead and manufactures of		11,263,125
Leather and mfs. of		36,333,858
Meat Products	195,462,487 lbs.	33,936,881
Nickel and mfs. of		10,859,882
Oils		
Animal	2,268,744 gals.	2,468,960
Mineral	4,569,341,077 gals.	65,902,780
Vegetable		104,443,758
Coconut	216,327,103 lbs.	33,079,584
Cottonseed	9,457,924 lbs.	1,305,154
Linseed	4,693,360 gals.	6,488,750
Olive, edible	4,078,811 gals.	12,168,848
Palm	41,948,224 lbs.	5,430,310
Peanut	12,683,237 gals.	16,990,133
Paper stock, crude	509,509,082 lbs.	18,512,546
Paper and mfs. of		84,686,852
Platinum		8,568,907
Silk, unmanufactured	39,660,101 lbs.	301,038,193
Silk, mfs. of		75,327,914
Spices	60,918,078 lbs.	11,641,083
Sugar	8,073,759,849 lbs.	1,017,163,456
Tea	90,246,615 lbs.	24,392,427
Tin and mfs. of		92,679,765
Tobacco, unmanufactured	82,221,396 lbs.	81,630,011
Tobacco, mfs. of	6,457,829 lbs.	16,932,004
Toys		10,737,694
Vegetables		40,420,326
Wax, Beeswax		1,418,023
Wood and mfs. of		209,031,235
Wood pulp	809,194 tons	89,418,185
Wool, unmanufactured	259,617,641 lbs.	126,972,088
Wool, mfs. of		58,115,537
All other articles		390,710,453
Totalmerchandise imported		5,278,481,490
Specie, Gold		150,540,200
Specie, Silver		102,899,506

IMPORTS AND EXPORTS OF THE UNITED STATES BY COUNTRIES

Countries	Imports From U. S.	Exports To U. S.
Argentina	$224,718,000	$182,546,000
Australasia		
Australia	132,275,000	41,502,000
New Zealand	39,191,000	19,181,000
Austria	8,168,485	2,085,038
Belgium	51,883,000	31,594,000
Kongo, Belgian	62,000	
Bolivia	4,112,000	28,205,000
Brazil	182,118,000	263,180,000
Bulgaria	37,657,000	35,667,000
Canada	801,633,000	464,029,000
Central American States		
Costa Rica	5,891,000	9,812,000
Guatemala	8,083,000	13,500,000
Honduras	6,500,000	5,542,000
Nicaragua	6,688,000	7,664,000
Panama	9,359,000	3,496,000
Salvador	9,064,000	8,340,000
Chile	62,829,000	178,374,000
China	146,897,000	137,420,000
Colombia	12,164,000	30,303,000
Cuba	234,207,000	343,693,000
Czecho-Slovakia	7,078,000	10,160,000
Denmark	10,065,000	486,000
Dominican Republic	20,930,000	25,947,000
Ecuador	7,501,000	8,966,000
Egypt	14,284,000	82,619,000
Sudan	2,000	469,000
France	1,569,723,000	116,196,000
Algeria	4,607,000	2,167,000
Tunis	4,213,000	36,000
French Indo-China	594,000	375,000
French Colonies, n.e.s	5,271,000	1,208,000
Germany	381,771,609	90,773,014
Greece	16,604,000	17,539,000
Haiti	6,499,000	842,000
India, British	$ 52,931,000	$ 107,543,000
Italy	1,428,468,000	87,521,000
Eritrea (Massaua)	151,000	218,000
Japan	381,800,000	1,028,821,000
Formosa	1,716,000	3,495,000
Chosen	5,150,000	58,000
Liberia	27,000	312
Mexico	76,222,000	189,040,000
Morocco	2,085,000	2,394,000
Netherlands	218,644,000	22,998,000
Dutch East Indies	25,101,000	44,576,000
Dutch Possessions in America	3,388,000	2,422,000
Norway	53,519,000	1,870,000
Paraguay	2,619,000	622,000
Persia	17,000	358,000
Peru	36,740,000	60,828,000
Portugal (Madeira&Azores)	43,055,000	3,509,000
Portuguese Colonies	2,977,000	364,000
Rumania	6,588,000	
Russia (1915)	133,238,000	1,956,000
Finland	123,307,000	3,996,000
Siam	3,306,000	239,000
Spain	109,820,000	49,495,000
Sweden	22,123,000	5,104,000
Switzerland	152,062,000	35,280,000
Turkey	400	400
Union of South Africa	54,886,000	38,107,000
United Kingdom	2,746,908,000	376,273,000
British Colonies, n.e.s	67,249,000	38,031,000
United States		
Philippine Islands	92,290,000	105,216,000
Porto Rico	121,562,000	158,322,000
Uruguay	27,851,000	44,345,000
Venezuela	14,928,000	23,642,000

IMPORTS AND EXPORTS OF PRINCIPAL COUNTRIES

Countries	Imports	Exports
Argentina	$632,820,000	$394,881,000
Australasia—		
Commonwealth of Australia	461,396,000	493,712,000
New Zealand	147,493,000	232,435,000
Belgium	611,987,000	902,911,000
Congo, Belgian	10,467,000	11,566,000
Bolivia	15,354,000	68,097,000
Brazil	380,430,000	633,061,000
Bulgaria	186,041,000	106,585,000
Canada	1,064,316,000	1,239,492,000
Central American States		
Costa Rica	7,318,000	17,749,000
Guatemala	11,231,000	22,419,000
Honduras	6,931,000	5,999,000
Nicaragua	7,913,000	12,409,000
Panama	11,407,000	3,757,000
Salvador	14,938,000	16,745,000
Chile	144,188,000	278,567,000
China	879,270,000	857,270,000
Colombia	21,446,000	36,721,000
Cuba	313,166,000	470,259,000
Denmark	233,460,000	190,411,000
Dominican Republic	22,019,000	39,461,000
Ecuador	11,383,000	20,836,000
Egypt	243,069,000	388,909,000
Sudan	22,528,000	13,417,000
France	3,747,234,000	1,681,641,000
Algeria	182,010,000	239,378,000
Tunis	35,152,000	38,982,000
French Indo-China	45,318,000	35,094,000
French Colonies, n.e.s.	73,295,000	63,810,000
Greece	141,644,000	37,294,000
Haiti	10,935,000	17,273,000
India, British	548,403,000	776,394,000
Italy	3,187,714,000	1,001,404,000

Countries	Imports	Exports
Japan	$[illegible]	$4,180,000
Java	11,092,000	1,007,000
Mexico	1,074,814,000	1,028,821,000
Netherlands	77,121,000	58,913,000
Norway	78,858,000	76,780,000
Peru	1,431,000	1,412,000
Russia	88,875,000	198,346,000
Servia	10,444,000	8,841,000
Switzerland	1,016,447,000	867,346,000
United States	2,317,000,000	2,091,178,000
Uruguay	3,832,000	4,362,000
Venezuela	9,687,000	20,[illegible]
Portugal	14,782,000	14,[illegible]
Russia	7[illegible]	41,[illegible]
Spain	3[illegible]	1,[illegible]
Sweden	[illegible]	[illegible]
Siam	[illegible]	[illegible]
Spain	[illegible]	[illegible]
Sweden	[illegible]	[illegible]
Switzerland	[illegible]	[illegible]
Turkey	[illegible]	[illegible]
United States*	[illegible]	[illegible]
Uruguay	[illegible]	[illegible]
Venezuela	[illegible]	[illegible]
Portugal	[illegible]	[illegible]
Russia	[illegible]	[illegible]
Spain	[illegible]	[illegible]
Sweden	[illegible]	[illegible]
Switzerland	[illegible]	[illegible]
Turkey	[illegible]	[illegible]
United States*	[illegible]	[illegible]
Uruguay	[illegible]	[illegible]
Venezuela	24,484,000	43,423,000

*U. S. includes, Alaska, Hawaii and Porto Rico.

India Rubber. A peculiar elastic substance occurring in the milky juice of the rubber tree (*Hevea*) and in various other rubber-bearing plants some of which are extensively cultivated in the tropics. Most of the rubber of commerce is derived from South America, Central America, and Mexico; smaller quantities from Java, Penang, Singapore, Assam, and South Africa. The purest comes from Para in the Amazon region. Since 1900 many million pounds of rubber have been obtained from the *guayule* plant, a small shrub (*Parthenium argentatum*) found in Chihuahua and adjoining deserts of Mexico and the United States. Artificial or synthetic rubber has been produced in limited quantities by chemists in England and Germany. In Europe the first important practical applications of rubber are associated with the names of Macintosh, the patentee in 1823 of a waterproofing process by the solution of the gum in oil of turpentine and alcohol, and in naphtha. Hancock, the inventor of the "masticator," a machine for the condensation of crude lumps or shreds of caoutchouc, as imported, into compact homogeneous blocks for subsequent division into cakes, sheets, and rollers, and Goodyear, the inventor of the vulcanizing process, patented in 1844. Since then the uses of rubber have multiplied so rapidly that it is employed in every department of industry. When combined with a small quantity of sulphur, it is used for the manufacture of overshoes, boots, gloves, life preservers, gas bags, steam and water packing, belting, fire hose, rubber springs, tires, and artificial sponges. With a larger proportion of sulphur, and cured or vulcanized by exposure to a high temperature, it is used for the manufacture of combs, pen and pencil holders, pipes, mikstands, buttons, canes, carriages, jewelry, and for mountings for artificial teeth. In combination with asphalts, oils, and sulphur, and vulcanized (kerite), it is used for covering telegraph wires. The world's annual yield of rubber is about 300 million pounds. The most valuable single rubber product is automobile tires, of which, in 1910, some 37 millions were made in the United States, valued at $1,125,000,000.

Insurance. The act of providing against a possible loss, by entering into a contract with one who is willing to give assurance; that is, to bind himself to make good such possible loss, should it occur. The instrument by which the contract is made is denominated a *policy*, and the stipulated consideration is called the *premium*. In this country, fire and marine insurance are almost invariably effected by joint-stock companies, whose modes of operations are too well known to call for explanation here. Life insurance (to which the word "assurance" is now more generally applied) is a contract by which a party, for a certain premium, agrees to pay a certain sum, should a person, to whose life it relates, die within a time specified; or to pay the executors of the insured a certain sum

at the time of his death. Such policies, however, formerly made an exception in the case of death by suicide. By this means, a family may be furnished with means of support in case of the death of its head. According to general practice, a life insurance is seldom made by the payment of a single sum at the time it is effected, but almost always by the payment of an annual premium during its continuance. An individual, therefore, who has insured a sum on his own life, would forfeit certain advantages of the insurance were he not to continue regularly to make his periodical payments. Life insurance is conducted by several kinds of societies; as the *proprietary, mutual insurance*, and *mixed societies*. The proprietary, or joint-stock companies, are formed of persons who have subscribed a capital, on the insurance of which the business of the company is carried on, and who divide the profits entirely among themselves. In the mutual insurance societies, on the other hand, there is no proprietary, the assured being likewise the assurers, and dividing the profits among themselves, after deducting the expenses of management, and reserving a guaranty fund. In the mixed class of offices, which is the most numerous in the United States, there is a proprietary, but, at the same time, the assured are allowed to participate largely in the profits of the society, which are usually divided in the form of bonuses at stated periods. The premiums to be paid are adjusted according to the age of the party on whose life the insurance is made, being lowest on young lives, and increasing from year to year as the expectancy of life diminishes.

It is within the past sixty years that the vast business of life insurance in the United States has been developed. The experimental stage was ended and the era of advance was opened when, in 1843, the Mutual Life Insurance Company of New York began business, its first policy having been issued on February 1st of that year. Since then a large number of life insurance companies have been established. The following list includes those now transacting business which had their inception between 1843 and 1860 inclusive, arranged according to the date of the first policy issued:

Mutual Life Insurance Company, 1843; New England Mutual Life Insurance Company (1), 1844; New York Life Insurance Company, Mutual Benefit Life Insurance Company, State Mutual Life Assurance Company (3), 1845; Connecticut Mutual Life Insurance Company, 1846; Penn Mutual Life Insurance Company, 1847; Union Mutual Life Insurance Company, 1849; National Life Insurance Company of Vermont, United States Life Insurance Company, Ætna Life Insurance Company, Manhattan Life Insurance Company, 1850; Massachusetts Mutual Life Insurance Company, Phœnix Mutual Life Insurance Company, Berkshire Life Insurance Company (4), 1851; Northwestern Mutual Life Insurance Company, 1858; Equitable Life Assurance Society, 1859; Washington Life Insurance Company, Home Life Insurance Company, Germania Life Insurance Company, 1860.

How life insurance has progressed since the early part of 1843 is shown in the subjoined table by periods of years as indicated, assessment insurance not being included:

Year	Amount of Outstanding Insurance	Amount of Assets
1843, ...	$6,500,000	$1,000,000
1867, ...	1,235,000,000	124,534,000
1892, ...	4,898,000,000	919,310,131
1899, ...	7,774,484,478	1,595,208,408
1906, ...	13,706,810,284	2,924,253,848
1910, ...	16,406,702,709	3,875,877,059
1919, ...	35,514,553,927	6,742,577,790

The following is the table of expectation of life usually recognized by American life insurance companies:

EXPECTATION OF LIFE

Age	Expectation in Years	Age	Expectation in Years	Age	Expectation in Years	Age	Expectation in Years	Age	Expectation in Years
0	28.15	20	34.22	40	26.04	60	15.45	80	5.85
1	36.78	21	33.84	41	25.61	61	14.86	81	5.50
2	38.74	22	33.46	42	25.19	62	14.26	82	5.16
3	40.01	23	33.08	43	24.77	63	13.66	83	4.87
4	40.73	24	32.70	44	24.35	64	13.05	84	4.66
5	40.88	25	32.33	45	23.92	65	12.43	85	4.57
6	40.69	26	31.93	46	23.37	66	11.96	86	4.21
7	40.47	27	31.50	47	22.83	67	11.48	87	3.90
8	40.14	28	31.08	48	22.27	68	11.01	88	3.67
9	39.72	29	30.66	49	21.72	69	10.50	89	3.56
10	39.23	30	30.25	50	21.17	70	10.06	90	3.43
11	38.64	31	29.83	51	20.61	71	9.60	91	3.32
12	38.02	32	29.43	52	20.05	72	9.14	92	3.12
13	37.41	33	29.02	53	19.49	73	8.69	93	2.40
14	36.79	34	28.62	54	18.92	74	8.25	94	1.98
15	36.17	35	28.22	55	18.35	75	7.83	95	1.62
16	35.76	36	27.78	56	17.78	76	7.40		
17	35.37	37	27.34	57	17.20	77	6.99		
18	34.98	38	26.91	58	16.63	78	6.59		
19	34.59	39	26.47	59	16.04	79	6.21		

Interest is the allowance made for the loan or retention of a sum of money which is lent for, or becomes due at, a certain time, this allowance being generally estimated at so much per cent. per annum, that is, so much for the use of $100 for a year. The money lent or forborne is called the *principal;* the sum paid for the use of it, the *interest.* The interest of $100 for one year is called the *rate per cent.*, and the sum of any principal and its interest together, the *amount.* Interest is either *simple* or *compound.* Simple interest is that which is allowed upon the principal only, for the whole time of the loan or forbearance. Compound interest is that which arises from any sum or principal in a given time by increasing the principal, at fixed periods, by the interest then due, and hence obtaining interest upon both interest and principal. The rate of interest, supposing the security for the principal to be equal, depends obviously upon what may be made by the employment of money in various industrial undertakings, or on the rate of profit. Where profits are high, interest is high, and vice versa; in fact, the rate of interest is simply the net profit on capital. Besides this, however, the interest on each particular loan must further vary according to the supposed risk of the lender, etc. Bills and notes, by the usage of trade, carry interest from the date they become due, such interest being recoverable as damages, but the jury are not bound to give it. In the United States interest is generally awarded by the courts on overdue debts.

States and Territories	Interest Laws		
	Legal Rate Per Cent.	Allowed by Contract Per Cent.	Forfeiture for Usury.
Alabama	8	8	Interest and costs.
Alaska	8	12	Interest; double amount paid recoverable.
Arizona	6	10	No provision.
Arkansas	6	10	Principal and interest.
California	7	12	No provision.
Colorado	8	12‡	No provision, except re pawn and note brokers.
Connecticut	6	12	Fine or imprisonment, or both.
Delaware	6	6	Excess of interest.
District of Columbia	6	8	Interest.
Florida	8	10	Interest; double excess paid recoverable.
Georgia	7	8	Interest.
Hawaii	8	12	
Idaho	7	10	Interest.
Illinois	5	7	Interest.
Indiana	6	8	Excess interest.
Iowa	6	8	Interest, 8% of principal and costs.
Kansas	6	10	Double the excess interest.
Kentucky	6	6	Excess interest.
Louisiana	5	8	Interest.
Maine	6	Any	No provision.
Maryland	6	6	Interest.
Massachusetts	6	Any‡	No provision.
Michigan	5	7	Interest.
Minnesota	6	10	Interest and costs.
Mississippi	6	8	Interest.
Missouri	6	8	Excess interest.
Montana	8	10	Double interest.
Nebraska	7	10	Interest and costs.
Nevada	7	12	Excess interest.
New Hampshire	6	6	Three times excess interest.
New Jersey	6	6	Interest and costs.
New Mexico	6	12	Excess interest; twice excess paid recoverable.
New York	6	6	Principal and interest; also misdemeanor.
North Carolina	6	6	Interest; double amount paid recoverable.
North Dakota	6	10	Interest; double amount paid recoverable.
Ohio	6	8	Interest over 6%.
Oklahoma	6	10	Interest; double amount paid recoverable.
Oregon	6	10	Principal and interest.
Pennsylvania	6	6	Excess interest.
Rhode Island	6	Any	No provision.
South Carolina	7	8	Interest; double interest paid recoverable.
South Dakota	7	12	Interest; also misdemeanor.
Tennessee	6	8	Excess interest.
Texas	6	10	Interest; double amount paid recoverable.
Utah	8	12	Loan void; principal and interest recoverable.
Vermont	6	6	Excess interest.
Virginia	6	6	Interest.
Washington	6	12	Interest and costs; double interest paid recoverable.
West Virginia	6	6	Excess interest.
Wisconsin	6	10	Excess interest; thrice amount paid recoverable.
Wyoming	8	12	Interest.

‡See law.

COMMERCIAL LAW

STATUTES OF LIMITATION				EXEMPTION LAWS		JURISDICTION OF JUSTICES OF THE PEACE	STATES AND TERRITORIES
CONTRACTS UNDER SEAL, YEARS	JUDGMENTS, YEARS	NOTES, YEARS	OPEN ACCOUNTS, YEARS	PERSONAL PROPERTY, EXEMPT	HOMESTEAD, EXEMPT		
10	20	6	3	$1,000	$2,000	$ 100	Alabama.
10	10	6	6	300	2,500	1,000	Alaska.
4–6	4–5	4–6	3	*	4,000	200	Arizona.
5	3–10‡	5	3	500	2,500	300	Arkansas.
4	5	4	4	*	5,000	300	California.
3–20	6–20‡	6	6	*	2,000	300	Colorado.
17	....	6	6	*	1,000	100	Connecticut.
20	10†	6	3	*	....	200	Delaware.
12	12	3	3	300	....	1,000	District of Columbia.
20	7–20	5	3	1,000	160 acres	100	Florida.
20	7	6	4	1,600	or 1,600	100	Georgia.
..	6–20	..	6	*	1,000	300	Hawaii.
5	6	5	4	*	5,000	300	Idaho.
10	5–20	10	5	*	1,000	300	Illinois.
20	20	10	6	600	or 600	200	Indiana.
10	10–20	10	5	*	40 acres	100	Iowa.
5	5	5	3	*	160 acres	300	Kansas.
15	15	5–15	2–5	*	1,000	100	Kentucky.
10	10†	5	3	*	Total, 2,000	100	Louisiana.
20	20	6-20	6	*	500	20	Maine.
12	12	3	3	100	....	100	Maryland.
20	20	6–20	6	*	800	100	Massachusetts.
10	6–10	6	6	*	1,500	300	Michigan.
6	10	6	6	500	80 acres	100	Minnesota.
6	7	6	3	250	3,000	200	Mississippi.
10	10	10	5	300	1,500 (min.)	250	Missouri.
8	10	8	5	*	2,500	300	Montana.
5	5	5	4	500	or 2,000	200	Nebraska.
6	6	6	4	*	5,000	300	Nevada.
20	20	6	6	*	500	13.33	New Hampshire
16	20	6	6	200	1,000	200	New Jersey.
6	7	6	4	*	1,000	200	New Mexico.
20	10–20	6	6	*	1,000	200	New York.
10	10	3	3	500	1,000	200	North Carolina.
10	10	6	6	1,000	5,000	200	North Dakota.
15	5††	15	6	500	or 1,000	300	Ohio.
5	5	5	3	*	5,000	200	Oklahoma.
10	10	6	6	*	3,000	250	Oregon.
20	20	6	6	300	....	300	Pennsylvania.
20	20	6	6	*	....	....	Rhode Island.
6–20	20	6	6	500	1,000	100	South Carolina.
20	10–20	6	6	750	5,000	100	South Dakota.
6	10	6	6	*	1,000	500	Tennessee.
4	10	4	2	500	5,000	200	Texas.
6	8	6	4	*	1,500 (min.)	300	Utah.
8	8	6–14	6	*	1,000	200	Vermont.
10	10–20	5	3	*	2,000	300	Virginia.
6	6	6	3	*	2,000	100	Washington.
10	10	10	5	200	1,000	300	West Virginia.
10–20	10–20	6	6	*	5,000	200	Wisconsin.
10	5–10	10	8	500	2,500	200	Wyoming.

*Certain specific property exempt according to circumstances.
†Subject to renewal. ††Dormant 5 years, outlawed 21 years, after execution.

INVENTIONS SINCE THE DISCOVERY OF ELECTRICITY

Inventions	Date	Inventor	Nativity
Discoveries of electrical phenomena,	1560	William Gilbert,	England
Won the title of "founder of the science of electricity,"	1603		
Screw printing-press,	1620		
Spirally grooved rifle barrel,	1620	Blaew,	Germany
Iron furnaces,	1621	Koster,	England
The use of steam,	1630	Lord Dudley,	England
The first authentic reference in English literature to the use of steam in the arts.		David Ramseye,	England
Bay Psalm Book, first book published in the colonies,	1640		Massachusetts
Barometer,	1643	Torricelli,	Italy
Steam engine, atmospheric pressure,	1663	Thomas Newcomen,	England
Machine for generating electricity,	1681–6	Otto von Guericke,	Germany
First newspaper in America, "Public Occurrences,"	1690		
First paper mill in America,	1690	William Rittenhouse,	Pennsylvania
First steam engine with a piston,	1690	Denys Papin	France
The manufacture of plate glass established,	1695		France
First to discover difference between electric conductors and insulators,	1696 1736	Stephen Gray,	England
The first practical application of the steam engine,	1702	Thomas Savery,	England
First to produce electric spark,	1708 1716	Dr. J. Wall,	England
Thermometer,	1709	Fahrenheit,	Danzig
Electrometer, the well-known pith ball,	1718 1772	John Cantor,	England
The "Franklin" printing-press,	1725	Benjamin Franklin,	United States
Electrical glass plate machine,	1727 1772	Martin de Planta,	France
Stereotyping,	1731	William Ged,	Scotland
First to discover that electricity is of two kinds,	1733–9	Cisternay du Fay,	France
Flying shuttle in weaving,	1733	John Kay,	England
Rotary 3-color printing-press (multi-color),	1743	Platt & Keen,	England
Electric or Leyden Jar,	1745	Kleist,	Germany
Substitution of coke for coal in melting iron,	1750	Abraham Darby,	England
Lightning conductor,	1752	Benjamin Franklin,	United States
Spinning jenny,	1763	James Hargreaves,	England
Pianoforte, played in public in England in,	1767		England
Drawing rolls in a spinning machine,	1769	Richard Arkwright,	England
The introduction of the "Hollander" or beating engine for pulping rags in the manufacture of paper,	1773		
The mule spinner,	1774	Samuel Crompton,	England
Cut nails,	1775	Jeremiah Wilkinson,	United States
Circular wood saw,	1777	Miller,	England
Embryo bicycle,	1779	Branchard & Magurier,	France
Steam engine, the basis of the modern engine,	1782	James Watt,	Scotland
Gas balloon,	1783	J. E. & J. M. Montgolfier,	France
Puddling iron,	1783–4	Henry Cort,	England
Plow, with cast-iron mold board, and wrought and cast-iron-shares,	1784	James Small,	Scotland
Power loom,	1785	James Cartwright,	England
First steamboat in the United States,	1786	John Fitch,	United States
Steam road wagon (first automobile),	1787	Oliver Evans,	United States
Grain threshing machine,	1788	Andrew Meikle,	England
Hobby horse, forerunner of bicycle,	1790		England
Rotary steam power printing-press, the first idea of,	1790	Wm. Nicholson,	England
Wood planing machine,	1791	Samuel Bentham,	England
Gas first used as an illuminant,	1792	Wm. Murdoch,	England
Cotton gin,	1793	Eli Whitney,	United States
Art of lithography,	1796	Alois Senefelder,	Germany
Machine for making continuous webs of paper,	1800	Louis Robert,	France
Electric battery discovered,	1800	Volta,	Italy
Steam coach,	1801	Richard Trevithick,	England
Wood mortising machine,	1801	M. J. Brunel,	England
Pattern loom,	1801	M. J. Jacquard,	France
First fire-proof safe,	1801	Richard Scott,	England
Steamboat on the Clyde, "Charlotte Dundas,"	1802	William Symington,	England
First photographic experiments,	1802	Wedgwood & Davy,	England
Planing machine,	1802	J. Bramah,	England
The application of steam to the loom,	1803	William Horrocks,	England
Steel pen,	1803	Wise,	England
Steam locomotive on rails,	1804	Richard Trevithick,	England
Application of twin-screw propellers in steam navigation,	1804	John Stevens,	United States
Process of making malleable-iron castings,	1804	Lucas,	England
First life preserver,	1805	John Edwards,	England
Electro-plating,	1805	Luigi Brugnatelli,	Italy
Knitting machine, the latch needle in the,	1806	Jeandeau,	France
Steamboat navigation on the Hudson River,	1807	Robert Fulton,	United States
Percussion or detonating compound,	1807	A. J. Forsyth,	Scotland
First street gas lighting in England,	1807	F. A. Winsor,	England
Band wood saw,	1808	Newberry,	England
Voltaic arc,	1808	Sir Humphry Davy,	England
First steamboat to make a trip to sea, the "Phœnix,"	1808	John Stevens,	United States
Multi-wire telegraphy,	1809	Sommering,	Germany
Revolving cylinder printing-press,	1810	Frederick Koenig,	Germany
Breech-loading shotgun,	1811	Thornton & Hall,	United States
Storage battery,	1812	J. B. Ritter,	Germany
Dry pile (prototype of dry battery),	1812	Zamboni,	Italy
First practical steam rotary printing-press, paper printed on both sides,	1814	Frederick Koenig,	Germany

INVENTIONS SINCE THE DISCOVERY OF ELECTRICITY

(CONTINUED)

Inventions	Date	Inventor	Nativity
First locomotive in United States,	1814	George Stephenson,	England
First circular wood saw made in this country,	1814	Benjamin Cummings,	United States
Heliography,	1814	Jos. N. Niepce,	France
Kaleidoscope,	1814	Sir David Brewster,	England
Miners' safety lamp,	1815	Sir Humphry Davy,	England
Dry gas meter,	1815	S. Clegg,	England
Knitting machine,	1816	Brunel,	England
"Draisine" bicycle,	1816	Baron von Drais,	Germany
"Columbian" press, elbowed pulling bar, number of impressions per hour, 50,	1817	George Clymer,	United States
Stethoscope,	1819	Laënnec,	France
Electro-magnetism discovered,	1819	H. C. Oersted,	Denmark
Lathe for turning irregular wood forms,	1819	Thomas Blanchard,	United States
The theory of electro-dynamics first propounded,	1820	Andre Ampère	France
Electroscope,	1820	Bohenberg,	Germany
The conversion of the electric current into mechanical motion,	1821	Michael Faraday,	England
Galvanometer,	1822	Schweigger,	Germany
Multi-color printing,	1822	P. Force,	United States
Calculating machine,	1822	Charles Babbage,	England
Discovery of thermo-electricity,	1823	Professor Seebeck,	England
Liquefaction and solidification of gas,	1823	Michael Faraday,	England
Water gas, discovery of,	1823	Ibbetson,	England
Portland cement,	1825	Joseph Aspdin,	England
Electro-magnet,	1825	Sturgeon,	England
First passenger railway, opened between Stockton and Darlington, England,	1825		
Electrical spur wheel,	1826	Barlow,	England
First railroad in United States, near Quincy, Mass,	1826		
The law of galvanic circuits formulated,	1827	George S. Ohm,	Germany
Friction matches,	1827	John Walker,	United States
The reduction of aluminum,	1827	Friedrich Wohler,	Germany
Law of electrical resistance,	1827	George S. Ohm,	Germany
Improved rotary printing-press, "London Times," 5,000 impressions per hour,	1827	Cowper & Applegarth,	England
Hot air blast for iron furnaces,	1828	J. B. Neilson,	Scotland
Wood planing machine,	1828	William Woodworth,	United States
Spool electro-magnet,	1828	Joseph Henry,	United States
Tubular locomotive boiler,	1828	Séquin,	France
Spinning ring frame,	1828	John Thorp,	England
The "Washington" printing-press, lever motion and knuckle joint for a screw, number of impressions per hour, 200,	1829	Samuel Rust,	United States
First steam locomotive in United States, "Stourbridge Lion,"	1829		
Double fluid galvanic battery,	1829	A. C. Becquerel,	France
First portable steam fire engine,	1830	Brathwaite & Ericsson,	England
Magneto-electric induction,	1831	Michael Faraday,	England
Chloroform,	1831	G. J. Guthrie,	Scotland
First conception of electric telegraph,	1832	Professor S. F. B. Morse,	United States
First magneto-electric machines,	1832	Saxton,	United States
Rotary electric motor,	1832	Wm. Sturgeon,	England
Chloral-hydrate,	1832	Justus von Liebig,	Germany
Locomotive, "Old Ironsides," built,	1832	M. W. Baldwin,	United States
Link-motion for locomotives,	1832	Sir Henry James,	England
Adoption of steam whistle for locomotives,	1833	George Stephenson,	England
Reciprocating saw-tooth cutter within double guard fingers for reapers,	1833	Obed Hussey,	United States
"McCormick" reaper,	1834	Cyrus H. McCormick,	United States
Rotary electric motor,	1834	M. H. Jacobi,	Russia
Carbolic acid discovered,	1834	Runge,	Germany
Horseshoe machine,	1835	H. Burden,	United States
Constant electric battery,	1836	J. P. Daniell,	England
Acetylene gas discovered,	1836	Edmund Davy,	England
The revolver; a device "for combining a number of long barrels so as to rotate upon a spindle by the act of cocking the hammer,"	1836	Samuel Colt,	United States
The screw applied to steam navigation,	1836 1841	John Ericsson,	United States
The galvanizing of iron,	1837	Henry Craufurd,	England
Indicator-telegraph,	1837	Cooke & Wheatstone,	England
Photographic carbon printing,	1838	Mungo Ponton,	France
Babbitt metal,	1839	Isaac Babbitt,	United States
Vulcanization of rubber,	1839	Charles Goodyear,	United States
The first boat electrically propelled,	1839	Jacobi,	Germany
Daguerreotype, (First to produce a direct photographic positive in the camera by means of highly polished silver surfaced plate exposed to the vapors of iodine and subsequent development with mercury vapor.)	1839	Louis Daguerre,	France
Making photo-prints from paper negatives, (First production of positive proofs from negatives.)	1839	Fox Talbot,	England
Photographic portraits (Daguerreotype process),	1839	Profs. Draper & Morse,	United States
First incandescent electric lamp,	1840	Grove,	England
Celestial photography,	1840	Draper,	United States
Artesian well,	1840		Paris
Pneumatic caissons,	1841	M. Triger,	France

INVENTIONS SINCE THE DISCOVERY OF ELECTRICITY

(CONTINUED)

Inventions	Date	Inventor	Nativity
Ether as an anæsthetic,	1842	Dr Long,	United States
Pianoforte automatically played,	1842	M. Seytre,	France
Water gas, utilization of,	1842	Selligne,	France
Steam hammer,	1842	James Nasmyth,	Scotland
Typewriting machine,	1843	Charles Thurber,	United States
First telegram sent,	1844	Professor S. F. B. Morse,	United States
The use of nitrous oxide gas as an anæsthetic,	1844	Dr. Horace Wells,	United States
The electric arc light (gas retort carbon in a vacuum),	1844	Léon Foucault,	France
First telegraphic message, Washington, Baltimore,	1844	Professor S. F. B. Morse,	United States
Automatic adjustment of electric arc light carbons,	1845	Thomas Wright,	England
Double cylinder printing-press,	1845	R. Hoe & Co.,	United States
Pneumatic tire,	1845	R. W. Thompson,	England
Sewing Machine	1846	Elias Howe,	United States
Printing telegraph,	1846	House,	United States
Suez canal started,	1846	De Lesseps,	France
Electric cautery,	1846	Crusell,	Russia
Artificial limbs,	1846		
Gun cotton,	1846	Schönbein,	Germany
First pianoforte keyboard player,	1846	Debain,	France
Chloroform in surgery,	1847	Dr. Simpson,	Scotland
Nitro-glycerine,	1847	Sobrero,	
Time-lock,	1847	Savage,	United States
Hoe's lightning press, capable of printing 20,000 impressions per hour,	1847	Richard M. Hoe,	United States
Match-making machinery,	1848	A. L. Dennison,	United States
Breech gun-lock, interrupted thread,	1849	Chambers,	United States
Magazine gun,	1849	Walter Hunt,	United States
Steam pressure gauge,	1849	Bourdon,	France
Lenticular stereoscope,	1849	Sir David Brewster,	England
Latch needle for knitting machine,	1849	J. T. Hibbert,	United States
"Corliss" engine,	1849	G. H. Corliss,	United States
Printing-press, curved plates secured to a rotating cylinder,	1849	Jacob Worms,	France
Mercerized cotton,	1850	John Mercer,	England
Collodion process in photography,	1850	Scott Archer,	England
American machine-made watches,	1850		United States
Electric locomotive,	1851	Dr. Page,	United States
Self-raker for harvesters,	1851	W. H. Seymour,	United States
Breech-loading rifle,	1851	Maynard,	United States
Icemaking machine,	1851	J. Gorrie,	United States
Ophthalmoscope,	1851	Helmholtz,	Germany
The Ruhmkorff coil,	1851	Ruhmkorff,	Germany
Fire-alarm telegraph,	1852	Channing & Farmer,	United States
Reticulated screen for half-tone photographic printing,	1852	Fox Talbot,	England
Soda process of making pulp from wood,	1853	Watt & Burgess,	United States
Laws of magneto-electric induction,	1853	Michael Faraday,	England
Laws of electro-statics,	1853	Michael Faraday,	England
Electrolysis,	1853	Michael Faraday,	England
Duplex telegraph,	1853	Gintl,	Austria
Photographic roll films,	1854	Melhuish,	England
Diamond rock drill,	1854	Herman,	United States
Four-motion feed for sewing machines,	1854	A. B. Wilson,	United States
Magazine firearm,	1854	Smith & Wesson,	United States
Fat decomposed by water or steam at high temperature, since largely used in soap making,	1854	R. A. Tilghman,	United States
Safety matches,	1855	Lundstrom,	Sweden
Iron-clad floating batteries first used in Crimean War,	1855		
Cocaine,	1855	Gaedeke,	Germany
Process of making steel, blowing air through molten pig iron,	1855	Sir Henry Bessemer,	England
Dryplate photography,	1855	Dr. J. M. Taupenot,	
Bicycle,	1855	Ernst Michaux,	France
Sleeping car,	1856	Woodruff,	United States
Aniline dyes,	1856	Perkins,	England
Printing machine for the blind (contains elements of the present typewriting machine),	1856	Alfred E. Beach,	United States
Regenerative furnace,	1856	Wm. Siemens,	England
Refining engine in paper pulp making,	1856	T. Kingsland,	United States
Coal-oil first sold in the United States,	1857	Messrs. Stout & Hand,	United States
First sea-going iron-clad war vessel, the "Glorie,"	1857		France
Ground wood pulp,	1858	Henry Voelter,	Germany
Inclined elevator and platform in the reaper,	1858	J. S. Marsh,	United States
Cable car,	1858	E. A. Gardner,	United States
Breech-loading ordnance,	1858	Wright & Gould,	United States
Feed injector for boilers,	1858	Giffard,	France
First Atlantic cable,	1858	Cyrus Field,	United States
"Great Eastern" launched,	1859		
Storage or secondary battery,	1860	Gaston Planté,	France
Singing telephone,	1860	Philip Reis,	Germany
Ammonia absorption ice machine,	1860	F. P. E. Carré,	France
Improved stereotyping process,	1861	Charles Craske,	United States
Shoe-sewing machine,	1861	George McKay,	United States
Driven well, a tube with a pointed perforated end driven into the ground,	1861	Col. N. W. Green,	United States
Passenger elevator,	1861	E. G. Otis,	United States
Barbed-wire fence introduced,	1861		United States
Calcium carbide produced,	1862	Frederich Woehler,	Germany

INVENTIONS SINCE THE DISCOVERY OF ELECTRICITY

(CONTINUED)

Inventions	Date	Inventor	Nativity
Revolving turret for floating battery,	1862	Theodore Timby,	United States
First iron-clad steam battery, "Monitor,"	1862	John Ericsson,	Sweden
Gatling gun,	1862	Dr. R. J. Gatling,	United States
Smokeless gunpowder,	1863	J. F. E. Schultze,	Prussia
Pneumatic pianoforte player (regarded as first to strike keys by pneumatic pockets),	1863	M. Fourneaux,	France
Explosive gelatine,	1864	A. Nobel,	Sweden
Rubber dental plate,	1864	J. A. Cummings,	United States
Automatic grain-binding device,	1864	Jacob Behel,	United States
Process of making fine steel,	1865	Martin,	United States
Antiseptic surgery,	1865	Sir Joseph Lister,	England
Web-feeding printing-press,	1865	William Bullock,	United States
Automatic shell ejector for revolver,	1865	W. C. Dodge,	United States
Open-hearth steel process,	1866	Siemens-Martin,	England
Compressed air rock drill,	1866	C. Burleigh,	United States
Torpedo,	1866	Whitehead,	United States
Dynamo electric machine,	1866	Wilde,	England
Sulphite process for making paper pulp from wood,	1867	Tilghman,	United States
Dynamo electric machine,	1866	Siemens,	Germany
Disappearing gun carriage,	1868	Moncrief,	England
First practical typewriting machine,	1868	C. L. Sholes,	United States
Dynamite,	1868	A. Nobel,	Sweden
Oleomargarine,	1868	H. Mege	France
Water heater for steam fire engine,	1868	W. A. Brickell,	United States
Sulky plow,	1868	B. Slusser,	United States
Railway air-brake,	1868	George Westinghouse,	United States
Tunnel shield (operated by hydraulic power),	1869	Alfred E. Beach,	United States
A curved spring tooth harrow,	1869	David L. Garver,	United States
Dynamo-electric machine,	1870	Gramme,	France
Celluloid,	1870	J. W. & Isaac Hyatt,	United States
Rebounding gun-lock,	1870	L. Hailer,	United States
The Goodyear welt shoe-sewing machine,	1871	Goodyear,	United States
Photographic gelatino-bromide emulsion (basis of present rapid photography),	1871	R. L. Maddox,	England
Continuous web printing-press,	1871	Hoe & Tucker,	United States
Grain binder,	1871	S. D. Locke,	United States
Compressed air rock drill,	1871	S. Ingersoll,	United States
Positive motion weaving loom,	1872	J. Lyall,	United States
Theory that light is an electric phenomenon,	1872	Clerk Maxwell,	England
Automatic air brake,	1872	George Westinghouse,	United States
Automatic car coupler,	1873	E. H. Janney,	United States
The photographic platinotype process, (Prints by this process are permanent.)	1873	Willis,	England
Quadruplex telegraph,	1873	T. A. Edison,	United States
Twine binder for harvesters,	1873	M. L. Gorham,	United States
Gelatino-bromide photographic emulsion (sensitiveness to light greatly increased by the application of heat),	1873	Charles Bennett,	England
Self-binding reaper,	1873	Locke & Wood,	United States
Barbed-wire machine,	1874	Glidden & Vaughan,	United States
Siphon recorder for submarine telegraphs,	1874	Sir William Thompson,	England
Store cash carrier,	1875	D. Brown,	United States
Illuminating water gas,	1875	T. S. C. Lowe,	United States
Roller flour mills,	1875	F. Wegmann,	United States
Middlings purifier for flour,	1875	Geo. T. Smith,	United States
Ice-making machine,	1875	R. P. Pictet,	Switzerland
Speaking telephone,	1876	Alex. G. Bell,	United States
Electric candle, (The first step towards the division of the electric current for lighting.)	1876	Paul Jablochkoff,	Russia
Continuous machine for making tobacco cigarettes,	1876	Russell,	United States
Steam feed saw mills,	1876	D. C. Prescott,	United States
The first Portland cement plant in United States,	1876		Coplay, Pa.
Phonograph,	1877	T. A. Edison,	United States
Gas engine,	1877	N. A. Otto,	United States
Carbon microphone,	1877	T. A. Edison,	United States
Telephone transmitter of variable resistance,	1877	Emil Berliner,	United States
Carbon filament for electric lamp, (Beginning of the incandescent vacuum electric light.)	1878	T. A. Edison,	United States
Rotary disk cultivator,	1878	Mallon,	United States
Decided advance in the "expression" of self-playing pianofortes,	1878	Gally,	United States
Automatic grain binder,	1879	J. F. Appleby,	United States
Cathode rays discovered,	1879	Sir Wm. Crookes,	England
Electric railway,	1879	Siemens,	Germany
Steam plow,	1879	W. Foy,	United States
Magazine rifle,	1879	Lee,	United States
"Blake" telephone transmitter,	1880	Blake,	United States
Hammerless gun,	1880	Greener,	United States
Storage battery or accumulator,	1880	Camille A. Faure,	France
Typhoid bacillus isolated,	1880	Eberth & Koch,	Germany
Pneumonia bacillus isolated,	1880	Sternberg,	United States
Button-hole machine,	1881	Reece,	United States
Improvement in "expression" of self-playing pianofortes,	1882	Schmaele,	United States
Hand photographic camera for plates,	1881	Wm. Schmid,	United States
Tuberculosis bacillus isolated,	1882	Robert Koch,	Germany
Hydrophobia bacillus isolated,	1882	Louis Pasteur,	France

INVENTIONS SINCE THE DISCOVERY OF ELECTRICITY

(CONTINUED)

Inventions	Date	Inventor	Nativity
Public electric cars for city streets, at Cleveland, O.,	1884	Bentley & Knight,	United States
Cholera bacillus isolated,	1884	Robert Koch,	Germany
Diphtheria bacillus isolated,	1884	Loeffler,	Germany
Lockjaw bacillus isolated,	1884	Nicolaier,	France
Antipyrene,	1884	Kuno,	United States
Linotype machine,	1884	Ottmar Mergenthaler,	Germany
The rear-driven chain safety bicycle,	1884	George W. Marble,	United States
Chrome tanning of leather,	1884	Schultz,	United States
Process of reducing aluminum,	1885	Cowles,	England
Gas burner,	1885	Carl A. von Welsbach,	Austria
Hydraulic dredge,	1885	Bowers,	United States
Contact device for overhead electric trolley,	1885	C. J. Van Depoele,	United States
Graphophone,	1886	Bell & Tainter,	United States
Electric welding,	1886	Elihu Thompson,	United States
Combined harvester and thresher,	1886	Matteson,	United States
Band wood saw,	1887	D. C. Prescott,	United States
Cyanide process of obtaining gold and silver,	1887	McArthur & Forrest,	United States
System of polyphase electric currents,	1887	Nikola Tesla,	Austria
Incandescent gas light,	1887	Carl A. von Welsbach,	Austria
First standard electric railway in U. S. at Richmond, Va.,	1888	Frank J. Sprague,	United States
Process of annealing armor plate,	1888	Harvey,	United States
"Kodak" snap-shot film camera,	1888	Eastman & Walker,	United States
Process of making artificial silk,	1888	H. DeChardonnet,	France
Hertzian waves or electric-wave radiation,	1888	Heinrich Hertz,	Germany
First rotary cement kilns in United States,	1889		Coplay, Pa.
Nickel steel,	1889	Schneider,	United States
Process for making aluminum,	1889	Chas. M. Hall,	United States
Electric plow,	1890	W. Stephens,	United States
Improved linotype machine,	1890	Ottmar Mergenthaler,	Germany
Bicycles equipped with pneumatic tires,	1890		
Krag-Jörgensen magazine rifle,	1890	Krag-Jörgensen,	United States
"Coherer" for receiving electric waves,	1891	Edouard Branly,	England
Rotary steam turbine,	1891	C. A. Parsons,	England
Cement-lined paper-pulp digester,	1891	G. F. Russell,	United States
Round bale cotton press,	1891	Brown,	United States
Microphone,	1891	Emile Berliner,	United States
Power loom,	1891	Northrup,	United States
Commercial application of formic-aldehyde,	1892	J. J. A. Trillat,	France
Shoe-last lathe, for different lengths,	1893	Kimball,	United States
Kinetoscope,	1893	T. A. Edison,	United States
Process for making carborundum,	1893	E. G. Acheson,	United States
Calcium carbide produced in electric furnace,	1893	Thomas L. Willson,	United States
Process for liquefying air,	1895	Carl Linde,	Germany
Electric locomotive, B. & O. Bell Tunnel,	1895		United States
X-rays,	1895	Prof. W. C. Roentgen,	Germany
Acetylene gas from calcium carbide,	1895	Thomas L. Willson,	United States
System of wireless telegraphy,	1896	G. Marconi,	Italy
Foundation laid of science of radio-activity,	1896	Henri Becquerel,	France
Use of ultra-violet rays in treating diseases,	1896	Niels R. Finsen,	Denmark
Nernst electric light,	1897	Walter Nernst,	Germany
Mercury vapor electric light,	1900	Peter Cooper Hewitt,	United States
Air-ship,	1901	M. Santos-Dumont,	Brazil
Automobile mower,	1901	Deering Harvester Co.,	United States
The first passenger steam turbine ship, "Edward VII.,"	1901	Denny & Brothers,	England
The first oil-burning steamship built in U. S., "Nevada,"	1902		
Wireless transmission of electrical power,	1905	Nikola Tesla,	Austria
Cable relay electrical transmitting and receiving apparatus,	1905	Alexander Muirhead,	England
Flying machine,	1906	Orville & Wilbur Wright,	United States
Color photography,	1906	Louis & L. Lumière,	France
Wireless telephony,	1906	Archie F. Collins,	United States
Automatic phototelegraph,	1908	A. Korn,	Germany
Thermit mixtures for melting and welding metals,	1908	H. Goldschmidt,	Germany
Silencer for firearms,	1909	Hiram P. Maxim,	United States
Hydro-aeroplane; the flying boat,	1911	Glenn H. Curtiss,	United States
Pulmotor for reviving victims of asphyxiation,	1911	Alexander B. Dräger,	Germany
Waterproof cement and concrete,	1911	Logan W. Page,	United States
Improved ocean cable,	1911	Johannes H. Cuntz,	
Tungsten incandescent electric light,	1911	A. Just & F. Hanaman,	Austria
Cerebrospinal meningitis antitoxin,	1912	Dr. Simon Flexner,	United States
Kinetophone; the talking moving-picture machine,	1912	T. A. Edison,	United States
Infantile paralysis bacillus isolated,	1914	Dr. Simon Flexner,	United States
Typhus bacillus isolated,	1914	Dr. Harry Plotz,	United States
Telescribe for recording telephone conversations,	1915	T. A. Edison,	United States

Iron. A metallic element very widely diffused in nature, and occurring in great abundance in many parts of the world. Its symbol is Fe, from the Latin word *ferrum*; atomic weight, 55.84. In the perfectly pure state, iron is almost unknown. In the arts, it is met with in the forms of malleable iron, steel and cast iron, the first being iron as free from impurities as it is possible to get it, and the other two being iron containing carbon in proportions varying from 0.65 to upwards of 5.0 per cent. Good malleable iron, known also as wrought iron, is of a grayish color. Its melting-point approaches that of platinum, although at temperature far below this it assumes a soft, pasty condition, and is capable of being welded together into one mass.

This property of iron is of the greatest value in manufacturing operations. Its hardness and toughness are scarcely altered by heating to redness and cooling suddenly, forming in this respect a striking contrast to steel and cast iron. It is very malleable and ductile, and at a red heat may be hammered and rolled into any desired form. By these operations, it acquires a fibrous texture, and increases greatly in tenacity. The presence of foreign substances modifies the working properties of wrought iron; thus, sulphur in quantities of upwards of 0.01 per cent, renders it what is technically called *red short*—that is, brittle and non-tenacious at a red heat. Phosphorus, if present in quantities of more than 0.5 per cent., renders the iron brittle at the ordinary temperature, or, as it is technically called, *cold short*. In dry air malleable iron is unchanged, but air and moisture quickly oxidize it, forming a red rust, which in time would eat through the whole mass. When heated to whiteness in a current of air, malleable iron burns with vivid scintillations, producing magnetic oxide, and at a red heat decomposes aqueous vapor, forming magnetic oxide and evolving hydrogen. Cast iron, or pig iron, is iron containing the highest amount of carbon. There are two kinds, viz.: gray cast iron, which is granular in texture and of a gray color; and white cast iron, which is much whiter, has a crystalline and somewhat conchoidal fracture, and is very hard and brittle. The chief difference between these two kinds of cast iron appears to be due to the state in which the carbon is contained in them. The carbon may be removed from cast iron by heating it to the welding point and stirring it about in the air or with oxide of iron (*Puddling process*), or by blowing air through it in the melted state (*Bessemer process*). In the latter operation the heat produced by the combustion of the carbon is sufficient to raise the temperature to such a degree that, when at last the carbon is all burnt off, the resulting malleable iron is still in the liquid state. If these operations are stopped before all the carbon is burnt off, steel of various qualities is produced. Cast iron is the form in which the metal is almost invariably prepared from its ore, by processes whose description would occupy too much space, the reader being therefore referred to works on metallurgy for further details. The most important iron ores are *magnetite*, or *magnetic iron ore*, which has a black metallic luster, sometimes forms mountainous masses, and contains 72.41 per cent. of iron; *hæmatite red iron ore*, or *oligistic iron*, which is ferric oxide, occurs either crystalline or massive, and contains 70 per cent. of iron; *specular iron ore*, or *elba iron ore*, which is also a ferric oxide, and is iron gray and crystalline; *brown iron ore*, which is a hydrated sesquioxide of iron, contains when pure 59.89 per cent. of iron, and is of a compact earthly appearance; *spathic iron ore*, or *sparry iron ore*, a native protocarbonate of iron, crystallizing in masses of a light yellowish color, and containing 48.27 per cent. of iron; *clay iron ore*, which consists of hæmatite or spathic iron ore with clay.

In 1920, the production of pig iron in the chief producing countries of the world was as follows: United States, 36,925,897 tons; United Kingdom, 8,000,700 tons; Germany, 7,000,000 tons; Spain (1919), 4,640,061 tons; and Canada, 1,090,396 tons.

In the United States, Pennsylvania is far in advance of the other states as a producer of pig iron. Ohio, Illinois, and Alabama follow in the order named. Pennsylvania also ranks first among the States in steel production, with Ohio second, Illinois third, and New York fourth in mill products.

As in case of pig iron, the United States leads the world in steel making, with a production in 1920 of 42,132,934 tons. The next largest steel-producing countries, in order of their rank, were the United Kingdom, 9,055,000 tons; Germany, 9,000,000 tons; and France, 2,915,000 tons.

The largest known deposits of iron ore occur in the Lake Superior region. The hematite mines of the Mesabi range in northern Minnesota furnish more than 60 per cent and those of northern Michigan furnish more than 20 per cent of all the iron ore produced in the United States.

Motion Pictures had their origin in the stroboscope, consisting of a disk with a series of slits through which the observer looked at pictures of moving objects. As the disk revolved the slits came successively before the eye, and the impression of motion was produced. The zoetrope, or "wheel of life," followed, in which a hollow cylinder pierced with a number of slits revolved upon a vertical axis. The slits extended half-way down the cylinder; within and below a series of pictures, such as a galloping horse, was arranged. When the cylinder was rotated the observer saw the horse in motion. The pictures were at first drawn by hand. In 1877 Muybridge secured photographs of a running horse by using a row of cameras whose shutters were opened and closed electrically when the horse passed in front of them.

Cinematograph, vitascope, biograph, bioscope, etc.—terms largely formed from Latin and Greek words for life or movement—are names for the modern motion-picture apparatus which was made possible by Edison's invention in 1903 of the celluloid roll-film. The film is moved across the lens of the camera and exposed intermittently for instantaneous photographs. The positive film secured is passed through an optical lantern and the images projected upon a screen. From 50,000 to 165,000 pictures are needed for an hour's exhibition. Colored pictures were shown as early as 1911. By 1912 the exhibition of motion pictures had become an important industry. Development had been rapid from the kinetoscope exhibited by Edison in 1893 to the kinetophone of 1912, by which the same inventor made possible the simultaneous production of the pictures and of the sounds associated with them. Motion pictures soon came to be used not only for entertainment but for educational purposes. They have been used to show processes of manufacture, to instruct employes of railroads and factories along their lines of work, and to illustrate scientific subjects for the schools and colleges. Some countries have purchased machines for use in government schools. The making of machines and the prep-

studios and exhibition of pictures employ a large number of persons. Frequently several months are spent in the preparation of one play, thousands of persons and horses being required for the pictures. Near Los Angeles a city has been built and solely for making motion pictures. In 1913 the motion picture industry had grown to be the fourth largest in America.

Radium. A remarkable chemical element discovered in 1898 by M. and Mme. Curie of Paris. Whether true or combined, it is constantly breaking down into other elements of smaller atomic weight and giving off three distinct kinds of rays which move at enormous speed.

The alpha rays are particles of the element bearing the two rays are negatively charged particles called electrons; the gamma rays are similar to very powerful X-rays. In this process of radio-activity the element emits sufficient heat to raise its own weight of water from the freezing to the boiling point in one hour.

Carnotite are the most important source of radium, is found chiefly in Colorado and Utah. The element is generally prepared as the chloride or bromide salt. In 1921 the State of New York paid $21,000 for 2½ grams of radium to be used in research work on the treatment of cancer and other diseases. This price, about $20,000 per gram, is more than double that $8500 per carat asked for a red diamond, the most costly of precious stones.

Railroad. A road constructed of tracks of iron rolled rails, on which roll the wheels of carriages drawn either by horses or by steam-engines, and to which they are confined by ledges or flanges raised on the tires of the wheels. Nearly two centuries before the introduction of the locomotive, wooden rails were used at the collieries, in the north of England: their upper surfaces were, at a later period, covered with a plate or bar of iron to render them more durable; and about the year 1776, flanges were added to them to keep the wagons from running off. The imperfections of plate, or as they were also called strap rails led about the year 1801, to the adoption of edge rails, or those at present exclusively used; and, soon after, cast iron was supplanted by wrought iron, in their manufacture. The use of locomotives instead of animals was suggested in 1764; but no locomotive seems to have been constructed until 1805. At first cogged wheels and various kinds of propellers were employed with locomotives from an erroneous supposition that there would not be sufficient friction between the driving-wheels and rails to prevent the former from turning round without the production of progressive motion; but in 1814 plain wheels were tried and found perfectly efficient. The locomotive did not come into practical use until the opening of the Liverpool & Manchester Railway in 1830; although the first railway Act received the sanction of the British legislature in 1801, by the incorporation of the Surrey Iron Railway Company. This was indeed a comparatively trifling enterprise, for it extended only from Wandsworth to Croydon, and was merely applicable for the carriage of coals, lime, etc., the moving-power being derived from horses alone. In the United States a horse-railroad was completed in 1827, from the granite quarries of Quincy, Mass., a distance of three miles to the Neponset River. A second road was laid out in January, 1827, from the coal-mines of Mauch Chunk, Penn., to the Lehigh River, a distance of nine miles, and with various ramifications the whole length exceeded thirteen miles. The Delaware and Hudson Canal Company, in 1828, constructed a railroad from their coal-mines to Honesdale, the terminus of their canal, and sent a commissioner to England for the purchase of rail, iron, and locomotives. In the spring of 1829, these locomotives arrived in this country. Of the succeeding great railway enterprises, one of the principal was the Baltimore & Ohio line, commenced in 1828, and originally planned for horse-cars only, but, influenced by the success of steam locomotives in England, their employment was adopted on this road instead of horse-power. In August, 1830, the Hudson & Mohawk Railroad, from Albany to Schenectady, was commenced. Several similar enterprises were undertaken in the Pennsylvania coal region in 1830, and in the legislative session of 1830-31 no fewer than twelve railroad companies were incorporated. In 1831 the Baltimore & Susquehanna Railroad commenced operations. A prize of $4,000 was offered in 1831 by the Baltimore and Ohio railroad for an engine able to draw 15 tons at a speed of 15 miles per hour. In 1840 the actual railway mileage of Great Britain was 1,331 miles. Canada had no railways until 1853, and South America began their construction about the same time. The first railway in Egypt was built from Alexandria to Cairo in 1856. There were no railroads in Turkey and Greece until 1860 and 1869. A transcontinental line across North America was completed in 1869, when the Union Pacific met the Central Pacific. The Southern Pacific from San Francisco to New Orleans, followed in 1881. The Canadian Pacific, completed 1885, extends from Montreal to Vancouver. The Russian government built the Siberian railway entirely across the continent of Asia, a distance of over 4,000 miles, 1891-1904. In 1910 the line from Buenos Ayres to Valparaiso, crossing the Andes, was finished. A recent achievement in the United States is the all rail route to Havana. A viaduct 128 miles long extends from Homestead, Florida, over Florida Keys to Key West. From Key West to Havana the cars are transported by a huge ferry boat, completed in 1915, thus enabling the moving of perishable freight between Havana and Chicago without transfer.

Submarines. When and by whom the first submarine boat was built is not definitely known. Success with submarine vessels was first achieved by David Bushnell in America about 1775. The vessel had sufficient room for just one man, by whom it was operated. The body of the vessel was made of wood. In the days when Fulton was experimenting with steam propulsion, he also gave attention to submarine navigation. He made several submarine boats, some of better design for speed than those of Bushnell. Fulton's boat too was built of wood and operated by manual power. Later mechanical power took

the place of hand power and many different designs appeared, those by Holland and Nordenfeldt being especially notable. In 1887 the United States asked for proposals for submarines. Designs by Holland and Nordenfeldt were submitted; those by Holland were accepted and formed the basis of several vessels built. The characteristic of Holland's method was a "steering under" or "diving" device; that of Nordenfeldt, a "sinking" design. Most modern submarines are worked by the Holland method. The success of the Holland type led Great Britain and other naval powers to build similar types of submarines. An early feature of the Holland type of boat was a mounted dynamite gun fired when the boat was submerged. This weapon was later discarded and torpedoes were used for offensive power.

Modern submarines are so greatly improved that their importance in naval warfare has advanced rapidly. They are of 900 to 1,200 tons displacement, have a radius of action of 2,000 miles or over, a surface speed of at least 20 knots and a submerged speed of 10 knots. They carry mounted guns, are fitted for wireless telegraphy, and have ample accommodations for officers and men. Some types carry anti-aircraft guns. They have gasoline engines for surface propulsion, and electric motors for use when submerged. The steering of the ship is done by chart and compass. Observation is permitted by means of the periscope, which is a telescope with a long steel tube having a reflecting prism at the top and lenses at the bottom.

The development of submarines revolutionized naval warfare. During the World War German under-sea craft made terrible inroads upon Allied shipping. Their unrestricted use by Germany as commerce destroyers, in violation of international law, finally arrayed all the leading nations against the Central Powers. The term "U-boat," applied to the submarine, was derived from the German word *unterseeboot*, meaning "under-sea boat," shortened by the Germans to *U-boot*, whence U-boat.

Telegraph. Any apparatus for transmitting signals to a distance, but in ordinary use the term refers to the electromagnetic telegraph. This is composed, in its simplest form, of the line or wire, usually galvanized iron; a key for sending; a sounder to make the signals audible; and some source of current such as a battery or dynamo. All are connected so that the current must pass through each one. Only one wire is generally used because the earth serves as a return wire to complete the circuit.

The *key* is merely a lever held in place by a spring. It has an insulated knob on one end, and carries a contact point underneath. The *sounder* consists of two electromagnets with a piece of iron mounted close to their ends. The iron armature is attached to a pivoted arm which strikes a brass anvil when it moves either up or down. When the key is *open* no current can flow, but when the knob is depressed a contact is made which closes the circuit. The current then flows through the magnets which pull the iron toward them, causing a click when the arm strikes the anvil. When the key is raised the arm springs away from the magnets with another click.

The signals depend upon the time between the sounds of an up and a down click. A short period corresponds to a dot, a longer period to a dash, with a definite arrangement of dots and dashes for each letter. The Morse code, which is used in the United States and Canada, also makes use of a space in order to simplify the combinations. To avoid errors, the Continental Morse code using only dots and dashes is generally employed in Europe, and also in radio telegraphy.

A commercial Morse telegraph key is also equipped with a switch which is closed when the instrument is not in use. A current thus flows continually through all the instruments on a line until some operator wishes to send a message. He then opens his switch and sends the signals which are repeated in every office connected with the line. As the current flowing over a long line is usually too weak to operate a sounder, the main line is connected with a *relay*, which operates in the same way but is much more sensitive. The moving arm of the relay acts as a key to close a local circuit and operate a sounder. Very long lines, such as those from New York to Chicago, are generally divided into sections by *repeaters* which act as a reversible relay to repeat the signals with a stronger current.

By using currents differing in strength or direction, or both, it is possible by the *duplex* system to send a message in both directions at the same time. In 1873 Edison invented the *quadruplex* system whereby two messages may be sent in both directions at the same time. The *synchronous multiplex* system permits six operators to send over the same wire. Machines, such as the Wheatstone automatic telegraph, which use a perforated tape, are capable of transmitting 300 to 400 words per minute as compared with 25 to 40 by a good operator.

The Supreme Court of the United States has decided that Samuel F. B. Morse was the inventor of the telegraph. Other famous scientists who worked on the same problem were the Englishmen, Wheatstone and Cook, whose five wire system was the first to be tried commercially, and Professor Joseph Henry, an American, who in 1831 operated the first sounding electric telegraph. Steinheil of Munich also developed a similar system about 1837. At present the Morse system is used in the greater part of the world. Morse began his work in 1832. His first commercial line was constructed with government aid. It extended between Washington and Baltimore and was opened to the public April 1, 1844. During the first four days of operation the receipts were just one cent.

Wireless Telegraphy. A method of transmitting electromagnetic signals to a distance without the use of connecting wires. Induction and other methods have been tried, but the basis of modern systems of wireless or radio telegraphy was laid down in 1864 when Clerk-Maxwell, by mathematical reasoning predicted the existence of electromagnetic waves in the ether. In 1887 Professor H. Hertz proved by experiments that such waves existed, and later, Edward Branly and Sir Oliver Lodge each developed an instru-

ment called a coherer by which they could be detected.

When a stone is thrown into still water a series of waves may be seen traveling outward in circles. Hertz found that somewhat similar waves could be produced in the ether by the oscillating discharge of an electric spark. The shortest of these waves is many times longer than the longest light wave but they travel at the same speed, 186,330 miles per second.

Guglielmo Marconi, in 1885, was the first to combine the discoveries of earlier scientists into a practical method of signaling, and deserves complete credit as the inventor of wireless or radio telegraphy.

Marconi produced his signals by means of sparks formed by an induction coil and condenser. One side of the electric discharge was connected with the earth; the other, with a series of aerial wires supported from tall poles. At the receiving station, similar aerial wires conducted the incoming waves to a coherer which under their influence operated a local telegraphic circuit.

The development of wireless telegraphy has been rapid. Three large systems are those of the Marconi, the Telefunken, and the United Radio companies. In 1902 the first transatlantic message was sent, and later the value of the wireless telegraph on shipboard was proven by incidents such as the rescue of the survivors of the *Titanic* in 1912. Commercial service is continually carried on between the United States, Europe, and Japan. It is a formidable rival of the submarine cables because the rate for wireless messages is lower than that charged by the cable companies.

The coherer is no longer used, because crystals of carborundum, silicon, galena and other minerals, employed in connection with sensitive telephone receivers, have been found much more satisfactory. In the most modern stations vacuum tubes are employed, both for sending and receiving, because of their unusual properties, of which one is the ability to control a strong current by the action of a weak one.

The greatest difficulty in wireless operation is due to the fact that as the Hertzian waves radiate in all directions, the signals sent out from several stations at one time are liable to interfere with each other. This problem is partially solved by adjusting, or *tuning*, both the sending and receiving stations to operate with a wave of definite length. In the United States a Federal license is required to operate a sending station, but not for receiving instruments only. Amateur stations are required to use a wave length of 200 meters or less.

Morse Code. A·– B–··· C–·– D–·· E· F··–· G––· H···· I·· J·––– K–·– L·–·· M–– N–· O––– P·––·– Q––·– R·–· S··· T– U··– V···– W·–– X–··– Y–·–– Z––··

Continental Code. A·– B–··· C–·–· D–·· E· F··–· G––· H···· I·· J·––– K–·– L·–·· M–– N–· O––– P·––· Q––·– R·–· S··· T– U··– V···– W·–– X–··– Y–·–– Z––··

Telephone. An instrument used for the purpose indicated by its name which means a "voice from afar." Early attempts at the transmission of sound resulted in the discovery of the speaking tube and the tightly stretched string used in the "tin can" type of toy telephone. Many inventors worked on the problem of an electric telephone, and on February 14, 1876, Alexander Graham Bell and Elisha Gray both filed applications in the U. S. patent office describing a similar method of transmitting sounds by means of electricity. A patent was issued to Bell, March 7, 1876, which, after many long and very expensive legal battles, was finally upheld by the Supreme Court, so that Bell is considered as the inventor of the modern telephone.

Bell's original system used a device similar to the modern receiver, both for sending and receiving. The transmitter of today, which has been developed by many scientists, is much more delicate and satisfactory. At present the telephone consists essentially of a transmitter, an induction coil, and a receiver, connected by copper wires and supplied with a source of direct current.

The *transmitter* is composed of a thin metallic diaphragm to the back of which is attached a small carbon block. A second piece of carbon is mounted a short distance behind the first, and the space between the two is filled with hard grains of carbon. Such an arrangement of conductors in loose contact, called a *microphone contact*, has the property of changing its electrical resistance even under very slight pressure.

The modern *receiver* consists of two strong, permanent steel magnets, on the ends of which are welded short pieces of soft iron surrounded by coils of fine wire. A thin iron diaphragm is mounted so that its center is a short distance from the ends of the magnets.

In operation, the sound waves formed in air by the voice are directed against the diaphragm of the transmitter. This vibrates back and forth, continually changing the pressure on the grains of carbon. The current of electricity which flows through the microphone and primary of the induction coil is thus varied in strength according to the sounds of the voice. An alternating current of higher voltage is formed in the secondary winding of the induction coil and flows over the wires and around the end of the magnets in the receiver. Here the attraction of the magnets for the diaphragm changes with the strength of the current so that the diaphragm vibrates in the air and thus produces sound waves exactly similar to those spoken into the transmitter. Obviously then the sound of the voice does not travel along the wire, but instead, an alternating current is transmitted which produces sound waves at the receiver.

Connections between subscribers are made by grouping the terminals from each telephone on a switchboard at a central exchange. Each line is represented by a hole in the board, and underneath each hole is a tiny electric light. When a subscriber removes his receiver from the hook, the lamp lights and the operator inserts the tip of a flexible wire in the hole and asks for the number required. She then places the other end of the wire in the hole corresponding to the number wanted, and operates a switch which rings the call bell. When either party hangs up the receiver a light flashes and the operator removes the connecting cord.

The first exchange was erected in New Haven, Conn., in 1878, for only eight subscribers.

Telephone lines require a complete metallic circuit. The development of the *phantom circuit* in which two circuits are made to do the work of three, and of the *Pupin loading coil* and *vacuum tube repeaters* which make conversation possible over long distances, have permitted the present extensive use of the telephone. The first conversation between New York and San Francisco was held January 25, 1915. On January 1, 1921, about 14 million telephones, or about two-thirds of all in the world, were in use in the United States.

The *automatic telephone* eliminates the central operator by means of an automatic magnetic switching system. Each instrument is equipped with a moving dial having finger holes numbered from 0 to 9. To call a number, such as 635, the finger is placed in hole number 6 and pulled as far as possible. This connects with the 600 trunk line. By pulling number 3 the third unit of tens is switched in, and on pulling dial number 5 the connection to a single line is completed.

Wireless Telephone. Wireless telephony differs from wireless telegraphy chiefly in the character of the electromagnetic waves which are radiated from the aerials of the sending station. With a system using dots and dashes for signals, a series of interrupted waves may be used, but to transmit the tones of the human voice a continuous wave (CW) system is required. This was first accomplished by substituting for the intermittent spark of an induction coil or transformer, the continuous spark of an electric arc. The waves sent out by the arc are modulated by properly connecting a telephone transmitter into the circuit. Vacuum bulbs similarly controlled have been found most effective both for receiving and transmitting. In September 1915, the same year in which the first trans-continental telephone line was completed, conversation over the wireless telephone occurred between New York, by way of the naval station at Arlington, Va., and the station at Mare Island, Calif. Messages sent from Arlington were also received in the Hawaiian Islands, almost 5000 miles away.

The development of the wireless telephone has been so rapid that several of the large electric companies now maintain *broadcasting* stations, from which high power transmitting apparatus continually sends out not only news, business, and weather reports, but also lectures, musical concerts, and even grand opera produced by the most famous singers. As the receiving instruments are comparatively simple and inexpensive, thousands of stations are being used by amateur operators. These include not only students of electricity, but farmers, jewelers, and other business men to whom market reports or the exact time are of financial value.

Telescope, an optical instrument by which objects may be viewed as if they were nearer than they are. It consists essentially of a system of lenses or mirrors encased in a tube or tubes. The rays of light by which an object is seen radiate from it in straight lines; hence the longer they travel, the farther apart they become, and the fewer of them fall upon a given area. The unaided eye is so small that it does not receive from objects which are too far distant enough rays to make any sensible impression on the retina; and the visual images of objects which can be seen, vary in vividness according to the collective power of the light waves which produce them. The telescope affords the aid of a mechanical eye which collects a larger number of light rays in proportion to its size, and focuses them by reflection from the surface of a concave mirror or by refraction through the medium of a lens; hence the two kinds of telescopes, reflectors and refractors. The first telescopes, made by the Dutch early in the 17th century, were refractors having small lenses of low power. Galileo imitated the invention from its description, and built a telescope which magnified one thousand times. With this he discovered the moons of Jupiter and the phases of Venus. Early attempts to use larger lenses, to increase their magnifying power, were frustrated by color distortion or chromatic aberration; i. e. the different colored rays of light could not be brought to an exact focus. This led Herschel in 1779 to 1789 to build the reflecting telescopes with which he discovered Uranus, and made his famous catalogue of stars. In reflectors there is no color distortion. In refractors chromatic aberration is now overcome by achromatic lenses. Very large instruments of both kinds are used.

THE LARGE REFRACTORS OF THE WORLD

Institution or Location	Aperture in Inches	Focal Length in Feet	Date of Erection
Yerkes Observatory, Williams Bay, Wisconsin,	40.0	62.0	1897
Lick Observatory, Mt. Hamilton, Calif.,	36.0	57.8	1888
Naval Observatory, Nikolaev, Russia,	32.0	....	....
Meudon Observatory, near Paris,	32.5	53.0	1891
Astrophysical Observatory, Potsdam,	31.5	39.4	....
Bischoffsheim Observatory, Nice,	30.3	52.6	1889
Allegheny Observatory, Pittsburgh, Pa.	30.0	....	....
Imperial Observatory, Pulkova,	30.0	45.0	1885
National Observatory, Paris,	28.9	....	....
Royal Observatory, Greenwich,	28.0	28.0	1894
Berlin,	27.5	....	....
Imperial Observatory, Vienna,	27.0	34.0	1882
Royal Observatory, Greenwich,	26.0	26.0	1897
Johannesburg, South Africa,	26.0	....	....
Naval Observatory, Washington,	26.0	32.5	1873
McCormick Observatory, Charlottesville, Va.,	26.0	32.5	1882
Cambridge University Observatory,	25.0	....	1891
Meudon Observatory, near Paris,	24.4	52.2	1891
Harvard College Observatory, Arequipa, Peru,	24.0	....	1894
Nat'l Obs'y, Cordoba, Argentina,	24.0	....	....
Nat'l Obs'y, Santiago, Chile,	24.0	....	....
Detroit, Mich.,	24.0	....	....
Cape Observatory, Cape Town, South Africa,	24.0	22.6	1897
Radcliffe Observatory, Oxford, Eng.,	24.0	....	....
Swarthmore College, Pa.,	24.0	36.0	....
Lowell Observatory, Flagstaff, Ariz.,	24.0	31.0	1895
National Observatory, Paris,	23.6	59.0	1891
Hamburg, Germany,	23.6	....	....
Halstead Observatory, Princeton University, N. J.,	23.0	32.0	1883
Mount Etna, Sicily,	21.8	....	....
Edinburgh, Scotland,	21.2	....	....
Mt. Porro Observatory, Turin, Italy,	20.5	....	....
Chamberlin Observatory, Denver, Colorado,	20.0	28.0	1891
Manila Observatory, Philippines,	20.0	....	1892
Chabot Observatory, Oakland, Calif.	20.0	....	....

THE LARGE REFLECTORS OF THE WORLD

Institution or Location	Aperture in Inches
Solar Observatory, Mount Wilson, Calif.,	100.0
Dominion Observatory, Victoria, B.C.,	73.0
Lord Rosse, Birr Castle, Ireland,	72.0
National Observatory, Cordoba, Argentina,	61.0
Dr. Common, Harvard Observatory, Cambridge, Mass.,	60.0
Solar Observatory, Mount Wilson, Calif.,	60.0
Melbourne, Australia,	48.0
National Observatory, Paris,	48.0
Simeis, Crimea,	40.0
Carre, near Geneva, Switzerland,	39.4
Meudon Observatory, near Paris,	39.0
Hamburg, Germany,	39.0
Ann Arbor, Mich.,	37.5
National Observatory, Santiago, Chile,	36.6
Cambridge University, England,	36.0
Birr Castle, Ireland,	36.0
Solar Obs'y, South Kensington, England,	36.0
Crossley, Lick Observatory, Mt. Hamilton, Calif.,	36.0

Trades-unions. A trade society is defined in the report of the Social Science Committee on the subject appointed at Bradford, in 1859, "as a combination of workmen to enable each to secure the conditions most favorable for labor"; and although trades-unions, as they are generally called, almost always have other objects in view in addition to that specified in the definition, that object is their distinguishing one. Combinations of this sort in Great Britain are considerably more than three centuries old for there is a statute of the year 1548 expressly directed against them. Trades-unions generally endeavor to regulate the prices and the hours of labor, and in many cases the number of men engaged by an employer, the number of apprentices which may be bound in proportion to the journeymen employed by a master, and the like. As accessories, these unions may collect funds for benefit societies, and undertake the insurance of tools, libraries, and reading-rooms; but their fund, to which every member must regularly contribute a stated sum, is principally reserved for enabling the men to resist, by strikes and otherwise, such action on the part of the employers as would tend to lower the rate of wages or lengthen the hours of labor. That trades-unions enable the men to benefit by the state of trade more than they otherwise would have done would appear from the fact that the worst-paid trades are those without unions. Trades-unions are also said to have furthered the safety of the laborer by producing beneficial modifications of the conditions in which he works. Some hostility against trades-unions has been produced by the outrages of a more or less serious nature of which some of the unions, or members of them, have been guilty, such outrages being directed against the property of employers, or against the persons and tools of non-union men. The trades-unions of the United States embrace over 27,000 local organizations, and more than 2,100,000 affiliated members; in late years having increased rapidly.

Trusts. A corporation derives certain benefits from the state, and is in turn subject to certain state control. To avoid this state control, and in order thus to enable the largest firms and corporations in any particular trade to combine, and by combined action to limit production and raise prices while killing off the competition any outsider may dare to offer, what are known as trusts have been devised. A trust is merely the combination for the above purposes of the large interests in any branch of trade. There is no incorporation. There is an agreement between the parties; the profits of all are divided into certain ascertained proportions, and the public cannot from any sensible sign know whether or not such a combination exists. Secrecy and irresponsibility are its objects.

Turbine, either a horizontal or vertical water-wheel, made to revolve by the escape of water through orifices, under the influence of pressure derived from a fall. Turbines are now made after a vast variety of patterns. The oldest and simplest is the Scotch turbine, or Barker's mill. In another common form the water passes vertically down through the wheel between the fixed screw blades, which give it a spiral motion, and then strike similar blades attached to a movable spindle, but placed in the opposite direction, so that the impact of the water communicates a rotatory motion to the blades and spindles. Or the water may be passed from the center horizontally outwards through fixed curved blades, so as to give it a tangential motion, and thereby cause it to act on the blades of the wheel which revolves outside. Beginning with 1897 the steam turbine has been successfully applied to the propulsion of vessels, notably in the great ocean liners, "Lusitania" and "Mauretania," and is steadily growing in favor. The principal point in favor of a turbine is that it has no reciprocating motion, like that of the piston of a common engine, and therefore the hull of a vessel is not shaken so much as by reciprocating engines. Turbine engines weigh much less, and occupy less room, than ordinary engines of the same power, so that passenger accommodation can be increased. Usually three sets of engines are employed, each driving a separate propeller shaft, which again conduces to steadiness of motion.

Type. The name given to the stamps or dies which impress the letters on the paper in printing. Printers, in early times, made the letters which they used, but in process of time the necessity for a division of labor created the distinct business of type-founding. The type-metal is a compound of lead and antimony, with a large proportion of tin. The antimony gives hardness and sharpness of edge to the composition, while the tin gives toughness and tenacity, and removes the brittleness which antimony causes when used in a large proportion without tin. The proper proportions of these metals are regulated by the size of the type, a greater quantity of antimony being employed for small letters. A complete assortment of types is called a *font*, which may be regulated to any extent. Every type-founder has a scale showing the proportional quantity of each letter required for a font; and a peculiar scale is required for every language. For the English language, the following is a type-founder's scale for

the small letters of a font of types of a particular size and weight:

a	8,500	h	6,400	o	8,000	v	1,200
b	1,600	i	8,000	p	1,700	w	2,000
c	3,000	j	400	q	500	x	400
d	4,400	k	800	r	6,200	y	2,000
e	12,000	l	4,000	s	8,000	z	200
f	2,500	m	3,000	t	9,000		
g	1,700	n	8,000	u	3,400		

Beginning with the largest, the subjoined specimens show the various sizes of type commonly used on book-work.

Eighteen Point.

Fourteen Point. Twelve Point.

Eleven Point. Ten Point. Nine Point.

Eight Point. Seven Point. Six Point.

Five and one-half Point. Five Point. Four and one-half Point.

Three and one-half point.

Emerald is a type now little used, and in size is between Seven Point and Six Point.

Type-writer, a machine used as a substitute for the pen, and by which the letters are produced by the impression of inked types. The essential elements in such machines are a movement to bring the type into position, an inking device, an impression movement, and means for letter and line spacing. A successful form of the machine has a series of letter keys arranged in rows, to be worked by the fingers of both hands, a letter being imprinted on the paper (which moves automatically) each time a key is struck. The best known, probably, are the Remington, Hammond, Bar-Lock, Smith Premier, Oliver, Underwood, Royal, American, etc. Many improvements have been made from time to time. One of the latest is the "English" typewriter, which has only two rows of keys, numbering twenty-nine in all. Each key works a lever to which is attached a capital letter, an ordinary Roman letter, and a figure. The capital letters and the figures are brought into play by means of two small shift stops, and the printing as it is performed is in full view of the operator.

WORLD'S SUBMARINE CABLES

Country	No. of Cables with One or More Cores	Length in Nautical Miles	
		Of Cables	Of Conductors
Argentine Republic,	13	59.824	138.544
Austria,	47	224.250	235.339
Bahamas,	1	211.000	211.000
Belgium,	[1] 2	54.514	279.856
Brazil,	23	37.779	66.414
British Guiana,	5	84.000	95.000
British India, Indo-European Telegraph Department Government Administration,	157	2,168.013	1,711.885
Bulgaria,	1	0.538	0.538
Canada,	26	334.750	334.750
Ceylon and India (Joint),	2	66.300	66.300
China,	1	113.000	113.000
Denmark,	[1] 56	171.100	880.300
Dutch Indies,	7	891.490	891.490
France and Algeria,	[1] 56	4,913.824	5,847.200
France (West Africa),	3	1,567.238	1,567.238
French Indo-China (Cochin China, Tonquin, and Amoy),	2	1,697.326	1,697.326
Germany,	[1] 89	2,796.695	5,654.977
Great Britain and Ireland,	[1] 177	2,265.830	7,551.994
Greece,	46	54.931	54.931
Holland,	32	241.543	780.449
Inter-Colonial System,	5	7,837.770	7,837.770
Italy,	36	1,063.088	1,112.458
Japan,	103	2,154.883	2,851.173
Macao,	1	1.930	1.930
New Caledonia,	1	1.000	1.000
New South Wales,	147	51.789	108.459
New Zealand,	16	285.682	290.466
Norway,	322	291.489	375.787
Portugal,	4	115.050	115.050
Queensland,	19	52.100	67.520
Russia in Europe, and the Caucasus,	12	328.282	408.387
Russia in Asia,	1	70.157	70.157
Senegal,	1	3.000	3.000
South Australia,	3	49.360	49.360
Spain,	15	1,771.346	1,771.346
Sweden,	[1] 17	208.488	368.431
Switzerland,	2	9.827	13.400
Tasmania,	4	4.750	19.000
Turkey in Europe and Asia,	21	346.558	368.734
Victoria,	1	4.500	4.500
Western Australia,	1	3.750	3.750
Total government-owned cables,	1,378	32,609.748	44,006.813
GENERAL SUMMARY			
Government administered,	1,378	32,609.748	
Private Companies,	437	188,682.693	
Grand total,	1,815	221,292.441	

THE WORLD'S STAPLES AND THE COUNTRIES PRODUCING THEM

Country	Wheat	Oats	Potatoes	Corn	Sugar	Rice	Cotton	Wool	Barley	Rye
	Bushels	*Bushels*	*Bushels*	*Bushels*	*Tons*	*Pounds*	*Bales*	*Pounds*	*Bushels*	*Bushels*
United States,	740,655,000	1,078,519,062	350,076,000	3,151,698,035	(a) 726,451 (b) 122,125	1,485,900,000	7,973,040	302,207,000	163,398,958	64,331,964
Canada,	320,835,333	544,973,750	110,895,000	14,220,000	(a) 18,929	.....	.....	15,000,000	64,252,708	25,800,357
Mexico,	11,951,000	.....	452,000	.....	(b) 103,010	.....	.....	6,500,000	.....	192,000
South America,	209,759,333	52,307,500	11,836,666	232,228,035	(b) 951,904	.....	581,080	470,120,707	16,715,000	58,928
Austria,	6,152,000	18,775,625	26,206,833	2,455,714	(a) 5,657	.....	.....	.....	5,200,833	12,661,428
Belgium,	11,323,333	30,251,250	93,329,333	.....	(a) 151,515	.....	.....	218,193	3,939,166	17,760,892
Bulgaria,	42,510,000	11,271,562	1,649,500	34,385,892	(a) 13,074	10,100,000	1,760	.....	13,240,833	8,389,871
Czecho-Slovakia,	40,673,833	72,352,500	136,430,333	10,500,892	(a) 524,559	.....	.....	.....	47,364,701	54,382,321
Denmark,	11,206,833	52,015,625	45,316,166	.....	(a) 176,368	.....	.....	.....	27,328,125	12,204,285
Finland,	280,166	28,020,062	18,244,666	.....	(a) 203	.....	.....	.....	4,939,166	10,385,357
France,	323,342,666	244,885,000	416,712,333	16,970,535	(a) 170,426	.....	.....	70,500,000	38,078,541	44,495,892
Germany,	97,865,666	324,884,687	985,217,000	.....	(a) 808,304	.....	.....	25,000,000	82,347,708	260,147,321
Greece,	11,170,166	4,133,750	1,653,500	7,873,750	.....	.....	.....	16,000,000	6,430,208	3,151,428
Hungary,	47,088,000	20,140,312	45,593,000	27,142,321	(a) 8,953	.....	.....	.....	20,091,875	22,095,178
Italy,	192,839,000	37,775,000	55,115,666	94,484,107	(a) 185,001	1,036,130,000	.....	21,500,000	10,361,666	5,633,571
Jugoslavia,	64,709,500	.....	38,452,000	86,556,250	(a) 1,960	.....	.....	.....	20,650,000	18,121,250
Netherlands,	8,685,833	21,288,750	84,767,833	.....	(a) 252,169	.....	.....	30,173	3,650,833	16,615,714
Norway,	941,000	12,741,875	27,304,833	.....	.....	.....	.....	.....	4,310,208	1,114,642
Portugal,	7,140,333	5,154,062	.....	.....	.....	.....	.....	10,000,000	1,458,333	2,958,928
Rumania,	97,218,666	69,372,187	2,431,000	186,465,892	(a) 1,213	.....	.....	.....	64,951,666	10,538,571
Poland,	35,282,166	149,790,000	567,091,166	1,527,500	(a) 469,035	.....	.....	.....	53,306,041	107,217,500
Spain,	143,205,166	40,034,687	102,225,000	28,048,035	(a) 220,460	652,660,000	.....	52,000,000	94,487,083	27,768,392
Sweden,	12,562,666	.....	62,391,000	.....	(a) 159,867	.....	.....	.....	11,808,541	28,514,464
Switzerland,	3,799,500	3,035,625	25,372,666	218,302	(a) 9,730	.....	.....	.....	551,875	1,800,178
United Kingdom,	56,898,500	220,578,750	237,436,666	.....	.....	.....	.....	108,000,000	68,435,000	.....
British India,	250,469,333	.....	.....	.....	(b) 3,361,086	80,003,840	2,844,800	50,000,000	.....	.....
Japan,	27,876,166	12,085,937	47,277,166	.....	.....	21,771,590,000	4,000	.....	89,897,916	.....
Persia,	.....	.....	.....	.....	.....	.....	.....	12,146,000	14,035,000	.....
Algeria,	41,480,166	11,412,500	1,028,833	378,214	.....	.....	120	33,184,000	50,490,625	5,000
Egypt,	37,010,833	.....	.....	70,568,928	(b) 100,800	(c) 732,050,000	653,720	.....	11,371,250	.....
Union of South Africa,	8,449,000	7,164,375	.....	43,320,000	.....	.....	1,600	184,952,800	1,215,625	.....
Sudan (Anglo Egyptian),	.....	.....	.....	.....	.....	.....	10,293	300,000	.....	.....
Tunis,	8,818,500	5,167,187	147,000	315,000	.....	.....	.....	3,735,000	11,482,500	.....
Australia,	146,644,333	.....	.....	.....	(b) 170,856	.....	.....	657,911,710	.....	.....
New Zealand,	6,872,333	6,368,125	4,728,133	500,892	.....	.....	.....	117,543,247	1,052,916	.....
Hawaii,	.....	.....	.....	.....	(b) 550,343	.....	.....	.....	.....	.....
Porto Rico,	.....	.....	.....	.....	(b) 485,884	.....	.....	.....	.....	.....
Philippine Islands,	.....	.....	.....	18,107,857	(b) 466,854	3,615,860,000	.....	.....	.....	.....
Guatemala,	360,500	.....	73,166	.....	(b) 14,816	4,290,000	.....	.....	.....	.....
French Indo-China,	.....	.....	.....	5,732,857	.....	10,179,710,000	5,980	.....	.....	.....
Java,	.....	.....	.....	.....	(b) 1,496,055	.....	.....	.....	.....	.....
Ceylon,	.....	.....	.....	.....	.....	620,000,000	.....	.....	.....	.....
Korea,	.....	.....	.....	.....	.....	5,961,860,000	.....	.....	.....	.....
Cuba,	.....	.....	.....	.....	(b) 4,183,676	.....	.....	.....	.....	.....

(a) Beet Sugar (raw). (b) Cane Sugar. (c) Exclusive of Nili crop.

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ALEXIS CARREL

WINNER NOBLE PRIZE IN MEDICINE, 1912

Acetic Acid. An acid produced by the oxidation of common alcohol, and of many other organic substances. Pure acetic acid has a very sour taste and pungent smell, burns the skin, and is poisonous. From freezing at ordinary temperatures (58° or 59°) it is known as *glacial acetic acid*. Vinegar is largely dilute acetic acid, and is prepared by subjecting wine or weak spirit to the action of the air; also from malt which has undergone vinous fermentation. Acetic acid, both concentrated and dilute, is largely used in the arts, in medicine, and for domestic purposes.

Acetylene. A colorless, inflammable gas, generally prepared by the action of water on calcium carbide, which is a product of the electric furnace. When used with the proper type of burner the gas produces a brilliant light which is very satisfactory for house lighting and portable lamps.

The gas alone is explosive when under pressure. Danger in the use of commercial tanks of acetylene is avoided by dissolving about 100 volumes of the gas in acetone which is absorbed in asbestos or other porous material. When burned with pure oxygen, acetylene produces a temperature approaching 7878° F., the highest of any known flame. For this reason the oxy-acetylene torch is generally employed for cutting steel beams and plates, and also for welding or fusing pieces of metal together.

Acid. A class of compounds whose general properties are: solubility in water; sour taste; power of reddening litmus; faculty of decomposing carbonates with effervescence; and the power of neutralizing alkalies and bases, forming salts. The progress of modern chemistry is gradually rendering the term *acids* less definite; and it is not improbable that it will be dropped altogether in strictly scientific writing, although in ordinary language it will be retained as a convenient term for expressing a very wide class of substances. All the above characteristics are seldom possessed together, many acids having only one or two of these properties, and some substances which are not acids possessing all of them. Thus, silicic acid is not soluble in water, has no sour taste, and does not redden litmus.

Acoustics. (*a-kou'stiks*). The science of sound. It teaches the cause, nature and phenomena of such vibrations of elastic bodies as affect the organ of hearing; the manner in which sound is produced, its transmission through air and other media, the doctrine of reflected sound or echoes, the properties and effects of different sounds, including musical sounds or notes, and the structure and action of the organ of hearing, etc. The propagation of sound is analogous to that of light, both being due to vibrations which produce successive waves, and Newton was the first to show that its propagation through any medium depended upon the elasticity of that medium. Regarding the intensity, reflection, and refraction of sound, much the same rules apply as in light. In ordinary cases of hearing the vibrating medium is air, but all substances capable of vibrating may be employed to propagate and convey sound. When a bell is struck its vibrations are communicated to the particles of air surrounding it, and from these to particles outside them, until they reach the ear of the listener. The intensity of sound varies inversely as the square of the distance of the body sounding from the ear. Sound travels through the air at the rate of about 1,090 feet per second; through water at the rate of about 4,700 feet. Sounds may be musical or non-musical. A musical sound is caused by a regular series of exactly similar pulses succeeding each other at precisely equal intervals of time. If these conditions are not fulfilled the sound is a noise. Musical sounds are comparatively simple, and are combined to give pleasing sensations according to easy numerical relations. The *loudness* of a note depends on the *degree* to which it affects the ear; the *pitch* of a note depends on the *number* of vibrations to the second which produce the note; the *timbre*, *quality*, or *character* of a note depends on the *body* or *bodies* whose vibrations produce the sound, and is due to the form of the paths of vibrating particles. The gamut is a series of eight notes, which are called by the names, Do, Re, Mi, Fa, Sol, La, Si, Do_2; and the numbers of vibrations which produce these notes are respectively proportional to 24, 27, 30, 32, 36, 40, 45, 48. The numerical value of the interval between any two notes is given by dividing one of the above numbers corresponding to the higher note by the number corresponding to the lower note. The intervals from Do to each of the others are called a *second*, a *major third*, a *fourth*, a *fifth*, a *sixth*, a *seventh*, and an *octave*, respectively. The interval from La to Do_2 is a *minor third*. An interval of $\frac{9}{8}$ is a *major tone;* $\frac{10}{9}$ is a *minor tone;* $\frac{16}{15}$ is called a *limma*. The properties of sound were mathematically investigated by Bacon and Galileo, but it remained for Newton, Lagrange, Euler, Laplace, Helmholtz, etc., to bring the science to its present state.

Aerolite. A stone falling from the air or atmospheric regions; a meteoric stone; some suppose them to be projected by lunar volcanoes, by others they are thought to be formed in the air by the union of simpler forms of matter volatilized from the earth's surface; but they are doubtless cosmical bodies of the same nature as shooting-stars, revolving round the earth, and falling when they come within its attraction. Analyzed, they are found to consist of twenty-two of the elements found in terrestrial minerals, the most prominent being malleable metallic iron and nickel.

Agricultural Colleges. Educational institutions, chiefly under government patron-

age, for the promotion of scientific farming. In 1862, the United States Congress passed a so-called land grant act, by which land scrip, representing 30,000 acres for every Senator and Representative, was issued to the States and Territories, the object being to provide a special fund for the creation of State and Territorial agricultural colleges. The land granted to the States by the act of 1862 amounted to somewhat more than 10,000,000 acres, which by 1900 had produced a permanent fund of $10,262,944, with lands still unsold of the estimated value of $4,062,850, the entire proceeds being in round numbers somewhat over $14,250,000. To this have been added other land-grant funds amounting to $1,441,577; other permanent funds, $14,442,194; farms and grounds, $5,543,108; buildings, $16,274,000; apparatus, $1,955,859; machinery, $1,373,696; libraries, $1,854,942; and miscellaneous equipment, $1,997,690, making a grand total of permanent plant of the value of $58,944,137. On this basis sixty-five of these institutions have been established.

Three of the land-grant colleges in Southern States (Mississippi, North Carolina, and South Carolina) have recently established courses of study in textile industry, with special reference to the manufacture of cotton goods. These institutions have provided buildings of regular cotton-mill design, equipped with machinery and apparatus for textile work.

The Act of 1862 was supplemented by a second (August 30, 1890), so that under both acts, each State and Territory having an agricultural college receives an appropriation annually from the United States treasury for its support. The past few years have witnessed the establishment of short courses of study in agriculture, dairying, mechanic arts, household economy, etc., for persons who cannot take a regular course.

Albumen or **Albumin** (L., from *albus*, white). A substance, or rather group of substances, so named from the Latin for the white of an egg, which is one of its most abundant known forms. It may be taken as the type of the protein compounds or the nitrogenous class of food stuffs. One variety enters largely into the composition of the animal fluids and solids, is coagulable by heat at and above 160°, and is composed of carbon, hydrogen, nitrogen, and oxygen, with a little sulphur. It abounds in the serum of the blood, the vitreous and crystalline humors of the eye, the fluid of dropsy, the substance called coagulable lymph, in nutritive matters, the juice of flesh, etc. The blood contains about seven per cent. of albumen. Another variety called vegetable albumen exists in most vegetable juices and many seeds, and has nearly the same composition and properties as egg albumen. When albumen coagulates in any fluid it readily encloses any substances that may be suspended in the fluid. Hence it is used to clarify syrupy liquors. In cookery white of eggs is employed for clarifying, but in large operations like sugar-refining the serum of blood is used. From its being coagulable by various salts, and especially by corrosive sublimate, with which it forms an insoluble compound, white of egg is a convenient antidote in cases of poisoning by that substance. With lime it forms a cement to mend broken ware.

In botany the name albumen is given to the farinaceous matter which surrounds the embryo, the term in this case having no reference to chemical composition. It constitutes the meat of the cocoanut, the flour or meal of cereals, the roasted part of coffee, etc.

Alchemy (from the Arabic article *al* and *kimia*, secret, hidden), a false science, founded on no true scientific principles, which existed in some form or other from the earliest ages, but which, in Europe at least, was made the subject of considerable study and research during the period extending from the Twelfth to the Seventeenth Century. Although it was unproductive in itself, we are yet indebted to it, if not as the parent of modern chemistry, at any rate as the science out of which chemistry has been largely developed. The enthusiasts who devoted themselves to this subject were styled *Alchemists*, and the task which they set themselves to perform was threefold, viz: (1) to discover the *philosopher's stone*, a mineral that would, by mere contact, transmute the baser metals into gold; (2) to prepare the *elixir of life*, a substance which would prolong life indefinitely; and (3) to discover the *alcahest*, or universal solvent. These three substances and more especially the first, they firmly believed to be obtainable, and to need only a fortunate combination of materials for the production of each of them; and, accordingly, fortunes were expended, and lives wasted, in these futile endeavors. The history of Alchemy is somewhat obscure and unconnected, owing to the secrecy with which its operations were carried on; but among the most prominent characters connected with it may be mentioned the celebrated English monk, Roger Bacon, to whom the invention of gunpowder is popularly attributed, and who wrote a work entitled "The Mirror of Alchymy."

Alembic. The alembic is one of the oldest forms of vessels for distillation, and the type of all later kinds of apparatus for that purpose. It consists of a flask, composed of either glass or copper, with a wide neck, on which is fitted a head connected with a downward running tube, the whole so arranged that all vapors condensed against the inside of the head run through a surrounding gutter to the tube and so into a receiver. In some manufacturing processes alembics are still advantageously employed, more so in France than elsewhere. For the larger chemical processes, however, it is now largely superseded by the retort and worm-still.

Alexandrian Library, the largest collection of books of the ancient world, founded by Ptolemy Soter in the city of Alexandria towards the beginning of the Third Century B. C. At one time it is said to have contained 700,000 manuscripts, embracing the collected literature of Rome, Greece, India, and Egypt. It was partly destroyed by fire by a mob of fanatic Christians in A. D. 391, and was finally dispersed or destroyed during the siege of Alexandria by the Arabs under Amru (A. D. 638).

Alimentary Canal. Another name for the digestive tract of an animal. It includes the

whole passage traversed by the substances taken in as food, from their entrance into the mouth to the excretion of the indigestible residue from the rectum. In the mammalia it is made up of the following parts, viz: (1) the *mouth;* (2) the *pharynx*, a funnel-shaped cavity at the back of the mouth, which communicates with the nostrils; (3) the *œsophagus* or gullet, a straight and narrow tube which pierces through the diaphragm or midriff; (4) the *stomach*, a bag-pipe shaped cavity, the wide expanded part of which is termed the *cardiac pouch*, and the narrow tapering part the *pylorus;* (5) the *small intestine*, remarkable for its length and for the manner in which it is necessarily coiled, and divided, for the sake of convenience, into three parts, the *duodenum*, the *jejunum*, and the *ileum;* (6) the *large intestine*, which is thick, and presents externally a peculiar, gathered-up appearance, also divided into three parts, the ascending, transverse, and descending *colon;* (7) the *rectum*, a short, wide, smooth tube, the terminal aperture of which is called the *anus*. A portion of the large intestine which projects beyond the point of its union with the small intestine is called the *cæcum*, and a little worm-like appendage to this cæcum, the function of which has not exactly been determined, is called the *vermiform appendix*. The commencement as well as the end of the small intestine, is guarded by valves — the *pyloric valve*, in the form of a sphincter muscle, separating the pylorus from the duodenum, and the *ileo-cæcal valve*, separating the ileum from the large intestine.

Alkaloids. The name given to a series of bodies derived from the vegetable kingdom, which closely resemble in their chemical action the volatile alkali *ammonia*. They all contain nitrogen, and exert a powerful influence on the ray of polarized light. Like ammonia, they combine directly with acids to form salts. The alkaloids act most powerfully on the animal economy; some, such as strychnine and nicotine, form the most violent poisons with which we are acquainted, while others, such as quinine and morphine, are valuable medicines.

Aluminum. A valuable metal of which the earth alumina, the chief constituent of clay, is an oxide. It is only of late years that chemists have succeeded in inventing a process for extracting it in sufficient quantities and sufficiently cheap to enable it to be used for manufacturing purposes. It has a white color somewhat resembling tin; its specific gravity is only 2.6 (about that of common glass), and hence it is frequently used in the construction of articles where lightness is an object. The melting point is much below that of silver. When heated in oxygen it burns with brilliancy and produces alumina. It is not affected by sulphuretted hydrogen like silver. From its sonorousness it will probably be employed in the construction of musical instruments. With from 92½ to 95 per cent. of copper it forms an alloy named *aluminum-bronze* which is scarcely distinguishable by the eye from gold, whilst it is nearly as hard as iron. This alloy is coming into use in the manufacture of ornamental articles.

Amphibia. A class of vertebrate animals, which in their early life breathe by gills or branchiæ, and afterwards *partly* or *entirely* by lungs. The frog, breathing in its tadpole state by gills and afterwards throwing off these organs and breathing entirely by lungs in its adult state, is an example of the latter phase of amphibian existence. The Proteus of the underground caves of Central Europe exemplifies forms in which the gills of early life are retained throughout life, and in which lungs are developed in addition to the gills. A second character of this group consists in the presence of two occipital "condyles," or processes by means of which the skull articulates with the spine or vertebral column; Reptiles possessing one condyle only. The class is divided into four orders: the Ophiomorpha (or serpentiform), represented by the blindworms, in which limbs are wanting and the body is snake-like; the Urodela or "Tailed" Amphibians, including the newts, proteus, siren, etc.; the Anoura, or Tailless Amphibia, represented by the frogs and toads; and the Labyrinthodontia, which includes the extinct forms known as Labyrinthodons.

Aorta. In anatomy, the great artery or trunk of the arterial system, proceeding from the left ventricle of the heart, and giving origin to all the arteries except the pulmonary. It first rises towards the top of the breast-bone, when it is called the *ascending aorta;* then makes a great curve, called the transverse or *great arch of the aorta*, whence it gives off branches to the head and upper extremities; thence proceeding towards the lower extremities, under the name of the *descending aorta*, it gives off branches to the trunk; and finally divides into the two iliacs, which supply the pelvis and lower extremities.

Apocrypha (from the Greek *apokruptō*, I conceal). The name given especially to those additional Jewish writings which are not contained in the Hebrew Bible, or the Old Testament, but which were introduced into the Septuagint, from whence they were transferred into the Vulgate, and into many subsequent translations. By the Jews they are not held to be canonical. They are received by the Roman Catholic Church; but by the Church of England, and by other Protestant Churches, though they are held to be of value for historical purposes and for "instruction of manners," they are not used for "establishments of doctrine." Besides the Apocrypha of the Old Testament, which belong to the literature of the later Jews, there are certain apocryphal Christian writings, which are usually described as the Apocrypha of the New Testament.

Apostle. One who is sent off or away from; one sent on some important mission; a messenger; a missionary. The name given, in the Christian Church, to the twelve men whom Jesus selected from His disciples as the best instructed in His doctrines, and the fittest instruments for the propagation of His religion. Their names were as follows: Simon Peter, Andrew, his brother; James the greater, and John, his brother, who were sons of Zebedee; Philip of Bethsaida, Bartholomew, Thomas, Matthew; James, the son of Alpheus, commonly called James the less, Lebbeus, his brother, who was surnamed Thaddeus, and was called Judas, or Jude; Simon the Canaanite, and

Judas Iscariot. Of this number, Simon Peter, John, James the greater, and Andrew were fishermen; and Matthew, a publican or tax-gatherer. When the apostles were reduced to eleven, by the suicide of Judas, who had betrayed Christ, they chose Matthias by lot, on the proposition of St. Peter. Soon after, their number became thirteen, by the miraculous vocation of Saul, who under the name of Paul became one of the most zealous propagators of the Christian faith.

Arabian Numerals. The numeral characters now used in our arithmetic. They were introduced into Europe (Spain) about the close of the Tenth Century, by the Moors or Arabs; but they were known to the Hindus as early as the Sixth Century, and they might more properly therefore be called *Hindu numerals*. They were brought to England in the Fourteenth or Fifteenth Century, but their use was not general till the introduction of the art of printing. Up to the Sixteenth Century, accounts continued to be kept in the old Roman numerals.

Arian. A follower of Arius, Presbyter of Alexandria in the Fourth Century A. D., or one holding the system of doctrine associated with his name. In the year 317, Alexander, Bishop of Alexandria, publicly expressed his opinion that the Son of God is not only of the same dignity as the Father, but of the same essence (in Greek, ousia). Arius, one of the Presbyters, considered this view as leaning too much to Sabellianism, and, rushing to the other extreme, he declared that the Son of God was only the first and noblest of created beings, and though the universe had been brought into existence through His instrumentality by the Eternal Father, yet to that Eternal Father He was inferior, not merely in dignity, but in essence. The views of Arius commended themselves to multitudes, while they were abhorrent to still more; fierce controversy respecting them broke out, and the whole Christian world was soon compelled to take sides. The Arians greatly weakened themselves by splitting into sects, and the doctrines regarding the relation of the three Divine Personages authoritatively proclaimed at Nice were at last all but universally adopted. They may be found detailed in what are popularly termed the Nicene and the Athanasian Creeds. They were held almost without a dissentient voice through the Middle Ages, and were cordially accepted by the leading reformers.

Arteries. The blood-vessels by which the blood is carried out from the heart, and distributed to the general system and to the lungs. The arteries which proceed to the general system all commence in one large vessel, the *aorta*, which divides and subdivides into a large number of branches, which become, like those of a tree more and more minute as they are farther removed from the trunk, until they ultimately terminate in what are called the *capillaries*. These arteries all contain pure, oxidized, scarlet blood, which is hence known as *arterial blood*. The arteries which proceed to the lungs, on the other hand,— the *pulmonary arteries*, as they are called,— are two vessels which have their origin in the right ventricle of the heart, and carry the blood to the right and left lung respectively. They contain unpurified, dark-colored blood, the same as that which is contained in the veins, and hence known as *venous* blood. The principal arteries are the two *carotid* arteries, which supply the head; the two *subclavian* arteries, which proceed to the arms or front limbs; the two *iliac* arteries, to the legs or hind limbs; the *cæliac axis*, which supplies the liver, spleen, stomach, and intestines; and the *renal* arteries, which supply the kidneys. The arteries and the veins may readily be distinguished from each other in the dead body, the former being round or cylindrical, and having their walls comparatively stiff and thick, while the walls of the latter are collapsed and flaccid. It is owing to this fact that an artery when cut continues to bleed until death ensues, and the only way to arrest the bleeding is to tie the severed end nearest the heart; the flow of blood, too, from a cut artery is of a jet-like nature, owing to the force with which the blood is propelled from the heart, while from a cut vein the blood merely trickles out. The inner lining of the arteries is perfectly smooth, and there are no valves as in the veins. The arteries derived their name from the fact of their having been supposed by the ancients to contain air, being generally found empty after death.

Articles, The Thirty-nine, of the Church of England, a statement of the particular points of doctrine, thirty-nine in number, maintained by the English Church; first promulgated by a convocation held in London in 1562-1563, and confirmed by royal authority; founded on and superseding an older code issued in the reign of Edward VI. The five first articles contain a profession of faith in the Trinity; the incarnation of Jesus Christ, His descent to Hell and His resurrection; the divinity of the Holy Ghost. The three following relate to the canon of the Scripture. The eighth article declares a belief in the Apostles', Nicene, and Athanasian creeds. The ninth and following articles contain the doctrine of original sin, of justification by faith alone, of predestination, etc. The nineteenth, twentieth, and twenty-first declare the Church to be the assembly of the faithful; that it can decide nothing except by the Scriptures. The twenty-second rejects the doctrine of purgatory, indulgences, the adoration of images, and the invocation of saints. The twenty-third decides that only those lawfully called shall preach or administer the sacraments. The twenty-fourth requires the liturgy to be in English. The twenty-fifth and twenty-sixth declare the sacraments effectual signs of grace (though administered by evil men), by which God excites and confirms our faith. They are two: baptism and the Lord's Supper. Baptism, according to the twenty-seventh article, is a sign of regeneration, the seal of our adoption, by which faith is confirmed and grace increased. In the Lord's Supper, according to article twenty-eight, the bread is the communion of the body of Christ, the wine the communion of His blood, but only through faith (article 29); and the communion must be administered in both kinds (article 30). The twenty-eighth article condemns the doctrine of transubstantia-

tion, and the elevation and adoration of the Host; the thirty-first rejects the sacrifice of the mass as blasphemous; the thirty-second permits the marriage of the clergy; the thirty-third maintains the efficacy of excommunication. The remaining articles relate to the supremacy of the king, the condemnation of Anabaptists, etc. They were ratified anew in 1604 and 1628.

Asteroids, or Planetoids. A numerous group of very small planets revolving round the sun between the orbits of Mars and Jupiter, remarkable for the eccentricity of their orbits and the large size of their angle of inclination to the ecliptic. The diameter of the largest is not supposed to exceed 450 miles, while most of the others are very much smaller. They number over 330, and new members are being constantly discovered. Ceres, the first of them, was discovered January 1, 1801, and within three years more Pallas, Juno, and Vesta were seen. The extraordinary smallness of these bodies, and their nearness to each other, gave rise to the opinion that they were but the fragments of a planet that had formerly existed and had been brought to an end by some catastrophe. For nearly forty years investigations were carried on, but no more planets were discovered till December 8, 1845, when a fifth planet in the same region was discovered. The rapid succession of discoveries that followed was for a time taken as a corroboration of the disruptive theory, but the breadth of the zone occupied makes the hypothesis of a shattered planet more than doubtful. Their mean distances from the sun vary between 200,000,000 and 300,000,000 miles; the periods of revolution between 1,191 days (Flora) and 2,868 (Hilda). Their eccentricities and inclinations are on the average greater than those of the earth, but their total mass does not exceed one-fourth that of the earth.

Athanasian Creed. A formulary or confession of faith, said to have been drawn up by Athanasius, Bishop of Alexandria, in the Fourth Century, to justify himself against the calumnies of his Arian enemies. That it was really composed by this father seems more than doubtful; and modern divines generally concur in the opinion of Dr. Waterland, that it was written by Hilary, Bishop of Arles, in the Fifth Century. It is certainly very ancient; for it had become so famous in the Sixth Century as to be commented upon, together with the Lord's Prayer and Apostles' Creed, by Venantius Fortunatus, Bishop of Poitiers. It was not, however, then styled the Athanasian Creed, but simply the Catholic Faith. It is supposed to have received the name of Athanasius on account of its agreeing with his doctrines, and being an excellent summary of the subjects of controversy between him and the Arians. The true key to the Athanasian Creed lies in the knowledge of the errors to which it was opposed. The Sabellians considered the Father, Son, and Holy Spirit as one in person; this was "confounding the persons": the Arians considered them as differing in essence; this was "dividing the substance"; and against these two errors was the creed originally framed. This creed was used in France about the year 850; was received in Spain about 100 years later, and in Germany about the same time. It was both said and sung in England in the Tenth Century; was commonly used in Italy at the expiration of that century, and at Rome a little later. This creed is appointed to be read in the Church of England.

Atom. A part so small as not to be divisible. An ultimate particle of matter. Two opinions, directly opposed to each other, have long had currency with regard to the constituent particles of material things; the one, that matter is composed of an assemblage of minute particles, or atoms, incapable of further division; the other, that there is no limit to its divisibility, the smallest conceivable particle still consisting of an infinity of parts. The first of these theories, which is commonly distinguished by the name of *Atomic Philosophy*, was originated in Greece by Leucippus; it was supported by Democritus, and subsequently improved by Epicurus and his disciples. The Epicureans professed to account for the origin and formation of all things by supposing that these atoms were endued with gravity and motion, and thus came together into the different organized bodies we now see.

Atomic Theory. A theory as to the existence and properties of atoms (see *Atom*); especially, in chemistry, the theory accounting for the fact that in compound bodies the elements combine in certain constant proportions, by assuming that all bodies are composed of ultimate atoms, the weight of which is different in different kinds of matter. It is associated with the name of Dalton, who systematized and extended the imperfect results of his predecessors. On its practical side the atomic theory asserts three *Laws of Combining Proportions:* (1) the Law of Constant or Definite Proportions, teaching that in every chemical compound the nature and proportion of the constituent elements are definite and invariable; thus water invariably consists of eight parts by weight of oxygen to one part by weight of hydrogen; (2) the Law of Combination in Multiple Proportions, according to which the several proportions in which one element unites with another invariably bear towards each other a simple relation; thus one part by weight of hydrogen unites with eight parts by weight of oxygen to form water, and with sixteen parts (*i. e.*, 8×2) of oxygen to form peroxide of hydrogen; (3) the Law of Combination in Reciprocal Proportions, that the proportions in which two elements combine with a third also represent the proportions in which, or in some simple multiple of which, they will themselves combine; thus in olefiant gas hydrogen is present with carbon in the proportion of one to six, and in carbonic oxide oxygen is present with carbon in the proportion of eight to six, one to eight being also the proportions in which hydrogen and oxygen combine with each other. The theory that these *proportional numbers* are, in fact, nothing else but the relative weights of atoms so far accounts for the phenomena that the existence of these laws might have been predicted by the aid of the atomic hypothesis long before they were actually discovered by analysis. In themselves,

however, the laws do not prove the theory of the existence of ultimate particles of matter of a certain relative weight; and, although many chemists, even without expressly adopting the atomic theory itself, have followed Dalton in the use of the terms *atom* and *atomic weight*, in preference to *proportion*, *combining proportion*, *equivalent*, and the like, yet in using the word *atom* it should be held in mind that it merely denotes the proportions in which elements unite. These will remain the same whether the atomic hypothesis which suggested the employment of the term be true or false. Dalton supposed that the atoms of bodies are spherical, and invented certain symbols to represent the mode in which he conceived they might combine together.

Augsburg, Confession of. Name given to the celebrated declaration of faith, compiled by Melanchthon, revised by Luther and other reformers, and read before the Diet of Augsburg, June 25, 1530. It consisted of twenty-eight articles, seven of which refuted Roman Catholic errors, and the remaining twenty-one set forth the Lutheran creed. Soon after its promulgation, the last hope of reforming the Roman Catholic Church was abandoned and complete severance followed. An answer by the Roman Catholics was read August 3, 1530; when the Diet declared that it had been refuted. Melanchthon then drew up another confession. The first is called the unaltered, and the second, the altered form.

Aurora Borealis, called variously *Northern Lights*, *Polar Lights*, or *Streamers*, a phenomenon which generally appears in the northern parts of the sky, and presents an appearance somewhat resembling the dawn or break of day. It is a luminous meteor, and appears to proceed from a sort of haze or cloud in the northern part of the heavens. The upper edge of the cloud is whitish, the lower often dark or thick, and from the upper part streams of light shoot up in the form of a column, with, in general, a tremulous motion. This phenomenon generally commences two or three hours after sunset, and continues for a few hours, sometimes the whole night; it most frequently occurs in autumn and the early part of winter. Auroras are visible in most countries in high latitudes of the northern hemisphere, and it is asserted that similar appearances have been witnessed in high southern latitudes, but they are not known in tropical regions. No satisfactory answer has yet been furnished as to the cause of these polar lights; there is no doubt, however, that they are the result of electricity in the upper regions of the atmosphere, but how produced we are at present unable to say.

Bap'tists. A denomination of evangelical Christians, who differ from others in respect to baptism. They baptize all who repent and believe the gospel, at whatever age, and reject the substitution of sprinkling for immersion, which they maintain was originally practiced in the administration of baptism, and (except in the case of the sick) universally observed throughout Christendom for 1,300 years. Open communion the Baptists of the United States generally regard as an anomaly. They believe in the spiritual unity of the whole believing Church under Christ. Their government is congregational, each church being complete in itself for the management of its internal affairs. They associate, invite councils for advice, and coöperate in benevolent, educational, and missionary enterprises; but all such associations disclaim the slightest jurisdiction over the churches. Baptists make no distinction but that of office between clergymen and laymen. Elders, as evangelists and missionaries, are ordained and sent out to preach the gospel. In the United States the Baptist, with one exception, is now the largest denomination of evangelical Christians. In 1845, the southern Baptists, by mutual consent, formed separate organizations for their benevolent enterprises. As early as 1764, the Baptists founded their first college in Rhode Island. They have publication societies at Philadelphia, Charleston, and Nashville, and maintain about fifty periodical organs, including a quarterly review. The Baptists of the United States also support the American and foreign Bible society, the American Baptist missionary union, the southern Baptist board of foreign and domestic missions, the Baptist home mission society, and in part the "American Bible Union." Their missions are planted in Canada, Oregon, California, New Mexico, Hayti; in France, Spain, Germany, Denmark, Sweden, Norway; in western and central Africa; in southern India, Assam, Burmah, Siam, and China. In doctrine the Baptists of this country are Calvinistic, but with much freedom and moderation. Besides the general body of Baptists, there are in the United States nine smaller bodies agreeing with them in regard to baptism, but differing more or less on other points, viz: the Seventh-day, Free-will, Anti-mission, and General or Six-principle Baptists, Tunkers, Mennonites, Christians, Campbellites, and Winebrennarians. Some Baptists trace their history in a succession of pure churches from the Third Century to the Reformation. Cyril of Alexdria and Innocent I. of Rome began the persecution which they suffered for centuries. In England, from the time of Henry VIII, to William III., the Baptists struggled to gain their footing, and to secure liberty of conscience for all. In the time of Cromwell they first gained a fair hearing. Introduced into Rhode Island with Roger Williams and John Clark in 1638, their history for more than a century, in most of the colonies, is that of proscribed and banished men. Their prosperity dates from the Revolutionary War.

Blood. The nutritive fluid of the tissues, consists of a transparent colorless fluid, the *liquor sanguinis*, and minute solid bodies, the "corpuscles," which float in it. The liquor sanguinis consists of water, in which are dissolved fibrine, albumen, chlorides of sodium and potassium, phosphates of soda, lime, and magnesia, together with fatty and extractive matters, the latter the product of the metamorphosis of the tissues. The corpuscles are of two kinds — white and red; the white are larger and less numerous than the red, being in healthy blood in the proportion of two or three to 1,000. In certain forms of disease the number of these white blood-corpuscles is increased. They pre-

sent a granular appearance and are identical with the lymph-corpuscle. Under the microscope they vary their forms in the same way as the amœba; hence these movements are called amœboid. The red corpuscles, which are peculiar to vertebrates, are oval and nucleated in fishes, reptiles, and birds, but in man and the mammalia generally they are non-nucleated, biconcave, flattened disks, their edges being thicker than the center. The color of the blood varies; in the arteries it is of a bright scarlet, while in the veins it is dark purple. The chief difference between arterial and venous blood is that the former contains more oxygen and less carbonic acid than the latter. The red blood corpuscles possess great powers of absorbing oxygen. They receive oxygen in the lungs and carry it all over the body to the tissues to form new combinations.

Brahmanism (*brä'-man-izm*). The religion of the Hindus, which inculcates a belief in a supreme deity under the name of Brahma, who is an impersonal divine substance, the object merely of devout contemplation, not of worship. There is also *Brahma*, the creator of the universe and the first of the *Trimurti* or triad of divinities; of whom *Vishnu*, the preserver, and *Siva*, the destroyer, are the others. The rise of this system, which connects modern Hinduism with the religion of the ancient Vedas, was due primarily to the claim of the Brahmans, or Brahmins, to ability to sacrifice to the gods more acceptably than any other class. This claim gained acceptance and finally developed into an exclusive right of the Brahman caste. Further, as the language of the Vedas became obsolete, the Brahmans assumed guardianship of the holy books so that access to the gods was possessed by them alone. With the exception of the period, B. C. 300 to A. D. 500, when Buddhism was dominant, the Brahmans have held the greater part of India bound as with fetters within their rigid system of social castes. The doctrines of *sansara*, or the transmigration of souls, and of *karma*, or the permanence of the effects of one's action, are fundamental in all Hindu systems. A large part of the immense literature of India has been contributed by the Brahmans, and to them we owe our knowledge of Sanskrit.

Brain and Nerves. These constitute the nervous system which controls and guides all the functions of the body. The brain is the organ of thought, of sensation, and of voluntary motion. It is protected by the skull, and is composed of four principal parts: the *cerebrum*, or brain proper; the *cerebellum*, or little brain; the *pons Varolii*, or bridge of Varolius; and the *medulla oblongata*. Broadly speaking, the cerebrum is made up of gray matter containing cells in groups forming centers for thought, action, or sensation, and white matter containing nerve strands acting as lines of communication. The weight of the male brain ranges from 46 to 53 ounces, averaging 49½ ounces; the weight of the female brain ranges from 41 to 47 ounces, averaging 44 ounces. Noted examples of heavy brains are Cuvier's, 64 ounces, and Abercromby's, 63 ounces. While idiocy generally goes with very small brains, some powerful minds have accompanied exceptionally small heads, for example, Descartes, Shelley, Foscolo, Donizetti, and Schumann.

The nervous system includes also the spinal cord, the nerves, the end organs, and the various ganglia of the cerebro-spinal and sympathetic systems. As usually classified, there are twelve pairs of cranial nerves springing from the brain, and thirty-one pairs of spinal nerves arising from the spinal cord. The branches from these primary nerves reach all parts of the body. In addition to the cranial and spinal nerves, there is the sympathetic nervous system consisting of a double chain of ganglia lying on each side of the spinal cord. Each nerve is made up of a bundle of nerve-fibers surrounded by sheaths of connective tissue. Each nerve-fiber connects a central nerve-cell with a peripheral end organ. The distinguishing characteristic of a nerve-cell is its irritability, that of a nerve-fiber is its faculty of transmitting nervous energy at the rate of about 100 feet per second. While in many respects this nerve energy resembles electricity, it is far from being identical with that force. Each spinal nerve is from two roots, one containing motor and the other sensory fibers. The motor nerves dispatch impulses which produce contractions of the muscles. The sensory nerves transmit sensory impressions.

Buddhism (*bŏŏd'-izm*). A system of religion founded by Buddha Gautama, the "Enlightened One," who lived probably in the sixth century B. C. Becoming a religious teacher, he went through various provinces of India, propagating his doctrines, a kind of reformed Brahmanism. His religion became triumphant in Hindustan about the middle of the third century B. C., but between the fifth and seventh centuries of our era, Buddhism was expelled from India proper by the persecution of the Brahmans. However, under several denominations it has become the prevailing creed of the peninsula of India beyond the Ganges, Tibet, Ceylon, China, and Japan. The sacred writings of the Buddhists are very numerous; they were originally composed in Sanskrit, from which they were afterward translated into other tongues. It would seem that there was a belief in a primeval deity named Ali-Buddha, or the First-Buddha, and he was the first person of the trinity, the other two persons being Dhurma and Sunga, answering to Brahma, Siva and Vishnu, of the Brahmans. The trident borne by the priests is emblematical of this trinity. The principal tenets of Buddhism are, that the world and all it contains are manifestations of the Deity, but of a transient and delusive character; that the human soul is an emanation of the Deity, and, after death, will be bound to matter and subjected to the miseries of life, unless the individual to whom it belongs, by the attainment of wisdom through prayer and contemplation, secures its reabsorption into the Deity.

Capillary Action, or Capillarity. In physical science, the name applied to certain phenomena which are exhibited when liquids are placed in contact with the surfaces of solids. Suppose a glass rod to be dipped for a portion of its length in water; then the liquid, as if not subject to the laws of gravity, is raised upwards

against the sides of the solid, and its surface, instead of being horizontal, becomes slightly concave. If, instead of a solid rod, a hollow tube be immersed in the water, not merely is the liquid raised around the tube, but it rises in the inside to a height which is greater the narrower the tube, and the surface of the liquid inside the tube also assumes a concave form. If a glass tube, however, be immersed in mercury instead of water, the liquid in the tube is depressed instead of being raised, and the surface, which was previously concave, now becomes convex. The reason for this difference of action resides in the fact that mercury will not wet the tube as water does, for, if a metallic tube, such as one of copper, be substituted for the glass tube, the mercury in it will rise and have a concave surface, because it is able to wet the sides of the tube. Hence, whenever a liquid is able to adhere to a solid, it rises in contact with it. It is from capillarity that sap rises in plants, and that oil rises in the wicks of lamps. If the end of a towel be left in a basin of water, it is through capillarity that the basin is soon emptied of its contents. The phenomenon of capillarity is intimately connected with what is known as the surface tension of liquids, and its amount varies with the chemical nature of the particular liquid. The word is derived from the Latin *capillus*, a hair, because these phenomena are best seen in narrow hair-like tubes.

Carbon. One of the elements, existing uncombined in three forms, charcoal, graphite or plumbago, and the diamond; chemical symbol C, atomic weight twelve. The diamond is the purest form of carbon; in the different varieties of charcoal, in coal, anthracite, etc., it is more or less mixed with other substances. Pure charcoal is a black, brittle, light, and inodorous substance. It is usually the remains of some vegetable body from which all the volatile matter has been expelled by heat; but it may be obtained from most organic matters, animal as well as vegetable, by ignition in close vessels. Carbon being one of those elements which exist in various distinct forms is an example of what is called allotropy. The compounds of this element are more numerous than those of all the other elements taken together. With hydrogen especially it forms a very large number of compounds, called hydrocarbons, which are possessed of the most diverse properties, chemical and physical. With oxygen, again, carbon forms only two compounds, but union between the two elements is easily effected. It is one of the regular and most characteristic constituents of both animals and plants.

Cardinal. An ecclesiastical prince in the Roman Catholic Church, who has a voice in the conclave at the election of a pope, the popes being taken from the cardinals. The cardinals are appointed by the pope, and are divided into three classes or orders, comprising six bishops, fifty priests, and fourteen deacons, making seventy at most. These constitute the Sacred College and compose the pope's council. Originally they were subordinate in rank to bishops; but they now have the precedence. The chief symbol of the dignity of cardinal is a low-crowned, broad-brimmed red hat, with two cords depending from it, one from either side, each having fifteen tassels at its extremity. Other insignia are a red biretta, a purple cassock, a sapphire ring, etc.

Carnegie Institution. An educational body incorporated January 4, 1902, in Washington, D. C., by John Hay, Secretary of State; Edward D. White, Justice of the Supreme Court; Daniel C. Gilman, former president of Johns Hopkins University; Charles D. Walcott, superintendent of the United States Geological Survey; Dr. John S. Billings, director of the New York Public Library; and Carroll D. Wright, United States Commissioner of Labor. The aims of the institution, as expressed by the founder, are: (1) To increase the efficiency of the universities and other institutions of learning throughout the country by utilizing and adding to their existing facilities, and by aiding teachers in the various institutions for the experimental and other work in these institutions as far as may be advisable. (2) To discover the exceptional man in every department of study, whenever and wherever found to enable him by financial aid to make the work for which he seems especially designed his life work. (3) To promote original research, paying great attention thereto as being one of the chief purposes of this institution. (4) To increase the facilities for higher education. (5) To enable such students as may find Washington the best point for their special studies to avail themselves of such advantages as may be open to them in the museums, libraries, laboratories, observatories, meteorological, piscicultural, and forestry schools and kindred institutions of the several departments of the government. (6) To insure the prompt publication and distribution of the results of scientific investigation, a field considered to be highly important.

On January 29, 1902, the institution received from Mr. Carnegie a deed of gift of $10,000,000. In 1907, the foundation was increased to $12,000,000; in 1911, to $22,000,000.

Carnivora. In *Zoölogy*, the name applied to the order of mammals which feed mainly upon flesh, and the majority of which are commonly known as Beasts of Prey. They are distinguished by the adaptation of their teeth to an animal diet. The incisors or front teeth are generally six in each jaw; the canines or eye-teeth are two in each jaw, and are always long and pointed; the grinders are mostly furnished with sharp cutting edges, adapted for dividing flesh, but one or more of the hinder ones are generally furnished with a simple crown, adapted for bruising rather than for cutting. The feet in the *Carnivora* are always furnished with strong curved claws, and the collar-bones are quite rudimentary, or are altogether wanting. The order *Carnivora* is divided into the following three sections:— (1) *Digitigrades*, in which the heel is raised from the ground, and the animal walks upon tiptoe: to this section belong the dogs, the hyenas, and the cats. (2) *Plantigrades*, in which the whole or nearly the whole of the foot is applied to the ground, so that the animal walks upon the soles of the feet: to this section belong the bears. (3) *Pinnigrades*, in which both fore and hind legs are short, and

the feet form broad webbed swimming paddles: this section comprises the seals and the walruses.

Carotid Arteries. The two great arteries which convey the blood from the aorta to the head and brain. The *common carotids*, one on either side of the neck, divide each into an external and an internal branch. The *external carotid* passes up to the level of the angle of the lower jaw, where it ends in branches to the neck, face, and outer parts of the head. The *internal carotid* passes deeply into the neck, and through an opening in the skull behind the ear enters the brain, supplying it and the eye with blood. Wounds of the carotid trunks cause almost immediate death.

Catholic Church, Roman. The community of Christians throughout the world who recognize the spiritual supremacy of the Pope or Bishop of Rome, and are united together by the profession of the same faith and the participation of the same sacraments. Although a few other points of doctrinal differences separate the Roman Church from the Greek, Russian, and Oriental communions, yet the most palpable ground of division lies in the claim of supremacy in spiritual jurisdiction on the part of the Roman bishop. The history of the Roman Church, therefore, is, in fact, the history of this claim to supremacy.

In the minds of Roman Catholics the claim of supremacy on the part of the Bishop of Rome rests on the belief that Christ conferred on Peter a "primacy of jurisdiction"; that Peter fixed his see and died at Rome; and thus, that the Bishops of Rome, as successors of Peter, have succeeded to his prerogatives of supremacy. The letters of Pope Leo the Great show beyond question that the Bishops of Rome, in the commencement of the Fifth Century, claimed to speak and act with supreme authority; and the first direct challenge to this claim was made by the Patriarch of Constantinople, Acacius; and although Constantinople, in the time of Gregory the Great, and again of Nicholas I., renewed the struggle for supremacy, or even equality, the superior position of Rome continued to be recognized. The separation of the Greek Church and her dependencies, under the patriarch Michael Cerularius, in the year 1054, was but a narrowing of the territorial jurisdiction of Rome; and even Protestants have recognized the Roman Church of the mediæval period as absorbing in itself almost the whole of European Christendom, and as the only public representative of the Church in the West. The modern political institutions which then began to break upon the world so modified the public relations of Church and State as by degrees to undo the condition of society in which the temporal power of the popes had its foundation. The great revolution of the Sixteenth Century completed the process. Nor was the revolution with which the popes thus found themselves face to face without its influence in the external history of the Roman Church. The latter half of the Sixteenth Century was a period of new life in the Roman Church. The celebration of local synods, the establishment of episcopal seminaries, the organization of schools, and other provisions for religious instruction — above all, the foundation of active religious orders of both sexes — had the effect of arresting the progress of Protestantism, which in many countries had been at first rapid and decisive. From the end of the Sixteenth Century, therefore, the position of the Roman Catholic Church, especially in her external relations, may be regarded as settled. The local distribution of the rival churches in the world has hardly been altered, except by migration, since that time. But in her relations to the state the Roman Church has since passed through a long and critical struggle. The new theories to which the French Revolution gave currency have still further modified these relations; but in most of the European kingdoms they were readjusted after 1815 either by concordat or by some similar mutual agreement. The details of the doctrinal system of the Roman Catholic Church will be best collected and explained from the latest authentic creed, that commonly called "the creed of Pius V.," drawn up as a summary of the authoritative teaching of that ecclesiastical body till the time at which it was written, and published together with certain later doctrinal pronouncements. It is only necessary to premise that, while in the view of Catholics all doctrine must be based on the word of God, written or unwritten, the Church is the only authoritative judge of that rule of faith. The creed of Pius V. is as follows:

"I, N. N., with a firm faith believe and profess all and every one of these things which are contained in that creed which the holy Roman Church maketh use of. To wit: I believe in one God, the Father Almighty, Maker of heaven and earth, of all things visible and invisible, and in one Lord Jesus Christ, the only begotten Son of God, born of the Father before all ages; God of God, Light of Light; true God of the true God; begotten, not made; consubstantial with the Father, by whom all things were made. Who for us men, and for our salvation, came down from heaven, and was incarnate by the Holy Ghost of the Virgin Mary, and was made man. He was crucified also for us under Pontius Pilate, suffered and was buried. And the third day he rose again according to the Scriptures: he ascended into heaven, sitteth at the right hand of the Father, and shall come again with glory to judge the living and the dead; of whose kingdom there shall be no end. I believe in the Holy Ghost, the Lord and life-giver, who proceedeth from the Father and the Son; who, together with the Father and the Son, is adored and glorified; who spake by the prophets; and in one holy, Catholic, and Apostolic Church. I confess one baptism for the remission of sins; and I look for the resurrection of the dead, and the life of the world to come. Amen."

The doctrine of the Immaculate Conception of the Blessed Virgin Mary, and a still more comprehensive body of articles in the memorable *Syllabus* issued by Pope Pius IX. and in the decrees of the Vatican Council, celebrated under the presidency of the same pontiff, have been added to the former creeds. The doctrinal decisions of this latter council are divided into two sections, the first "on the Catholic Faith," the second "on the Church of Christ." Each section contains "a scheme of doctrine," in which the

heads of belief, and the grounds on which they rest, are explained. In the scheme "upon the Church of Christ" are contained, in "an additional chapter," the celebrated declaration regarding the infallibility of the pope.

Under the generic name Roman Catholics are comprised all those Christians who acknowledge the supremacy of the Roman pontiff, even though they be not of the Roman or Latin Rite. Not a few individuals and churches of other rites are included under this designation, Greeks, Slavonians, Ruthenians, Syrians (including Maronites), Copts, and Armenians; and these communities are permitted to retain their own national liturgy and language, and for the most part their established discipline and usages. As regards its organization for the purposes of ecclesiastical government the normal territorial distribution of the Roman Catholic Church of the several rites in the various countries where it exists is into provinces, which are subject to archbishops, and are subdivided into bishoprics, each governed by its own bishop. The following summary shows the statistics of the Church in the United States in 1919:

Cardinals, 2; archbishops, 16; bishops, 93; clergy, 21,643; churches, 16,580; seminaries, 113; students, 8,291; colleges for boys, 215; academies for girls, 710; parishes with schools, 6,048; parish school attendance, 1,771,418; orphan asylums, 295; children in institutions, 46,717; homes for aged, 118; Catholic population of United States, 17,885,645.

Celibacy. The state of being celibate or unmarried; specially applied to the voluntary life of abstinence from marriage followed by many religious devotees and by some orders of clergy, as those of the Roman Catholic Church. The ancient Egyptian priests preserved a rigid chastity; the priestesses of ancient Greece and Rome were pledged to perpetual virginity; and celibacy is the rule with the Buddhist priests of the East. Among Christians the earliest aspirants to the spiritual perfection supposed to be attainable through celibacy were not ecclesiastics as such, but hermits and anchorites who aimed at superior sanctity. During the first three centuries the marriage of the clergy was freely permitted, but by the Council of Elvira (305) continence was enjoined on all who served at the altar. For centuries this subject led to many struggles in the Church, but was finally settled by Gregory VII. positively forbidding the marriage of the clergy. The Council of Trent (1545) confirmed this rule. In the Greek Church celibacy is not compulsory on the ordinary clergy. Protestants hold that there is no moral superiority in celibacy over marriage, and that the Church has no right to impose such an obligation on any class of her ministers.

Chemistry. The science which is concerned with the study of the properties of the different forms of matter, and their mutual reactions, just as *Physics* is concerned with the study of force and energy. It has developed from the alchemy of the Middle Ages. The chemist finds by actual experiment that he is able to divide all substances into two great classes, viz., *compounds*, which can be split up into two or more different substances of a simpler nature, and *elements*, which he cannot split up into anything differing from themselves. All the varied forms of matter which we see around us are produced by the combinations of these elementary substances. Combination between different substances is due to the existence of *chemical attraction*, or, as it is often called, *chemical affinity*, between the atoms of which they are composed. The exact nature of this attraction is not understood. It differs from heat, electricity, and other forms of energy, in that it entirely changes the properties of the substances between which it acts, and, moreover, acts only between bodies which are in the most intimate possible contact. Chemical action consequently takes place most rapidly between gases, somewhat less rapidly between liquids, and much less rapidly between solids. Chemical changes may conveniently be classed under three heads: (1) *Combination* or *synthesis*, in which two or more substances combine to form a new compound of more complex composition; (2) *Decomposition* or *analysis*, in which a compound is split up into its constituent elements, or into other compounds of simpler nature; (3) *Double decomposition* or *metathesis*, in which a reaction takes place between two or more compounds, accompanied by a mutual interchange of elements, and ending in the formation of a new series of compounds. The occurrence of chemical change is generally rendered evident by an alteration in the physical properties of the bodies affected by the change. In many cases there is development of heat, sometimes, if the reaction is very energetic, accompanied by the production of light. There may also be production, destruction, or change of color, conversion of solids or liquids into gases, or condensation of gases into solids or liquids, production of solids from liquids, or *vice versa*. The occurrence or non-occurrence of chemical change depends in the first place on the nature of the substances brought into contact, and also on certain physical conditions. In many cases the reaction takes place at ordinary temperatures, in others the substances have to be heated before any change occurs. On the other hand, substances which react on one another at ordinary temperatures are without action at very low temperatures. Further, many compounds are decomposed or split up when heated, and, indeed, heat is one of the main agents which bring about decomposition. Generally speaking, a moderately high temperature is favorable to combination or double decomposition, while a higher temperature tends to produce decomposition. Oxygen and mercury, for example, combine together directly only at a temperature approaching the boiling point of the latter, but if the oxide of mercury thus formed is still more strongly heated, it splits up again into its constituent elements. If two or more substances are brought together in a state of solution, and by their mutual reaction can produce a new substance insoluble in the particular liquid used, then, with very few exceptions, this compound will be produced and will be *precipitated*, or thrown out of solution. The production or non-production of chemical action is affected also by the relative quantities or masses

in which the different substances are present, by the relative volatility, etc., of the bodies which may be formed, and by various other conditions, for a discussion of which reference must be made to special treatises on chemistry. It is found that, as a general rule, those elements most readily combine together which exhibit the greatest differences in their properties. Chlorine, for example, readily combines with sodium or antimony, but has very little attraction for bromine, which it closely resembles in many of its properties. It is found, moreover, that combination always takes place in certain definite proportions, and not in any haphazard quantities. For example, 16 parts by weight of oxygen always combine with 2 parts of hydrogen to form 18 parts of water, and 35.5 parts of chlorine always combine with 1 part of hydrogen to form 36.5 parts hydrochloric acid. Indeed, it is possible to find by experiment for each element a number which always represents the proportion by weight in which it combines with other elements. This is termed its *combining* or *atomic weight*. Further, it is found that if a piece of iron is placed in a solution of sulphate of copper, metallic copper is deposited on the iron, whilst a portion of the latter is dissolved, and for every 63.4 parts of copper deposited, 56 parts of iron are always dissolved. Again, when iron is placed in dilute sulphuric acid, hydrogen gas is given off and the metal is dissolved, and it is found that for every 1 part of hydrogen given off, 28 parts of iron are dissolved. It follows that 56 parts of iron are capable of replacing, or are chemically equivalent to, 63.4 parts of copper or two parts of hydrogen. Many examples of a similar kind might be quoted. Briefly, it is found that a certain definite quantity of each element is capable of combining with, or of replacing in compounds, certain definite quantities of other elements, and these are termed their *chemical equivalents*. For the sake of comparison, one part of hydrogen is usually taken as the standard to which all other equivalents are referred, and from the example given above it is evident that the equivalent of iron is 28, and so on. In some cases, the number representing the equivalent of an element is the same as that representing its atomic weight; but in many cases, for reasons which cannot be entered into here, the latter is some simple multiple of the former. The *equivalent* is a quantity determined by actual experiment, the *atomic weight* is to a certain extent a matter of theory. A similar series of facts is observed in the case of compounds. For example, 56.1 parts of potash will neutralize as much acid as 40 parts of soda or 17 parts of ammonia; 56.1 parts of potash, 40 parts of soda, and 17 parts of ammonia, are therefore chemically equivalent to each other. Chemistry was formerly divided into two branches: *Inorganic chemistry*, or the chemistry of the mineral kingdom, and *Organic chemistry*, or the chemistry of the vegetable and animal kingdoms, i. e., of those substances which are produced by vital action. It was believed that there was an essential difference between the two, and that it was impossible to prepare artificially in the laboratory those compounds formed in the bodies of plants and animals. In 1828, however, the substance *urea*, a body essentially characteristic of vital action, was prepared artificially, and even built up from its elements, by the German chemist, Wöhler. Since that time a large number of the compounds found in plants and animals have been produced from inorganic substances, or built up from other organic bodies, and it is now known that there is no essential difference whatever between organic and inorganic chemistry. The same forces are at work in both, subject to the same laws. One element, however, is contained in all organic bodies, viz, *carbon*. Carbon has the peculiar property of combining as it were with itself, and by virtue of this property it gives rise to an enormous number of derivatives, some of very complex composition and constitution. *Simply for the purposes of study*, these are still classed together under the head of Organic chemistry, which is defined as the *chemistry of the carbon compounds*. The greater number of the carbon compounds now known are artificial products which do not occur in nature. The majority of them may be regarded as derived from the hydro-carbons by the replacement of one or more atoms of hydrogen by some other element or group of elements. Amongst the most important of the series thus derived are the *haloid derivatives, alcohols, ethers, acids, aldehydes, ketones*, and *amines*. There are, however, important groups of substances, the relationships of which are not yet clearly made out. Amongst these are the *carbo-hydrates* and the *alkeloids*. The constitution and relationships of the *proteïds* or *albuminoid substances*, and of some others found only in the bodies of plants or animals, are still less understood. Notwithstanding the differences already alluded to, chemical attraction is closely related to the various forms of energy, and, indeed, is itself a form of potential energy. Of late years, the study of the changes in the distribution of energy which accompany chemical change has become of great importance. Chemical combination is in the majority of cases accompanied by development of heat, and the quantity of heat thus developed by the formation of a given weight of a particular substance is always the same, and the decomposition of any compound requires the expenditure, in the form of heat or otherwise, of exactly the same amount of energy as was liberated by its formation. On the other hand, the formation of some compounds is attended by absorption of heat, and exactly the same amount of heat is liberated when the compound decomposes. That branch of the science which deals specially with the development or absorption of heat which accompanies chemical reactions is termed *thermo-chemistry*. It is found that those compounds in the formation of which the greatest amount of heat is developed or set free are the most stable, i. e., the most difficult to decompose, and vice versa. Further, when several substances which *theoretically* can react in several different ways, producing several different compounds, are mixed together, it is always found that those bodies are produced in the formation of which the greatest amount of heat is developed. This important law is known as the *principle of maximum work*.

TABLE OF CHEMICAL ELEMENTS

Element	Symbol	Atomic Weight O = 16	Discoverer	Year	Specific Gravity*	Fusing or Melting Point*
Aluminum	Al	27.0	Wöhler	1827	2.72	659° C., 1218° F.
Antimony (stibium)	Sb	120.2	Valentine	1450	6.70	630° C., 1166° F.
Argon	A	39.9	Rayleigh and Ramsay	1894	1.40†	−188° C., −306° F.
Arsenic	As	74.96	Schröder	1694	5.71	850° C., 1562° F.
Barium	Ba	137.37	Berzelius, Pontin, Davy	1808	3.75	850° C., 1562° F.
Beryllium (glucinum)	Gl	9.1	Wöhler	1828	1.85	1280° C., 2336° F.
Bismuth	Bi	209.0	Valentine	1450	9.80	271° C., 520° F.
Boron	B	10.9	Davy, Gay-Lussac, Thenard	1808	2.45	2200–2500° C., 4000–4500° F.
Bromine	Br	79.92	Balard	1826	3.19	−7.3° C., 18.9° F.
Cadmium	Cd	112.40	Hermann and Stromeyer	1817	8.65	320.9° C., 609.6° F.
Cæsium	Cs	132.81	Bunsen and Kirchhoff	1860	1.87	26° C., 79° F.
Calcium	Ca	40.07	Davy, Berzelius, Pontin	1808	1.54	810° C., 1490° F.
Carbon	C	12.005	....	....	3.52‡	>3600° C., >6500° F.
Cerium	Ce	140.25	Berzelius, Hisinger, Klaproth	1803	6.9	640° C., 1184° F.
Chlorine	Cl	35.46	Scheele	1774	1.44†	−101.5° C., −150.7° F.
Chromium	Cr	52.0	Vauquelin	1797	6.92	1615° C., 2940° F.
Cobalt	Co	58.97	Brandt	1735	8.72	1480° C., 2696° F.
Columbium (niobium)	Cb	93.1	Hatchett	1801	7.06	1700° C., 3090° F.
Copper (cuprum)	Cu	63.57	....	....	8.9	1083° C., 1982° F.
Dysprosium	Dy	162.5	Urbain	1906		
Erbium	Er	167.7	Mosander	1843	4.77	
Europium	Eu	152.0	Demarçay	1896		
Fluorine	F	19.0	Ampère and Davy	1810	1.14†	−223° C., −369° F.
Gadolinium	Gd	157.3	Marignac	1880	1.31	
Gallium	Ga	70.1	Boisbaudran	1875	5.95	30° C., 86° F.
Germanium	Ge	72.5	Winkler	1886	5.47	958° C., 1756° F.
Gold (aurum)	Au	197.2	....	....	19.32	1063° C., 1946° F.
Helium	He	4.0	Ramsay	1895	.122†	<−271° C., <−456° F.
Hydrogen	H	1.008	Cavendish	1766	.07†	−259° C., −434° F.
Indium	In	114.8	Reich and Richter	1863	7.12	155° C., 311° F.
Iodine	I	126.92	Courtois	1811	4.95	113.5° C., 236.3° F.
Iridium	Ir	193.1	Tennant	1802	22.7	2350° C., 4262° F.
Iron (ferrum)	Fe	55.84	....	....	7.86	1530° C., 2786° F.
Krypton	Kr	82.92	Ramsay and Travers	1898	2.16†	−169° C., −272° F.
Lanthanum	La	139.0	Mosander	1839	6.15	810° C., 1490° F.
Lead (plumbum)	Pb	207.2	....	....	11.34	327.4° C., 621.3° F.
Lithium	Li	6.94	Arfvedson	1817	.53	186° C., 367° F.
Lutecium	Lu	175.0	Urbain	1907		
Magnesium	Mg	24.32	Davy	1808	1.75	651° C., 1204° F.
Manganese	Mn	54.93	Gahn	1774	7.4	1230° C., 2246° F.
Mercury (hydrargyrum)	Hg	200.6	....	....	13.595	−38.87° C., −37.97° F.
Molybdenum	Mo	96.0	Hjelm	1782	8.6	2500° C., 4500° F.
Neodymium	Nd	144.3	Welsbach	1885	6.95	840° C., 1544° F.
Neon	Ne	20.2	Ramsay and Travers	1898	.695A	−253° C., −423° F.
Nickel	Ni	58.68	Cronstedt	1751	8.9	1452° C., 2646° F.
Niton	Nt	222.4	Ramsay and Gray	1910	.....	−71° C., −96° F.
Nitrogen	N	14.008	Rutherford	1772	.80†	−210° C., −346° F.
Osmium	Os	190.9	Tennant	1803	22.48	2700° C., 4900° F.
Oxygen	O	16.0	Priestley	1774	{ 1.12† / 1.426 solid }	−218° C., −360° F.
Palladium	Pd	106.7	Wollaston	1803	11.9	1370° C., 2466° F.
Phosphorus	P	31.04	Brandt	1669	1.83	44° C., 111° F.
Platinum	Pt	195.2	Watson	1750	21.16	1755° C., 3191° F.
Potassium (kalium)	K	39.10	Davy	1807	.86	62.3° C., 144° F.
Praseodymium	Pr	140.9	Muthmann and Weiss	1904	6.48	940° C., 1724° F.
Radium	Ra	226.0	M. and Mme. Curie	1898	.....	700° C., 1292° F.
Rhodium	Rh	102.9	Wollaston	1804	12.1	1950° C., 3542° F.
Rubidium	Rb	85.45	Bunsen and Kirchhoff	1860	1.53	38° C., 100° F.
Ruthenium	Ru	101.7	Claus	1845	12.26	2450° C., 4442° F.
Samarium	Sm	150.4	Boisbaudran	1879	7.8	1300–1400° C., 2370–2550° F.
Scandium	Sc	45.1	Nilson	1879		
Selenium	Se	79.2	Berzelius	1817	4.27	217–220°C.,422–428°F.
Silicon	Si	28.1	Berzelius	1823	2.0	1420° C., 2588° F.
Silver (argentum)	Ag	107.88	....	....	10.53	960.5° C., 1761° F.
Sodium (natrium)	Na	23.00	Davy	1807	.97	97.5° C., 207.5° F.
Strontium	Sr	87.63	Davy	1808	2.54	>Ca <Ba
Sulphur	S	32.06	....	....	2.06	112.8° C., 235° F.
Tantalum	Ta	181.5	Ekeberg	1802	14.49	2850° C., 5160° F.
Tellurium	Te	127.5	Klaproth	1788	6.01	452° C., 846° F.
Terbium	Tb	159.2	Mosander	1843		
Thallium	Tl	204.0	Crookes and Lamy	1862	11.85	302° C., 576° F.
Thorium	Th	232.15	Berzelius	1828	11.23	<Mo <Mo
Thulium	Tm	169.9	Urbain	1900		
Tin (stannum)	Sn	118.7	....	....	7.30	231.9° C., 449.4° F.
Titanium	Ti	48.1	Gregor	1791	4.50	1800° C., 3272° F.
Tungsten (wolfram)	W	184.0	d'Elhujar	1782	18.7	3400° C., 6152° F.
Uranium	U	238.2	Klaproth	1789	18.68	<1850° C., <3362° F.
Vanadium	V	51.0	Sefstroem	1830	6.02	1720° C., 3128° F.
Xenon	Xe	130.2	Ramsay and Travers	1898	3.52†	−140° C., −220° F.
Ytterbium	Yb	173.5	Marignac	1878		
Yttrium	Yt	89.33	Gadolin	1794	3.80	1490° C., 2714° F.
Zinc (zincum)	Zn	65.37	Paracelsus	1520	7.14	419.4° C., 786.9° F.
Zirconium	Zr	90.6	Berzelius	1824	6.4	1700° C., 3090° F.

* The factors in the columns of specific gravities and melting points naturally vary with the form which the element takes (e.g., in carbon the specific gravity varies as diamond, charcoal, or lampblack is taken), but as far as possible the factor of the most typical form is given.

† Of the liquid element. ‡ Diamond. A—Air = 1. < Less than. > More than.

Christ, Disciples of. A denomination of Christians in the United States commonly known as the Christian Church, or Church of Christ, and sometimes called Campbellites. In September, 1809, Thomas Campbell, a Scotch minister of the seceders' branch of the Presbyterian Church, then living in Western Pennsylvania, issued a "Declaration and Address" deploring the divided state of the Church, and urging as the only remedy a complete restoration of apostolic Christianity and the rejection of all human creeds and confessions of faith. The Christian Association of Washington, Pa., was formed for the purpose of promoting the principles set forth in this "declaration." It was not the intention of the Campbellites to form a distinct religious body, but to effect the proposed reforms in the Churches. The Disciples maintained that having accepted the Bible as their only rule of faith and practice, and the only divine basis for the union of all Christians, they were led to reject infant baptism and adopt believers' immersion only. They observe the Lord's Supper each first day of the week, and heartily and practically accept and exalt the doctrine of the divinity of Christ. In 1920 the denomination had 8,506 ministers, 14,416 churches, and 1,493,515 communicants, besides several universities and colleges of high rank, and a number of religious publications.

Christian Endeavor, Young People's Society of. A society distinctly religious in all its features; organized February 2, 1881, in Williston Church, Portland, Me., by the Rev. Francis E. Clark, D. D. From one small association it expanded, up to 1917, into over 77,500 societies, in all parts of the world, with an aggregate membership of 4,000,000. In addition to the main organizations in the United States it has been found necessary to form branches, among which are the Juniors, organized March 27, 1884, at Tabor, Ia., by the Rev. J. W. Cowan and Miss Belle Smith; the Intermediate, organized by the Rev. A. Z. Conrad, of Worcester, Mass.; and the Mothers', suggested by Mrs. Amanda B. Fellows, of Chicago, and organized in April, 1893, at Topeka, Kan., by F. C. Barton. The first Christian Endeavor Society in England was organized in 1887, and was followed by similar ones in other countries; the constitution has been printed in over thirty different languages. The movement is not a denominational one. Any society belonging to an evangelical Church, which adopts the leading principles as set forth in the constitution, is admitted to all the privileges of the organization.

Christianity. The religion instituted by Jesus Christ. Though the great moral principles which it reveals and teaches, and the main doctrines of the gospel, have been preserved without interruption, the genius of the different nations and ages have materially colored its character. The first community of the followers of Jesus was formed at Jerusalem soon after the death of their Master. Another at Antioch in Syria first assumed (about 65) the name of *Christians;* and the travels of the apostles spread Christianity through the provinces of the Roman Empire. Palestine, Syria, Asia Minor, Greece, the islands of the Mediterranean, Italy, and the northern coast of Africa, as early as the First Century, contained societies of Christians. At the end of the Third Century almost one-half of the inhabitants of the Roman Empire, and of several neighboring countries, professed this belief. While Christianity as a system was thus spreading, many heretical branches had sprung from the main trunk. From the Gnostics, who date from the days of the apostles, to the Nestorians of the Fifth Century, the number of sects was large, and some of them exist to the present day. The most important events in the subsequent history of Christianity are the separation of the Eastern and Western Churches early in the Eighth Century; and the Western reformation, which may be said to have commenced with the sectaries of the Thirteenth Century and ended with the establishment of Protestantism in the Sixteenth. The number of Christians now in the world is computed at 564,000,000. Of these about 272,860,000 are Roman Catholics, 120,000,000 belong to the Greek Church, and 171,650,000 are Protestants. Of the various sects of Protestants in the English-speaking world the most numerous are the Episcopalians, Methodists, Baptists, and Presbyterians.

Christian Science, a religious and scientific system discovered in 1866 by Mrs. Mary Baker Eddy, Lynn, Mass., practiced by thousands of disciples in America and Europe. The members acknowledge and adore one Supreme God, taking the Scriptures for their guide. They confess God's Son, and the Holy Ghost, and man as the Divine image and likeness. They hold that Christian Science is the explication of Truth which is a power over all error, sin, sickness, and death. The curative system is spoken of as Christian Science Mind Healing, being based on the understanding of Spirit, divine Mind, as the only Cause. In her book, "Retrospection and Introspection," Mrs. Eddy says: "I claim for healing scientifically the following advantages: (1) It does away with all material medicines and recognizes the antidote for all sickness, as well as sin, in the immortal Mind; and mortal mind as the source of all the ills which befall mortals. (2) It is more effectual than drugs, and cures when they fail, or only relieve, thus proving the superiority of metaphysics over physics. (3) A person healed by Christian Science is not only healed of his disease, but he is advanced morally and spiritually. The mortal body being but the objective state of the mortal mind, this mind must be renovated to improve the body." The absence of creed and dogma in the Christian Science Church, its freedom from materialism, mysticism, and superstition, also the simplicity, uniformity, and impersonality of its form of worship and organization are among the distinguishing features which characterize this modern religious movement. Hypnotism, mesmerism, spiritualism, theosophy, faith cure, and kindred systems are foreign to true Christian Science. Those practicing these beliefs are denied admission to the Christian Science Church.

In June, 1906, the $2,000,000 extension of the Mother Church, the First Church of Christ Scientist, in Boston, was dedicated. At the annual meeting, June, 1907, an increase of 4,000 members over the previous year was reported. The total membership, resident and non-resident, was given at 43,876. Growth in membership and in churches has been substantial. According to statistics for the year 1916, the membership exceeded 85,000, and there were some 1,600 churches and societies, with about 3,200 ministers.

Chronology (Greek *chronos*, time, and *logos*, discourse). The science which treats of time, and has for its object the arrangement and exhibition of historical events in order of time and the ascertaining of the intervals between them. Its basis is necessarily the method of measuring or computing time by regular divisions or periods, according to the revolutions of the earth or moon. The motions of these bodies produce the natural division of time into years, months, and days. As there can be no exact computation of time or placing of events without a fixed point from which to start, dates are fixed from an arbitrary point or *epoch*, which forms the beginning of an *era*. Among the important eras are the Mundane, beginning with the supposed epoch of the creation (Jewish and other eras); the Vulgar or Christian era, beginning with the birth of Christ; the Mohammedan era, from the Hejira or the flight of Mohammed from Mecca to Medina.

BEGINNING OF EPOCHS, ERAS, AND PERIODS

Name		Began
Grecian Mundane Era,	B.C.	5598, Sept. 1
Civil Era of Constantinople,	"	5508, Sept. 1
Alexandrian Era,	"	5502, Aug. 29
Julian Period,	"	4713, Jan. 1
Mundane Era,	"	4008, Oct. 1
Jewish Mundane Era,	"	3761, Oct. 1
Era of Abraham,	"	2015, Oct. 1
Era of the Olympiads,	"	776, July 1
Roman Era (A. U. C.),	"	753, April 24
Metonic Cycle	"	432, July 15
Grecian or Syro-Macedonian Era,	"	312, Sept. 1
Tyrian Era,	"	125, Oct. 19
Sidonian Era,	"	110, Oct. 1
Augustan Era,	"	27, Feb. 14
Vulgar Christian Era,	A.D.	1, Jan. 1
Mohammedan Era,	"	622, July 16

Circulation. The natural motion of the blood in a living animal, by which it proceeds *from* the heart to all parts of the body by the arteries, and returns *to* the heart by the veins. There are in reality two circulations: the *pulmonary*, from the right side of the heart through the lungs to the left side of the heart; the *systemic*, from the left side of the heart through the body back to the right side of the heart. The blood is returned to the right auricle of the heart by the descending and ascending vena cava, which, when distended, contracts and sends it into the right ventricle; from the right ventricle it is propelled through the pulmonary artery, to circulate through and undergo a change in the lungs, being prevented from returning into the right auricle by the closing of valves. Having undergone this change in the lungs, it is brought to the left auricle of the heart by the four pulmonary veins, and thence is evacuated into the left ventricle. The left ventricle, after having been distended, contracts, and throws the blood through the aorta to every part of the body, by the arteries, to be returned by the veins into the vena cava. It is prevented from passing back from the left ventricle into the auricle by a valvular apparatus; and the beginning of the pulmonary artery and aorta is also furnished with similar organs, which prevent its returning into the ventricles.

Cloud. A collection of visible vapor or watery particles suspended in the atmosphere at some altitude. They differ from fogs only by their height and less degree of transparency. The average height of clouds is calculated to be two and one-half miles, thin and light clouds being much higher than the highest mountains, while thick heavy clouds often touch low mountains, steeples, and even trees. Clouds differ much in form and character, but are generally classed into three simple or primary forms, viz., (1) The *cirrus*, so called from its resemblance to a lock of hair, and consisting of fibers which diverge in all directions. Clouds of this description float at a great height, usually from three to five miles above the earth's surface. (2) The *cumulus* or *heap*, a cloud which assumes the form of dense convex or conical heaps, resting on a flattish base, called also summer cloud. Under ordinary circumstances these clouds accompany fine weather, especially in the heat of summer. They attain their greatest size early in the afternoon and gradually decrease towards sunset. (3) The *stratus*, so named from its spreading out uniformly in a horizontal layer, which receives all its augmentations of volume from below. It belongs essentially to the night, and is frequently seen on calm summer evenings after sunset ascending from the lower to the higher grounds, and dispersing in the form of a cumulus at sunrise. These three primary forms of clouds are subdivided as follows: (1) The *cirro-cumulus*, composed of a collection of cirri, and spreading itself frequently over the sky in the form of beds of delicate snow-flakes. (2) The *cirro-stratus* or *wane-cloud*, so called from its being generally seen slowly sinking, and in a state of transformation; when seen in the distance, a collection of these clouds suggests the resemblance of a shoal of fish, and the sky, when thickly mottled with them, is called in popular language a *mackerel sky*. (3) The *cumulo-stratus* or *twain-cloud*, one of the grandest and most beautiful of clouds, and consisting of a collection of large fleecy clouds overhanging a flat stratum or base. (4) The *nimbus*, *cumulo-cirro-stratus*, or *rain-cloud*, recognizable by its fibrous border and uniformly gray aspect. It is a dense cloud spreading out into a crown of cirrus and passing beneath into a shower.

College Fraternities. Societies existing in American colleges which are named from the letters of the Greek alphabet and therefore commonly called "Greek Letter Societies." They are secret organizations only in their grips and passwords. They are organized chiefly for literary and social purposes.

GENERAL FRATERNITIES FOR MEN

Fraternity	Membership	Active Chapters	Inactive Chapters	No. Houses	Where and When Founded
Acacia	4,198	24	4	10	University of Michigan, 1904
Alpha Chi Rho	1,975	17	0	6	Trinity, 1895
Alpha Delta Phi	13,234	25	10	20	Hamilton, 1832
Alpha Gamma Rho	1,249	14	0	3	Ohio State University, 1904
Alpha Phi Alpha	940	18	2	0	Cornell University, 1906
Alpha Sigma Phi	3,445	20	1	10	Yale, 1845
Alpha Tau Omega	14,676	70	24	27	Virginia Military Institute, 1865
Beta Phi	721	8	0	0	Chicago, 1911
Beta Theta Pi	24,552	80	23	62	Miami, 1839
Chi Phi	7,664	22	14	18	Princeton, 1854
Chi Psi	6,387	19	11	15	Union, 1841
Delta Chi	5,169	22	6	6	Cornell University, 1890
Delta Kappa Epsilon	21,206	43	14	40	Yale, 1844
Delta Phi	4,682	13	5	9	Union, 1827
Delta Psi	4,549	7	12	7	Columbia, 1847
Delta Sigma Phi	1,492	19	6	2	College, City of New York, 1899
Delta Tau Delta	15,646	62	24	29	Bethany, 1859
Delta Upsilon	15,264	44	4	35	Williams, 1834
Kappa Alpha (North)	2,350	8	2	6	Union, 1825
Kappa Alpha (South)	11,271	50	18	16	Washington and Lee, 1865
Kappa Alpha Psi	384	10	0	0	Indiana University, 1911
Kappa Delta Rho	385	5	0	3	Middlebury College, 1905
Kappa Nu	247	13	0	0	Rochester University, 1911
Kappa Sigma	17,438	85	19	39	University of Virginia, 1869
Lambda Chi Alpha	3,116	50	0	7	Boston University, 1911
Phi Chi Delta	226	13	1	0	Louisiana State University, 1913
Phi Delta Theta	24,119	85	24	64	Miami, 1848
Phi Epsilon Pi	979	20	0	0	College, City of New York, 1903
Phi Gamma Delta	18,360	63	24	48	Washington and Jefferson, 1848
Phi Kappa	825	7	0	0	Brown University, 1888
Phi Kappa Psi	16,403	46	21	34	Washington and Jefferson, 1852
Phi Kappa Sigma	6,474	29	17	15	University of Pennsylvania, 1850
Phi Kappa Tau	837	8	0	2	Miami, 1906
Phi Mu Delta	457	3	1	0	Wesleyan, 1899
Phi Sigma Delta	295	7	0	0	Columbia University, 1910
Phi Sigma Kappa	5,315	30	1	16	Mass. Agricultural College, 1873
Pi Kappa Alpha	6,151	45	12	13	University of Virginia, 1868
Pi Kappa Phi	776	12	5	0	College of Charleston, 1904
Pi Lambda Phi	1,177	10	4	0	Yale, 1895
Psi Upsilon	14,140	25	1	23	Union, 1833
Sigma Alpha Epsilon	22,146	90	31	43	University of Alabama, 1856
Sigma Alpha Mu	1,119	16	0	0	College, City of New York, 1909
Sigma Chi	17,631	71	23	38	Miami, 1855
Sigma Iota	300	6	0	0	Louisiana State University, 1904
Sigma Nu	14,621	79	13	36	Virginia Military Institute, 1869
Sigma Phi	3,174	10	2	9	Union, 1827
Sigma Phi Epsilon	5,449	45	11	10	Richmond College, 1901
Sigma Phi Sigma	602	6	0	1	University of Pennsylvania, 1908
Sigma Pi	1,473	12	2	2	Vincennes University, 1909
Tau Delta Phi	315	5	0	0	College, City of New York, 1910
Tau Kappa Epsilon	860	13	0	3	Illinois Wesleyan University, 1899
Theta Alpha	241	2	0	1	Syracuse University, 1909
Theta Chi	3,000	26	0	6	Norwich University, 1856
Theta Delta Chi	8,189	28	16	14	Union, 1847
Theta Xi (Eng. & Scien.)	3,021	21	0	5	Rensselaer Poly. Institute, 1864
Zeta Beta Tau	1,520	24	4	0	Jewish Theological Sem., 1898
Zeta Psi	9,008	24	9	20	New York University, 1847
Total 57	371,443	1,629	421	773	

FRATERNITIES FOR WOMEN

Fraternity	Membership	Active Chapters	Inactive Chapters	No. Houses	Where and When Founded
Alpha Chi Omega	3,794	26	1	5	De Pauw University, 1885
Alpha Delta Pi	3,145	27	5	1	Wesleyan Female College, 1851
Alpha Gamma Delta	1,597	19	1	4	Syracuse University, 1904
Alpha Omicron Pi	2,276	24	2	3	Barnard College, 1897
Alpha Phi	3,401	21	1	6	Syracuse University, 1872
Alpha Xi Delta	2,480	27	0	6	Lombard College, 1893
Beta Sigma Omicron (Junior)	1,134	11	0	0	Missouri State University, 1888
Chi Omega	4,825	42	6	5	University of Arkansas, 1895
Delta Delta Delta	7,770	61	5	11	Boston University, 1888
Delta Gamma	5,361	30	12	9	Oxford Institute, 1874
Delta Zeta	1,386	22	0	0	Miami University, 1902
Gamma Phi Beta	3,581	23	1	10	Syracuse University, 1874
Kappa Alpha Theta	8,133	43	12	9	De Pauw University, 1870
Kappa Delta	2,360	24	9	2	Virginia State Normal, 1897
Kappa Kappa Gamma	9,329	44	10	9	Monmouth College, 1870
Phi Mu	3,527	29	7	1	Wesleyan College, 1852
Pi Beta Phi	10,571	60	9	15	Monmouth College, 1867
Sigma Kappa	1,908	19	1	2	Colby College, 1874
Sigma Sigma Sigma, (Normal)	1,500	12	7	0	Virginia State Normal, 1898
Zeta Tau Alpha	1,688	21	6	2	Virginia State Normal, 1898
Total 20	79,766	585	95	100	

COLLEGES AND UNIVERSITIES OF THE UNITED STATES

Founded	Name of Institution	Location	Control	No. of Instructors	No. of Students
1896	Adelphi,	Brooklyn, N. Y.,	Non-sectarian,	31	574
1859	Adrian,	Adrian, Mich.,	Methodist Protestant,	18	150
1890	Agnes Scott,	Decatur, Georgia,	Non-sectarian,	40	456
1876	Ag. and Mech. Col. of Tex.,	College Station, Texas,	State,	135	3,825
1872	Alabama Poly. Inst.,	Auburn, Alabama,	State,	109	2,335
1861	Albion,	Albion, Mich.,	Methodist Episcopal,	28	489
1871	Alcorn Ag. and Mech.,	Alcorn, Miss.,	State,	28	600
1895	Albright,	Myerstown, Pa.,	U. Evangelical,	23	202
1836	Alfred U.,	Alfred, N. Y.,	Non-sectarian,	52	477
1815	Allegheny,	Meadville, Pa.,	Methodist Episcopal,	33	586
1887	Alma,	Alma, Mich.,	Presbyterian,	21	197
1821	Amherst,	Amherst, Mass.,	Non-sectarian,	55	500
1853	Antioch,	Yellow Springs, Ohio,	Non-sectarian,	27	300
1893	Armour Inst. of Tech.,	Chicago, Ill.,	Non-sectarian,	70	2,120
1869	Atlanta U.,	Atlanta, Ga.,	Non-sectarian,	39	561
1869	Augsburg Sem.,	Minneapolis, Minn.,	Lutheran,	16	147
1860	Augustana,	Rock Island, Ill.,	Evang. Lutheran,	79	944
1849	Austin,	Sherman, Tex.,	Presbyterian,	18	277
1858	Baker U.,	Baldwin City, Kans.,	Methodist Episcopal,	30	526
1845	Baldwin Wallace,	Berea, Ohio,	Methodist Episcopal,	47	1,028
1889	Barnard,	New York, N. Y.,	Non-sectarian,	104	749
1864	Bates,	Lewiston, Maine,	Non-sectarian,	38	634
1845	Baylor (Fem.).,	Belton, Texas,	Baptist,	61	1,467
1845	Baylor U.,	Waco, Texas,	Baptist,	140	2,388
1880	Bellevue,	Bellevue, Neb.,	Presbyterian,	10	135
1846	Beloit,	Beloit, Wis.,	Non-sectarian,	46	638
1871	Benedict,	Columbia, S. C.,	Baptist,	31	650
1855	Berea,	Berea, Ky.,	Non-sectarian,	135	2,550
1840	Bethany,	Bethany, West Va.,	Disciples,	24	300
1881	Bethany,	Lindsborg, Kans.,	Lutheran,	41	605
1849	Bethel,	Russellville, Ky.,	Baptist,	14	161
1897	Birmingham Southern,	Birmingham, Ala.,	Meth. Episcopal South,	18	375
1859	Blackburn,	Carlinville, Ill.,	Presbyterian,	10	141
1864	Boston,	Chestnut Hill, Mass.,	Roman Catholic,	35	734
1873	Boston U.,	Boston, Mass.,	Methodist Episcopal,	388	*5,246
1802	Bowdoin,	Brunswick, Maine,	Non-sectarian,	30	398
1897	Bradley Poly. Inst.,	Peoria, Ill.,	Non-sectarian,	55	2,014
1880	Bridgewater,	Bridgewater, Va.,	Brethren,	23	239
1877	Brigham Young,	Logan, Utah,	Latter-Day Saints,	38	936
1765	Brown U.,	Providence, R. I.,	Baptist,	83	1,400
1885	Bryn Mawr,	Bryn Mawr, Pa.,	Non-sectarian,	67	472
1846	Bucknell U.,	Lewisburg, Pa.,	Non-sectarian,	42	804
1891	Buena Vista,	Storm Lake, Iowa,	Presbyterian,	17	120
1895	Burleson,	Greenville, Texas,	Baptist,	16	235
1850	Butler,	Indianapolis, Ind.,	Christian,	39	850
1891	California Inst. of Tech.,	Pasadena, Calif.,	Non-sectarian,	55	413
1870	Canisius,	Buffalo, N. Y.,	Roman Catholic,	52	1,016
1850	Capital U.,	Columbus, Ohio,	Lutheran,	29	391
1866	Carleton,	Northfield, Minn.,	Non-sectarian,	60	634
1905	Carnegie Inst. of Tech.,	Pittsburgh, Pa.,	Non-sectarian,	304	5,108
1846	Carroll,	Waukesha, Wis.,	Presbyterian,	20	350
1851	Carson and Neman,	Jefferson City, Tenn.,	Baptist,	21	420
1870	Carthage,	Carthage, Ill.,	Lutheran,	35	301
1881	Case School of Applied Science,	Cleveland, Ohio,	Non-sectarian,	64	781
1903	Cathedral,	New York, N. Y.,	Roman Catholic,	22	375
1889	Catholic Univ. of America,	Washington, D. C.,	Roman Catholic,	90	1,335
1887	Cedarville,	Cedarville, Ohio,	Reformed Presbyterian,	18	206
1819	Centre,	Danville, Ky.,	Presbyterian,	12	269
1853	Central,	Pella, Iowa,	Reformed,	17	224
1857	Central,	Fayette, Mo.,	Methodist Episcopal,	13	262
1892	Central Baptist,	Conway, Ark.,	Baptist,	20	210
1864	Central Wesleyan,	Warrenton, Mo.,	Methodist Episcopal,	27	363
1785	Charleston,	Charleston, S. C.,	City,	11	138
1869	Claflin U.,	Orangeburg, S. C.,	Methodist,	20	752
1902	Clark,	Worcester, Mass.,	Non-sectarian,	26	205
1870	Clark U.,	Atlanta, Ga.,	Methodist Episcopal,	20	425
1889	Clark U.,	Worcester, Mass.,	Non-sectarian,	29	200
1896	Clarkson College of Tech.,	Potsdam, N. Y.,	Non-sectarian,	14	195
1896	Clemson Ag.,	Clemson Col., S. C.,	State,	61	1,081
1881	Coe,	Cedar Rapids, Iowa,	Non-sectarian,	37	1,228
1820	Colby,	Waterville, Me.,	Non-sectarian,	25	450
1819	Colgate U.,	Hamilton, N. Y.,	Non-sectarian,	50	650
1882	College of Emporia,	Emporia, Kans.,	Presbyterian,	25	313
1847	College of the City of New York,	New York, N. Y.,	City,	294	13,771
1891	College of the Ozarks,	Clarksville, Ark.,	Presbyterian,	21	190
1851	College of the Pacific,	San José, Calif.,	Methodist Episcopal,	32	481
1868	College of Wooster,	Wooster, Ohio,	Presbyterian,	46	724
1871	Colorado Ag.,	Ft. Collins, Col.,	State,	96	1,599
1874	Colorado,	Colorado Springs, Col.,	Non-sectarian,	55	681
1874	Colorado School of Mines,	Golden, Col.,	State,	29	472
1754	Columbia U., (a)	New York, N. Y.,	Non-sectarian,	1,506	*9,793
1839	Concordia,	Fort Wayne, Ind.,	Lutheran,	13	229

COLLEGES AND UNIVERSITIES OF THE UNITED STATES—Con.

Founded	Name of Institution	Location	Control	No. of Instructors	No. of Students
1881	Connecticut Ag.,	Storrs, Conn.,	State,	71	354
1915	Connecticut Col. for Women,	New London, Conn.,	Non-sectarian,	42	357
1890	Converse,	Spartanburg, S. C.,	Non-sectarian,	35	372
1886	Cooper,	Sterling, Kans.,	United Presbyterian,	18	200
1853	Cornell,	Mount Vernon, Iowa,	Methodist Episcopal,	50	750
1868	Cornell U., (b)	Ithaca, N. Y.,	Non-sectarian,	757	*5,342
1889	Cotner,	Bethany, Neb.,	Christian,	31	381
1884	Cottey Junior,	Nevada, Mo.,	Non-sectarian,	21	300
1842	Cox,	College Park, Ga.,	Non-sectarian,	19	175
1879	Creighton U.,	Omaha, Neb.,	Roman Catholic,	154	1,839
1853	Culver-Stockton,	Canton, Mo.,	Christian,	17	203
1842	Cumberland U.,	Lebanon, Tenn.,	Presbyterian,	21	375
1883	Dakota Wes. U.,	Mitchell, S. D.,	Methodist,	32	586
1769	Dartmouth,	Hanover, N. H.,	Non-sectarian,	157	1,875
1837	Davidson,	Davidson, N. C.,	Presbyterian,	25	498
1904	Davis and Elkins,	Elkins, West Va.,	Presbyterian,	58	1,163
1902	Defiance,	Defiance, Ohio,	Christian,	36	416
1833	Delaware,	Newark, Del.,	State,	43	481
1831	Denison U.,	Granville, Ohio,	Baptist,	70	933
1898	De Paul U.,	Chicago, Ill.,	Roman Catholic,	90	2,000
1837	De Pauw U.,	Greencastle, Ind.,	Methodist Episcopal,	46	1,149
1865	Des Moines U.,	Des Moines, Iowa,	Baptist,	43	1,467
1783	Dickinson,	Carlisle, Pa.,	Non-sectarian,	20	450
1872	Doane,	Crete, Neb.,	Congregational,	25	200
1881	Drake U.,	Des Moines, Iowa,	Non-sectarian,	80	2,000
1866	Drew Theo. Seminary,	Madison, N. J.,	Methodist Episcopal,	31	276
1873	Drury,	Springfield, Mo.,	Non-sectarian,	20	362
1847	Earlham,	Richmond, Ind.,	Friends,	30	555
1900	Eastern,	Manassas, Va.,	Non-sectarian,	21	178
1890	Ellsworth,	Iowa Falls, Iowa,	Non-sectarian,	19	480
1855	Elmira,	Elmira, N. Y.,	Non-sectarian,	33	400
1890	Elon,	Elon College, N. C.,	Christian,	31	400
1838	Emory and Henry,	Emory, Va.,	Methodist South,	18	239
1836	Emory U.,	Emory U., Ga.,	Methodist South,	183	1,020
1839	Erskine,	Due West, S. C.,	Amer. Ref. Presbyterian,	8	132
1855	Eureka,	Eureka, Ill.,	Christian,	22	303
1867	Ewing,	Ewing, Ill.,	Baptist,	10	110
1895	Fairmont,	Wichita, Kans.,	Congregational,	20	432
1888	Fargo,	Fargo, N. D.,	Congregational,	31	587
1882	Findlay,	Findlay, Ohio,	Church of God,	22	466
1866	Fisk U.,	Nashville, Tenn.,	Congregational,	41	604
1905	Florida (fem.),	Tallahassee, Fla.,	State,	44	771
1841	Fordham U.,	New York, N. Y.,	Roman Catholic,	172	*3,435
1853	Frances Shimer Sch.,	Mt. Carroll, Ill.,	Baptist,	20	170
1887	Franklin and Marshall,	Lancaster, Pa.,	Reformed,	17	316
1834	Franklin,	Franklin, Ind.,	Non-sectarian,	29	550
1825	Franklin,	New Athens, Ohio,	Non-sectarian,	7	107
1898	Friends U.,	Wichita, Kans.,	Friends,	22	271
1851	Furman U.,	Greenville, S. C.,	Baptist,	15	300
1864	Gallaudet,	Washington, D. C.,	Non-sectarian,	18	116
1817	General Theo. Sem.,	New York, N. Y.,	Protestant Episcopal,	16	79
1848	Geneva,	Beaver Falls, Pa.,	Reformed Presbyterian,	20	636
1875	George Peabody,	Nashville, Tenn.,	Non-sectarian,	90	1,608
1821	George Washington U.,	Washington, D. C.,	Non-sectarian	290	4,579
1829	Georgetown,	Georgetown, Ky.,	Baptist,	27	375
1789	Georgetown U.,	Washington, D. C.,	Roman Catholic,	221	2,262
1888	Georgia School of Tech.,	Atlanta, Ga.,	State,	126	2,732
1887	Gonzaga U.,	Spokane, Wash.,	Roman Catholic,	35	700
1903	Goshen,	Goshen, Ind.,	Mennonite,	18	483
1888	Goucher,	Baltimore, Md.,	Methodist Episcopal,	71	850
1895	Graceland,	Lamoni, Iowa,	Latter Day Saints,	20	350
1892	Grand Island,	Grand Island, Neb.,	Baptist,	14	100
1838	Greensboro,	Greensboro, N. C.,	Methodist Epis. South,	27	363
1892	Greenville,	Greenville, Ill.,	Free Methodist,	28	385
1847	Grinnell,	Grinnell, Iowa,	Non-sectarian,	70	854
1876	Grove City,	Grove City, Pa.,	Non-sectarian,	38	730
1888	Guilford,	Guilford, N. C.,	Friends,	18	240
1862	Gustavus Adolphus,	St. Peter, Minn.,	Lutheran,	21	366
1812	Hamilton,	Clinton, New York,	Non-sectarian,	28	320
1854	Hamline U.,	St. Paul, Minn.,	Methodist Episcopal,	35	500
1776	Hampden-Sidney,	Hampden-Sidney, Va.,	Presbyterian,	10	143
1868	Hampton Inst.,	Hampton, Va.,	Private Corp.,	100	1,885
1832	Hanover,	Hanover, Ind.,	Presbyterian,	15	313
1873	Hardin Jr. (fem.),	Mexico, Mo.,	Baptist,	25	220
1636	Harvard U.,	Cambridge, Mass.,	Non-sectarian,	891	*5,671
1882	Hastings,	Hastings, Neb.,	Presbyterian,	24	454
1833	Haverford,	Haverford, Pa.,	Friends,	25	210
1856	Hedding,	Abingdon, Ill.,	Methodist Episcopal,	23	152
1850	Heidelberg,	Tiffin, Ohio,	Reformed,	32	400
1890	Henderson-Brown,	Arkadelphia, Ark.,	Methodist South,	21	253
1884	Hendrix,	Conway, Ark.,	Methodist South,	18	280
1857	Highland,	Highland, Kans.,	Presbyterian,	4	35
1855	Hillsdale,	Hillsdale, Mich.,	Non-sectarian,	22	365

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1850	Hiram,	Hiram, Ohio,	Non-sectarian,	25	285
1822	Hobart,	Geneva, N. Y.,	Non-sectarian,	28	240
1842	Hollins,	Hollins, Va.,	Non-sectarian,	30	300
1843	Holy Cross,	Worcester, Mass.,	Roman Catholic,	41	725
1893	Hood,	Frederick, Md.,	Reformed,	30	265
1866	Hope,	Holland, Mich.,	Reformed,	18	450
1889	Howard,	Birmingham, Ala.,	Baptist,	18	477
1890	Howard Payne,	Brownwood, Tex.,	Baptist,	25	836
1867	Howard U.,	Washington, D. C.,	Non-sectarian,	145	1,893
1870	Hunter,	New York, N. Y.,	City,	220	2,966
1883	Huron,	Huron, S. D.,	Presbyterian,	23	404
1829	Illinois,	Jacksonville, Ill.,	Presbyterian,	26	523
1846	Illinois Woman's,	Jacksonville, Ill.,	Methodist Episcopal,	36	432
1857	Illinois State Normal U.,	Normal, Ill.,	State,	114	2,892
1850	Illinois Wes. U.,	Bloomington, Ill.,	Methodist Episcopal,	38	520
1820	Indiana U.,	Bloomington, Ind.,	State,	204	3,914
1869	Iowa State Col. of Ag. & Mech. Arts,	Ames, Iowa,	State,	350	*3,896
1842	Iowa Wes.,	Mt. Pleasant, Iowa,	Methodist Episcopal,	22	265
1856	Irving Col. & Music Conserv.,	Mechanicsburg, Pa.,	Non-sectarian,	30	135
1909	Jamestown,	Jamestown, N. D.,	Presbyterian,	23	270
1901	James Milliken U.,	Decatur, Ill.,	Presbyterian,	65	1,163
1831	Jefferson,	Convent, La.,	Roman Catholic,	18	175
1825	Jefferson Medical,	Philadelphia, Pa.,	Non-sectarian,	169	466
1883	John B. Stetson U.,	De Land, Fla.,	Baptist,	33	584
1876	John Hopkins U.,	Baltimore, Md.,	Non-sectarian,	412	3,487
1838	Judson,	Marion, Ala.,	Baptist,	28	292
1876	Juniata,	Huntington, Pa.,	Brethren,	23	378
1833	Kalamazoo,	Kalamazoo, Mich.,	Baptist,	20	312
1886	Kansas City U.,	Kansas City, Kans.,	United Brethren,	16	168
1886	Kansas Wes. U.,	Salina, Kans.,	Methodist South,	24	418
1871	Kemper Hall,	Kenosha, Wis.,	Roman Catholic,	21	105
1866	Kentucky Wes.,	Winchester, Ky.,	Methodist South,	12	165
1824	Kenyon,	Gambier, Ohio,	Protestant Episcopal,	15	171
1837	Knox,	Galesburg, Ill.,	Non-sectarian,	35	528
1875	Knoxville,	Knoxville, Tenn.,	United Presbyterian,	30	424
1832	Lafayette,	Easton, Pa.,	Presbyterian,	62	801
1858	La Grange,	La Grange, Mo.,	Baptist,	10	150
1833	La Grange,	La Grange, Ga.,	Methodist Epis. South,	18	157
1837	Lake Erie,	Painesville, Ohio,	Non-sectarian,	21	156
1876	Lake Forest,	Lake Forest, Ill.,	Presbyterian,	21	200
1872	Lander,	Greenwood, S. C.,	Methodist Epis. South,	26	318
1882	Lane,	Jackson, Tenn.,	Methodist Episcopal (colored),	22	426
1867	La Salle,	Philadelphia, Pa.,	Roman Catholic,	20	356
1847	Lawrence,	Appleton, Wis.,	Non-sectarian,	57	1,078
1856	Leander Clark,	Toledo, Iowa,	United Brethren,	14	176
1866	Lebanon Valley,	Annville, Pa.,	United Brethren,	25	300
1866	Lehigh U.,	Bethlehem, Pa.,	Non-sectarian,	92	1,104
1892	Lenoir,	Hickory, N. C.,	Lutheran,	21	256
1856	Lenox,	Hopkinton, Iowa,	Presbyterian,	10	125
1895	Lewis Institute,	Chicago, Ill.,	Non-sectarian,	125	4,000
1857	Lincoln U.,	Lincoln U., Pa.,	Presbyterian,	15	216
1865	Lincoln,	Lincoln, Ill.,	Presbyterian,	18	190
1880	Livingstone,	Salisbury, N. C.,	Non-sectarian,	30	1,034
1851	Lombard,	Galesburg, Ill.,	Non-sectarian,	20	303
1802	Louisburg,	Louisburg, N. C.,	Methodist Epis. South,	16	140
1906	Louisiana,	Pineville, La.,	Baptist,	18	307
1860	Louisiana State U.,	Baton Rouge, La.,	State,	90	1,662
1837	Louisville U.,	Louisville, Ky.,	City,	160	800
1869	Loyola U.,	Chicago, Ill.,	Roman Catholic,	160	1,250
1861	Luther,	Decorah, Iowa,	Lutheran,	22	254
1884	Macalester,	St. Paul, Minn.,	Presbyterian,	26	413
1863	Manhattan,	New York, N. Y.,	Roman Catholic,	12	96
1835	Marietta,	Marietta, Ohio,	Non-sectarian,	19	404
1864	Marquette U.,	Milwaukee, Wis.,	Roman Catholic,	272	3,725
1870	Martin,	Pulaski, Tenn.,	Methodist Epis. South,	18	250
1819	Maryville,	Maryville, Tenn.,	Presbyterian,	74	933
1853	Maryland for Women,	Lutherville, Md.,	Non-sectarian,	20	125
1863	Massachusetts Ag.,	Amherst, Mass.,	State,	85	1,100
1861	Massachusetts Inst. of Tech.,	Cambridge, Mass.,	Non-sectarian,	350	*3,505
1829	McCormick Theo. Sem.,	Chicago, Ill.,	Presbyterian,	18	165
1828	McKendree,	Lebanon, Ill.,	Methodist Episcopal,	18	176
1857	McMinnville,	McMinnville, Ore.,	Baptist,	17	245
1837	Mercer U.,	Macon, Ga.,	Baptist,	41	485
1899	Meredith,	Raleigh, N. C.,	Baptist,	40	516
1809	Miami,	Oxford, Ohio,	State,	83	2,274
1857	Michigan Ag.,	East Lansing, Mich.,	State,	177	1,758
1884	Michigan Col. of Mines,	Houghton, Mich.,	State,	24	260
1800	Middlebury,	Middlebury, Vermont,	Non-sectarian,	40	765
1887	Midland,	Fremont, Neb.,	United Lutheran,	28	718
1882	Milligan,	Milligan College, Tenn.,	Disciples,	12	104
1885	Mills,	Oakland, Calif.,	Non-sectarian,	65	450

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1867	Milton,	Milton, Wis.,	Seventh Day Baptists,	18	186
1851	Milwaukee-Downer,	Milwaukee, Wis.,	Non-sectarian,	37	350
1880	Mississippi Ag. and Mech.,	Agricultural College Miss.,	State,	140	1,600
1826	Mississippi,	Clinton, Miss.,	Baptist,	18	385
1885	Mississippi Indus. Inst.,	Columbus, Miss.,	State,	90	960
1889	Missouri Valley,	Marshall, Mo.,	Presbyterian,	13	358
1887	Missouri Wesleyan,	Cameron, Mo.,	Methodist,	22	382
1857	Monmouth,	Monmouth, Ill.,	United Presbyterian,	27	488
1893	Montana State,	Bozeman, Mont.,	State,	77	1,005
1742	Moravian C. & S.,	Bethlehem, Pa.,	Moravian,	24	225
1867	Morgan College and Acad.,	Baltimore, Md.,	Non-sectarian,	30	360
1894	Morningside,	Sioux City, Iowa,	Methodist,	42	1,003
1885	Morris Brown U.,	Atlanta, Ga.,	African Methodist Episcopal,	24	1,005
1887	Mount Angel,	Mount Angel, Ore.,	Roman Catholic,	22	256
1837	Mount Holyoke,	South Hadley, Mass.,	Non-sectarian,	125	787
1875	Mount St. Joseph's,	Baltimore, Md.,	Roman Catholic,	14	246
1808	Mount St. Mary's,	Emmitsburg, Md.,	Roman Catholic,	44	514
1858	Mount Union,	Alliance, Ohio,	Methodist,	30	604
1867	Muhlenburg,	Allentown, Pa.,	Lutheran,	18	248
1870	Municipal Univ. of Akron,	Akron, Ohio,	City,	42	575
1837	Muskingum,	New Concord, Ohio,	United Presbyterian,	60	1,180
1888	Nebraska Wes. U.,	University Place, Neb.,	Methodist,	47	1,281
1856	Newberry,	Newberry, S. C.,	Lutheran,	12	275
1866	New Hampshire Col. of Ag. & Mech. Arts,	Durham, N. H.,	State,	72	891
1873	New Orleans U.,	New Orleans, La.,	Methodist,	20	530
1904	New Rochelle,	New Rochelle, N. Y.,	Roman Catholic,	36	530
1830	New York U.,	New York, N. Y.,	Non-sectarian,	609	12,943
1856	Niagara U.,	Niagara Falls, N. Y.,	Roman Catholic,	23	350
1889	North Carolina St. Col. of Ag. & Eng.,	West Raleigh, N. C.,	State,	84	1,795
1892	North Carolina Col. for Women,	Greensboro, N. C.,	State,	95	1,451
1890	North Dakota Ag.,	Fargo, N. D.,	State,	66	1,165
1892	Northland,	Ashland, Wis.,	Congregational,	19	198
1865	Northwestern,	Watertown, Wis.,	Lutheran,	15	252
1855	Northwestern U.,	Evanston, Ill.,	Methodist,	553	*4,220
1861	Northwestern,	Naperville, Ill.,	Evangelical Ass'n,	30	529
1819	Norwich U.,	Northfield, Vt.,	Non-sectarian,	20	270
1833	Oberlin,	Oberlin, Ohio,	Non-sectarian,	129	1,695
1887	Occidental,	Los Angeles, Calif.,	Non-sectarian,	30	506
1877	Ogden,	Bowling Green, Ky.,	Non-sectarian,	5	125
1871	Ohio Northern U.,	Ada, Ohio,	Methodist Episcopal,	40	850
1870	Ohio State U.,	Columbus, Ohio,	State,	676	*7,521
1804	Ohio U.,	Athens, Ohio,	State,	98	3,382
1842	Ohio Wes. U.,	Delaware, Ohio,	Methodist,	96	1,585
1891	Okla. Ag. & Mech.,	Stillwater, Okla.,	State,	146	2,400
1885	Oregon Ag.,	Corvallis, Ore.,	State,	421	4,143
1865	Ottawa U.,	Ottawa, Kans.,	Baptist,	24	436
1847	Otterbein,	Westerville, Ohio,	United Brethren,	32	485
1886	Ouachita,	Arkadelphia, Ark.,	Baptist,	38	324
1830	Oxford,	Oxford, Ohio,	Non-sectarian,	22	223
1885	Pacific,	Newberg, Ore.,	Friends,	12	141
1854	Pacific U.,	Forest Grove, Ore.,	Congregational,	28	225
1875	Park,	Parkville, Mo.,	Presbyterian,	20	447
1875	Parsons,	Fairfield, Iowa,	Presbyterian,	23	449
1873	Penn,	Oskaloosa, Iowa,	Friends,	28	618
1832	Pennsylvania,	Gettysburg, Pa.	Lutheran,	35	518
1869	Penn. Col. for Women,	Pittsburgh, Pa.,	Non-sectarian,	23	203
1858	Pennsylvania Mil.,	Chester, Pa.,	Non-sectarian,	20	160
1855	Pennsylvania St.,	State College, Pa.,	State,	315	4,572
1887	Philander Smith,	Little Rock, Ark.,	Methodist,	23	409
1854	Polytechnic Inst.,	Brooklyn, N. Y.,	Non-sectarian,	50	1,287
1887	Pomona,	Claremont, Calif.,	Non-sectarian,	60	750
1887	Pratt Inst.,	Brooklyn, N. Y.,	Non-sectarian,	200	4,103
1880	Presbyterian Col. of S. C.,	Clinton, S. C.,	Presbyterian,	10	180
1746	Princeton U.,	Princeton, N. J.,	Non-sectarian,	213	1,967
1898	Principia,	St. Louis, Mo.,	Christian Science,	8	63
1868	Pritchett,	Glasgow, Mo.,	Non-sectarian,	8	79
1874	Purdue,	Lafayette, Ind.,	State,	241	3,113
1879	Radcliffe,	Cambridge, Mass.,	Non-sectarian,	133	654
1830	Randolph-Macon,	Ashland, Va.,	Methodist South,	24	186
1893	Randolph-Macon Women's,	Lynchburg, Va.,	Meth. Episcopal South,	49	618
1887	Redfield,	Redfield, S. D.,	Congregational,	9	60
1824	Rensselaer Poly. Inst.,	Troy, N. Y.,	Non-sectarian,	86	1,093
1892	Rhode Island State,	Kingston, R. I.,	State,	40	356
1912	Rice Inst.,	Houston, Tex.,	Non-sectarian,	56	735
1876	Rio Grande,	Rio Grande, Ohio,	Free Baptist,	12	455
1850	Ripon,	Ripon, Wis.,	Non-sectarian,	32	461
1853	Roanoke,	Salem, Va.,	Lutheran,	24	240
1885	Rochester Ath. and Mech. Inst.,	Rochester, N. Y.,	Private,	64	2,891
1850	Rochester Theo. Sem.,	Rochester, N. Y.,	Baptist,	10	64

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1847	Rockford for Women,	Rockford, Ill.,	Non-sectarian,	43	465
1857	Rock Hill,	Ellicott City, Md.,	Roman Catholic,	15	200
1885	Rollins,	Winter Park, Fla.,	Non-sectarian,	31	370
1883	Rose Poly. Inst.,	Terre Haute, Ind.,	Non-sectarian,	19	236
1916	Russell Sage,	Troy, N. Y.,	Non-sectarian,	27	300
1868	Rust,	Holly Springs, Miss.,	Methodist,	26	459
1766	Rutgers,	New Brunswick, N. J.,	Non-sectarian,	110	2,100
1888	Sacred Heart,	Denver, Col.,	Roman Catholic,	22	252
1899	St. Anslem's,	Manchester, N. H.,	Roman Catholic,	40	300
1858	St. Benedict's,	Atchison, Kans.,	Roman Catholic,	40	325
1892	St. Bernard,	St. Bernard, Ala.,	Roman Catholic,	30	190
1859	St. Bonaventura's,	Allegany, N. Y.,	Roman Catholic,	27	350
1848	St. Charles,	Cantonsville, Md.,	Roman Catholic,	16	220
1899	St. Elizabeth,	Convent, N. J.,	Roman Catholic,	32	173
1886	St. Ignatius,	Cleveland, Ohio,	Roman Catholic,	12	143
1784	St. John's,	Annapolis, Md.,	Non-sectarian,	16	237
1870	St. John's,	Brooklyn, N. Y.,	Roman Catholic,	40	1,000
1866	St. John's,	Washington, D. C.,	Roman Catholic,	20	352
1893	St. John's,	Winfield, Kans.,	Lutheran,	13	176
	St. John's Mil. Acad.,	Delafield, Wis.,	Episcopal,	26	500
1857	St. John's U.,	Collegeville, Minn.,	Roman Catholic,	60	500
1891	St. Joseph's,	Collegeville, Ind.,	Roman Catholic,	24	300
1852	St. Joseph's,	Philadelphia, Pa.,	Roman Catholic,	44	512
1858	St. Lawrence U.,	Canton, N. Y.,	Non-sectarian,	63	907
1818	St. Louis,	St. Louis, Mo.,	Roman Catholic,	235	2,618
1863	St. Mary's,	Oakland, Calif.,	Roman Catholic,	34	389
1848	St. Mary's,	St. Mary's, Kans.,	Roman Catholic,	40	475
1821	St. Mary's,	St. Mary's, Ky.,	Roman Catholic,	10	150
1857	St. Meinrad,	St. Meinrad, Ind.,	Roman Catholic,	15	196
1874	St. Olaf,	Northfield, Minn.,	Lutheran,	62	790
1878	St. Peter's,	Jersey City, N. J.,	Roman Catholic,	10	100
1860	St. Stephen's,	Annandale on Hudson, N. Y.,	Episcopal,	13	110
1868	St. Viator,	Kankakee, Ill.,	Roman Catholic,	32	520
1846	St. Vincent's C. & S.,	Beatty, Pa.,	Roman Catholic,	43	569
1842	St. Xavier,	Cincinnati, Ohio,	Roman Catholic,	86	648
1772	Salem,	Winston-Salem, N. C.,	Moravian,	54	679
1851	Santa Clara U.,	Santa Clara, Calif.,	Roman Catholic,	18	164
1856	Seton Hall,	South Orange, N. J.,	Roman Catholic,	20	403
1865	Shaw U.,	Raleigh, N. C.,	Baptist,	31	740
1877	Shorter,	Rome, Ga.,	Baptist,	24	275
1827	Shurtleff,	Alton, Ill.,	Baptist,	16	150
1899	Simmons,	Boston, Mass.,	Non-sectarian,	126	1,506
1860	Simpson,	Indianola, Iowa,	Methodist,	35	598
1872	Smith,	Northampton, Mass.,	Non-sectarian,	181	1,940
1886	S. Car. Col. for Women,	Rock Island, S. Car.,	State,	136	1,100
1885	South Dakota St. Sch. of Mines,	Rapid City, S. D.,	State,	14	147
1871	South Dakota State,	Brookings, S. D.,	State,	85	1,152
1885	Southwestern,	Winfield, Kans.,	Methodist Episcopal,	34	590
1830	Spring Hill,	Mobile, Ala.,	Roman Catholic,	32	343
1891	Stanford U.,	Stanford U., Calif.,	Non-sectarian,	334	2,333
1892	State College of Washington,	Pullman, Wash.,	State,	249	2,678
1847	State Univ. of Iowa,	Iowa City, Iowa,	State,	428	*4,594
1895	State Univ. of Montana,	Missoula, Mont.,	State,	75	1,442
1856	Stephens Junior,	Columbia, Mo.,	Baptist,	40	526
1870	Stevens Inst. of Tech.,	Hoboken, N. J.,	Non-sectarian,	53	862
1869	Straight,	New Orleans, La.,	Congregational,	43	600
1869	Susquehanna U.,	Selinsgrove, Pa.,	Lutheran,	23	300
1869	Swarthmore,	Swarthmore, Pa.,	Non-sectarian,	47	500
1871	Syracuse U.,	Syracuse, N. Y.,	Non-sectarian,	407	*4,670
1866	Tabor,	Tabor, Iowa,	Congregational,	14	85
1867	Talladega,	Talladega, Ala.,	American Missionary Assoc.,	41	600
1883	Tarkio,	Tarkio, Mo.,	United Presbyterian,	18	295
1848	Taylor U.,	Upland, Ind.,	Methodist,	18	250
1882	Teacher's Col. of Indianapolis,	Indianapolis, Ind.,	State,	45	800
1884	Temple U.,	Philadelphia, Pa.,	Partly State,	377	7,110
1873	Texas Christian U.,	Ft. Worth, Texas,	Disciples,	50	700
1870	Thiel,	Greenville, Pa.,	Lutheran,	16	282
1882	Toledo U.,	Toledo, Ohio,	City,	50	1,450
1869	Tougaloo,	Tougaloo, Miss.,	American Missionary Association,	24	400
1793	Transylvania,	Lexington, Ky.,	Non-sectarian,	27	268
1838	Trinity,	Durham, N. C.,	Methodist South,	39	814
1823	Trinity,	Hartford, Conn.,	Non-sectarian,	25	214
1900	Trinity,	Washington, D. C.,	Roman Catholic,	48	375
1869	Trinity U.,	Waxahachie, Tex.,	Presbyterian,	21	350
1852	Tufts,	Tufts College, Mass.,	Non-sectarian,	366	2,128
1834	Tulane U.,	New Orleans, La.,	Non-sectarian,	356	3,631
1794	Tusculum,	Greenville, Tenn.,	Non-sectarian,	25	250
1881	Tuskegee Inst.,	Tuskegee, Ala.,	Private,	238	2,860
1860	Union Christian,	Meron, Ind.,	Christian,	12	104
1887	Union,	Barbourville, Ky.,	Methodist,	14	250

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1795	Union,	Schenectady, N. Y.,	Non-sectarian,	50	935
1836	Union Theo. Sem.,	New York, N. Y.,	Non-sectarian,	32	317
1848	Union U.,	Jackson, Tenn.,	Baptist,	40	735
1802	U. S. Military Acad.,	West Point, N. Y.,	National,	144	917
1845	U. S. Naval Acad.,	Annapolis, Md.,	National,	221	2,253
1831	University of Alabama,	Tuscaloosa, Ala.,	State,	200	2,500
1891	University of Arizona,	Tucson, Ariz.,	State,	95	1,732
1871	University of Arkansas,	Fayetteville, Ark.,	State,	85	1,600
1846	University of Buffalo,	Buffalo, N. Y.,	Non-sectarian,	260	1,509
1869	University of California,(c)	Berkeley, Calif.,	State,	1,127	*11,505
1867	University of Chattanooga	Chattanooga, Tenn.,	Methodist Episcopal,	27	500
1892	University of Chicago, (d)	Chicago, Ill.,	Non-sectarian,	377	*4,815
1870	University of Cincinnati,	Cincinnati, Ohio,	City,	370	3,864
1877	University of Colorado,	Boulder, Col.,	State,	225	3,569
1833	University of Delaware,	Newark, Del.,	State,	53	648
1864	University of Denver,	Denver, Col.,	Methodist,	190	2,780
1879	University of Detroit,	Detroit, Mich.,	Roman Catholic,	105	1,904
1905	University of Florida,	Gainesville, Fla.,	State,	65	1,592
1785	University of Georgia,	Athens, Ga.,	State,	90	1,281
1908	University of Hawaii,	Honolulu, Hawaii,	Territorial,	29	432
1892	University of Idaho,	Moscow, Id.,	State,	115	1,292
1867	University of Illinois, (e)	Urbana, Ill.,	State,	973	*9,084
1866	University of Kansas,	Lawrence, Kans.,	State,	265	*3,649
1865	University of Kentucky,	Lexington, Ky.,	State,	150	2,326
1865	University of Maine,	Orono, Maine,	State,	117	1,466
1784	University of Maryland,	College Park, Md.,	State,	300	1,833
1837	University of Michigan, (f)	Ann Arbor, Mich.,	State,	503	*9,227
1868	Univ. of Minnesota, (g)	Minneapolis, Minn.,	State,	950	*8,024
1848	University of Mississippi,	University, Miss.,	Non-sectarian,	38	630
1839	University of Missouri,	Columbia, Mo.,	State,	288	*3,959
1869	University of Nebraska,	Lincoln, Neb.,	State,	275	*4,670
1886	University of Nevada,	Reno, Nev.,	State,	51	671
1892	University of New Mexico,	Albuquerque, N. M.,	State,	35	559
1789	Univ. of North Carolina,	Chapel Hill, N. C.,	State,	98	2,514
1883	Univ. of North Dakota,	Grand Forks, N. D.,	State,	111	1,608
1849	Univ. of Notre Dame,	Notre Dame, Ind.,	Roman Catholic,	135	2,100
1892	University of Oklahoma,	Norman, Okla.,	State,	173	5,000
1878	University of Oregon,	Eugene, Ore.,	State,	123	2,058
1740	University of Pennsylvania, (h)	Philadelphia, Pa.,	Non-sectarian,	964	*7,445
1787	University of Pittsburgh,	Pittsburgh, Pa.,	Non-sectarian,	579	*3,182
1903	University of Porto Rico,	Rio Piedras, P. R.,		55	1,973
1909	University of Redlands,	Redlands, Calif.,	Baptist,	21	351
1832	University of Richmond,	Richmond, Va.,	Baptist,	41	725
1850	University of Rochester,	Rochester, N. Y.,	Non-sectarian,	58	2,278
1879	Univ. of Southern Calif.,	Los Angeles, Calif.,	Methodist Episcopal,	277	4,859
1896	Univ. of Southern Minn.,	Austin, Minn.,	Private,	28	800
1805	Univ. of South Carolina,	Columbia, S. C.,	State,	39	703
1882	Univ. of South Dakota,	Vermilion, S. D.,	State,	74	972
1868	University of the South,	Sewanee, Tenn.,	Protestant Episcopal,	28	243
1794	University of Tennessee,	Knoxville, Tenn.,	State,	159	1,521
1883	University of Texas,	Austin, Texas,	State,	220	*4,463
1850	University of Utah,	Salt Lake City, Utah,	State,	154	3,486
1895	University of Tulsa,	Tulsa, Okla.,	Presbyterian,	32	522
1791	University of Vermont,	Burlington, Vt.,	State,	150	1,409
1819	University of Virginia,	Charlottesville, Va.,	State,	112	3,537
1862	University of Washington,	Seattle, Wash.,	State,	250	*4,521
1848	University of Wisconsin,(i)	Madison, Wis.,	State,	991	*7,196
1886	University of Wyoming,	Laramie, Wyo.,	State,	60	1,517
1858	Upper Iowa U.,	Fayette, Iowa,	Methodist,	24	415
1869	Ursinus,	Collegeville, Pa.,	Reformed,	20	252
1890	Utah Ag.,	Logan, Utah,	State,	70	1,574
1873	Valparaiso,	Valparaiso, Ind.,	Non-sectarian,	115	3,250
1873	Vanderbilt,	Nashville, Tenn.,	Non-sectarian,	165	1,200
1861	Vassar,	Poughkeepsie, N. Y.,	Non-sectarian,	144	1,089
1842	Villanova,	Villanova, Pa.,	Roman Catholic,	35	700
1884	Virginia Intermont,	Bristol, Va.,	Baptist,	21	275
1839	Virginia Military Inst.,	Lexington, Va.,	State,	45	597
1872	Virginia Poly. Inst.,	Blackburg, Va.,	State,	60	803
1805	Virginia Union U.,	Richmond, Va.,	Baptist,	18	463
1832	Wabash,	Crawfordsville, Ind.,	Non-sectarian,	26	381
1834	Wake Forest,	Wake Forest, N. C.,	Baptist,	35	577
1868	Wartburg,	Clinton, Iowa,	Lutheran,	10	80
1865	Washburn,	Topeka, Kans.,	Non-sectarian,	50	854
1802	Washington & Jefferson,	Washington, Pa.,	Non-sectarian,	21	519
1749	Washington & Lee U.,	Lexington, Va.,	Non-sectarian,	42	725
1853	Washington U.,	St. Louis, Mo.,	Non-sectarian,	295	3,833
1782	Washington,	Chestertown, Md.,	Non-sectarian,	12	90
1850	Waynesburg,	Waynesburg, Pa.,	Presbyterian,	15	300
1875	Wellesley,	Wellesley, Mass.,	Non-sectarian,	136	1,551
1868	Wells,	Aurora, N. Y.,	Non-sectarian,	33	231
1836	Wesleyan,	Macon, Ga.,	Methodist Episcopal South,	36	561
1831	Wesleyan U.,	Middletown, Conn.,	Methodist,	54	533
1854	Western Col. for Women,	Oxford, Ohio,	Non-sectarian,	35	320

COLLEGES AND UNIVERSITIES OF THE UNITED STATES—Con.

Founded	Name of Institution	Location	Control	No. of Instructors	No. of Students
1867	Western Maryland,	Westminster, Md.,	Methodist,	26	415
1826	Western Reserve U.,	Cleveland, Ohio,	Non-sectarian,	415	5,373
1849	Westminster,	Fulton, Mo.,	Presbyterian,	12	154
1852	Westminster,	New Wilmington, Pa.,	United Presbyterian,	23	300
1867	West Virginia U.,	Morgantown, West Va.,	State,	165	2,248
1890	West Virginia Wesleyan,	Buckhannon, West Va.,	Methodist Episcopal,	32	486
1834	Wheaton,	Norton, Mass.,	Non-sectarian,	31	325
1860	Wheaton,	Wheaton, Ill.,	Non-sectarian,	28	376
1882	Whitman,	Walla Walla, Wash.,	Non-sectarian,	41	654
1901	Whittier,	Whittier, Calif.,	Friends,	19	131
1856	Wilberforce U.,	Wilberforce, Ohio	African Methodist Episcopal,	52	1,340
1873	Wiley U.,	Marshall, Tex.,	Methodist,	30	731
1844	Willamette U.,	Salem, Ore.,	Methodist,	34	496
1693	William and Mary	Williamsburg, Va.,	State,	32	729
1849	William Jewell,	Liberty, Mo.,	Baptist,	20	357
1793	Williams,	Williamstown, Mass.,	Non-sectarian,	54	576
1908	William Smith,	Geneva, N. Y.,	Non-sectarian,	27	95
1870	Wilmington,	Wilmington, Ohio,	Friends,	19	335
1870	Wilson,	Chambersburg, Pa.,	Presbyterian,	31	390
1845	Wittenberg,	Springfield, Ohio,	Lutheran,	32	1,068
1854	Wofford,	Spartanburg, S. C.,	Methodist South,	19	343
1910	Woman's Col. of Alabama,	Montgomery, Ala.,	Methodist,	35	375
1914	Women's Col. of Delaware,	Newark, Del.,	State,	30	329
1865	Worcester Poly. Inst.,	Worcester, Mass.,	Non-sectarian,	53	571
1701	Yale U.,	New Haven, Conn.,	Non-sectarian,	735	*3,710
1881	Yankton,	Yankton, S. D.,	Non-sectarian,	28	427
1890	York,	York, Neb.,	United Brethren,	22	625

* Regular students full-time.

(a) Columbia. Total registration, including 11,809 in summer session and 6845 in extension courses, 26,006. (b) Cornell. Total enrollment including summer session and part time students, 8377. (c) California. Total enrollment including summer school, 17,909; including students of extension courses, 40,054. (d) Chicago. Grand total inclusive of summer school enrollment, 12,576. (e) Illinois. Grand total, including summer session and part time students, 10,198. (f) Michigan. Total enrollment inclusive of summer session and part time course, 10,527. (g) Minnesota. Grand total resident students inclusive of summer session, 10,711. (h) Pennsylvania. Total enrollment, inclusive of resident students in summer session or part time courses, 14,030. (i) Wisconsin. Summer session, enrollment, 4847; grand total resident students, 10,507. In case of many enrollments not marked with a * the total includes students of summer session, extension, and other part time courses

COLLEGES AND UNIVERSITIES OF CANADA

Founded	Name of Institution	Location	Control	No. of Instructors	No. of Students
1838	Acadia University,	Wolfville, N. S.,	Baptist,	23	330
1888	Agricultural College,	Truro, N. S.,	Provincial,	13	392
1906	Alberta, University of,	Edmonton, Alberta,	Provincial,	84	1,106
1843	Bishop's College, Univ. of,	Lennoxville, Que.,	Anglican,	8	71
1899	Brandon College,	Brandon, Man.,	Baptist,	20	419
1907	British Columbia, Univ.,	Vancouver, B. C.,	Provincial,	64	1,530
1818	Dalhousie University,	Halifax, N. S.,	Non-sectarian,	86	622
1913	Edmonton Jesuit College,	Edmonton, Alberta,	Roman Catholic,	17	186
1789	King's College, Univ. of,	Windsor, N. S.,	Anglican,	18	129
1843	Knox College,	Toronto, Ont.,	Presbyterian,	17	114
1852	Laval University,	Quebec, Que.,	Roman Catholic,	293	1,263
1903	Manitoba Ag. College,	Winnipeg, Man.,	Provincial,	38	1,122
1877	Manitoba, Univ. of,	Winnipeg, Man.,	Provincial,	184	2,013
1907	MacDonald College,	Ste. Anne de Bellevue, Que.,	Non-sectarian,	57	722
1821	McGill University,	Montreal, Que.,	Non-sectarian,	315	3,319
1857	McMaster University,	Toronto, Ont.,	Baptist,	22	281
1878	Montreal, Univ. of,	Montreal, Que.,	Roman Catholic,	821	5,495
1858	Mount Allison University,	Sackville, N. B.,	Methodist,	28	246
1800	New Brunswick, Univ. of,	Fredericton, N. B.,	Provincial,	11	177
1874	Ontario Ag. College,	Guelph, Ont.,	Provincial,	60	2,067
1849	Ottawa, Univ. of,	Ottawa, Ont.,	Roman Catholic,	73	800
1836	Prince of Wales College,	Charlottetown, P. E. I.,	Provincial,	10	232
1841	Queen's University,	Kingston, Ont.,	Non-sectarian,	159	2,578
1855	St. Dunstan's College,	Charlottetown, P. E. I.,	Roman Catholic,	12	290
1855	St. Francis Xavier, Univ.	Antigonish, N. S.,	Roman Catholic,	20	267
1864	St. Joseph's College, Univ.	St. Joseph, N. B.,	Roman Catholic,	40	389
1852	St. Michael's College,	Toronto, Ont.,	Roman Catholic,	26	200
1907	Saskatchewan, Univ. of,	Saskatoon, Sask.,	Provincial,	63	1,637
1872	Stanstead Wesleyan Col.,	Stanstead, Que.,	Methodist Episcopal,	22	410
1827	Toronto, Univ. of,	Toronto, Ont.,	Provincial,	572	5,237
1851	Trinity College, Univ. of,	Toronto, Ont.,	Anglican,	23	166
1836	Victoria University,	Toronto, Ont.,	Methodist Episcopal,	32	575
1877	Wesley College,	Winnipeg, Man.,	Methodist Episcopal,	14	300
1878	Western University,	London, Ont.,	Non-sectarian,	59	255

Collegiants. A branch of the Dutch Arminians, so named because they called their assemblies for public worship "colleges." This religious sect owed its origin to three brothers, John, Adrian, and Gilbert van der Codde, by whom it was established in 1619 at Rijnsberg, near Leyden. The collegiants rejected all creeds, had no ministry, and no regular form of church government. They adopted baptism by immersion, but their communion was free to all. In many points they resembled the Plymouth Brethren of the present day. The sect became extinct during the 18th Century.

Color is the name given to distinguish the various sensations that light rays of various rates of vibration give to the eye. As is the case with many of the words that denote our sensations, the word *color* is applied also to the properties of bodies that cause them to emit the light that thus affects our senses. The molecular constitution of a body determines the character and number of the light vibrations it returns to the eye. This gives to each body its own characteristic color; hence the term color is used to denote that quality in respect of which bodies present a different appearance to the eye independently of their form.

Ordinary white light (the light which comes from an incandescent solid or liquid), when transmitted through triangular prisms of glass or other media differing in dispersive power from the atmosphere, is shown to consist of a number of colored lights, which, meeting the eye, together produce the sensation of white light. The colors thus shown are usually said to be seven—red, orange, yellow, green, blue, indigo, violet—although in reality there is an enormous, if not an infinite, number of perfectly distinct colors in light. The seven colors are frequently called the primary colors, and other tints and shades are producible by mixing them; but in a stricter sense the primary colors are three in number, namely, red, green, and violet (or blue). These three colors or kinds of light cannot be resolved into any other. In the scientific sense of the word white and black are not considered colors, a white body reflecting and a black body absorbing all the rays of light without separating them, whereas the colors proper are due to separation of the rays of light by partial absorption and reflection or by refraction. If a body absorbs every other kind of light and reflects or transmits red light only, it will appear of a red color; if it absorbs every kind except blue rays, it will appear blue, and so on. If more than one kind of light be transmitted or reflected, the object will appear of a color compounded of these different rays of light. The colors of metals are due to what is called "surface absorption." When white light strikes a piece of gold yellow light is reflected by the surface. Yet when hammered exceedingly thin, gold transmits greenish-blue light. In case of surface color, the colors by reflection and transmission are different.

In art the term color is applied to that combination or modification of tints which produces a particular and desired effect in painting. The colors of the spectrum have to be distinguished from colors used in reference to *pigments*. The pigments red, blue, and yellow, regarded in the arts as the primary colors, produce effects, when mixed, very different from those produced by admixture of the corresponding spectrum colors. These three pigment colors form other colors thus: red and yellow make orange, yellow and blue make green, and red and blue make purple; but red, blue, and yellow cannot be produced by any combination of the other colors. —*Local colors* are those which are natural to a particular object in a picture, and by which it is distinguished from other objects.—*Neutral colors*, those in which the hue is broken by partaking of the reflected colors of the objects which surround them.—*Positive colors*, those which are unbroken by such accidents as affect neutral objects.—*Complementary colors*, colors which together make white; thus, any of the primary colors is complementary to the other two.—*Subjective* or *accidental colors*, the imaginary complementary colors seen after fixing the eye for a short time on a bright-colored object, and then turning it to a white or light-colored surface.

In the three-color process used in various mechanic arts a separate photographic negative of the object is made for each of the primary colors. For printing, separate plates are made from these negatives and impressions from each are superimposed in inks approximating to the primary shades. Color photographs may be exhibited by projecting light through the three primary negatives properly superimposed. By an improved process, however, in exhibiting colored motion pictures, distinct images in each of the three primary colors succeed one another so rapidly upon the screen as to coalesce upon the retina and thus produce a wonderfully exact impression of the natural colors.

Color-blindness. Inability to distinguish one color from another, and, in some rare cases, inability to discern any color, but only black and white or light and shade. The colors most usually confounded are red and brown with green, purple and green with blue, and red with black. Color-blindness is of two kinds, congenital and acquired. When acquired, it is believed to be an affection of the optic nerve and retina. This may be caused by disease, or accident, and also by the excessive use of tobacco, alcohol, or other drugs. Congenital color-blindness is often hereditary and nearly always affects both eyes. In most cases the person affected is unable to distinguish properly one or two of the fundamental colors, red, green, and blue.

In many countries strict laws have been enacted to prevent color-blind persons from occupying positions on railways and ships where their defective vision may endanger the lives of others. Sweden, in 1877, took the lead in making such laws, and was followed by the United States, Great Britain, Germany, France, and Austria.

Combustion. The operation of fire on inflammable substances, or the union of an inflammable substance with oxygen or some other supporter of combustion, attended with heat and in most instances with light. In consequence of the combination of the carbon in fuel with the

oxygen of the air being the universal method of getting heat and light, and as when the action takes place the fuel is said to burn or undergo combustion, the latter term has been extended to those cases in which other bodies than carbon — for example, phosphorus, sulphur, metals, etc.— burn in the air or in other substances than air — for example, chlorine. Though the action between the gas and the more solid material, as coal, wood, charcoal, of whose combination combustion is the result, is mutual, the one having as much to do with the process as the other, yet the former, as oxygen, chlorine, iodine, and the compounds which they form with each other and with nitrogen, have received the name of supporters of combustion, while to the latter the term combustibles has been assigned.

Spontaneous Combustion is the ignition of a body by the internal development of heat without the application of fire. It not unfrequently takes place among heaps of rags, wool, and cotton when lubricated with oil; hay and straw when damp or moistened with water; and coal in the bunkers of vessels. In the first case the oil rapidly combines with the oxygen of the air, this being accompanied with great heat; in the second case the heat is produced by a kind of fermentation; in the third by the pyrites of the coal rapidly absorbing and combining with the oxygen of the air. The term is also applied to the extraordinary alleged phenomenon of the human body being reduced to ashes without the direct application of fire. It is said to have occurred in the aged and persons that were fat and hard drinkers; but most chemists reject the theory and altogether discredit it.

Comet. A celestial body presenting a nebulous aspect, and traveling under the sun's attraction. Many of these bodies are distinguished by a remarkable tail-like appendage. The greater number of those hitherto known have revolved round the sun on a path whose observed portion belonged to an exceedingly elongated ellipse, or was even parabolic or hyperbolic. A few, however, travel in closed orbits around the sun in known periods. Among the most remarkable comets in recent times were those of 1780, 1807, 1811, 1815, 1819, 1825, 1843, 1847, 1858, 1861, 1874, and 1910 (Halley's). We know so little respecting the physical conditions of comets that it would be hazardous to speculate at present concerning their real nature. A theory of great ingenuity, and (what is novel in this branch of speculation) founded on physical experiments which really seem to have some bearing on the subject, were put forward by Professor Tyndall, who is disposed to regard the tails of comets as resulting from the formation of a species of actinic cloud by the action of the solar rays, *after* their character has been altered during their passage through the comet's head. At present, however, it is difficult to say whether such a theory is well or ill founded.

Conchology. The science of shells, that department of zoölogy which treats of the nature, formation, and classification of the shells with which the bodies of many mollusca are protected; or the word may be used also to include a knowledge of the animals themselves, in which case it is equivalent to *malacology*. In systems of conchology shells are usually divided into three orders: Univalves, Bivalves, and Multivalves, according to the number of pieces of which they are composed.

Conductor. A body capable of transmitting the electric fluid. It is called also a *non-electric;* for, unless insulated, it will not exhibit electrical excitement, the electricity being carried off along it as fast as it is communicated to or excited upon it. The metals are the best conductors; resinous substances are very bad ones. Bodies incapable of transmitting electricity are called *non-conductors;* and, because electricity may be communicated to or excited upon them, without artificial insulation, they are termed *electrics*. There is no body a perfect conductor, or a perfect non-conductor. The non-conducting power depends very much on the extent of non-conducting surface. In frictional electricity, the best conductors are the metals, as before stated; after which come graphite, sea-, spring-, and rain-water. Ice is a worse conductor than fluid or water. Alcohol, ether, paper, dry wood, and straw, are also weak conductors. Shellac, wax, amber, and sulphur become conductors when fused; and glass at a red heat conducts readily. A conductor is said to be *insulated* when it rests upon non-conducting supports. A lightning-conductor is a pointed metallic rod fixed to the upper parts of buildings to secure them from the effects of lightning. It is connected with the earth, or, what is better, the nearest water, by a good conductor, which is sufficiently thick not to be melted in transmitting the electricity; and which, where attached to the wall, is insulated by non-conductors, so that the electricity may not be diverted to the building, instead of passing harmlessly away. This useful instrument was invented by Franklin in 1755.

Congregationalists. A large and influential Christian sect, called also *Independents* in England, because they hold that every single congregation of Christians, when properly constituted with deacons and a pastor, forms an independent body, competent to its own direction and government, without interference from any other church, or any presbyteries, bishops, etc. They therefore hold that each congregation has inherent in itself power to fix its own tenets and form of religious worship, and to exercise ecclesiastical government. They hold a Christian Church to be a congregation of true believers; *i. e.*, persons who both openly profess their faith in the essential doctrines of the Gospel, and evince the earnestness of their belief by a corresponding change of disposition and demeanor. The doctrines of the Congregational Churches are almost identical with those embodied in the Articles of the Presbyterian Church, interpreted according to their Calvinistic meaning. They disavow all subscription to creeds, confessions, or articles of faith; nevertheless, they are distinguished by a singular degree of uniformity in faith and practice. As to the origin of Independency, it is probable that some conventicles were secretly established in England soon after the accession of Elizabeth; but the first prominent advocate of Congregational principles appeared in 1580, in the person

of Robert Brown. The Plymouth and Massachusetts Bay settlements in this country were founded by Congregational pilgrims in 1620 and 1628; and others, a few years afterwards, in Massachusetts and Connecticut. Congregationalism gave New England the distinctive character it bears in history, and, in return, the development of the New England Churches, and the teachings of their pastors, gave Congregationalism substantially its form. "From the earliest settlement of New England, there was a definite but peculiar relation between the Churches and the State. It was neither that in which the State rules the Church, nor that in which the Church rules the State, but rather a peculiar blending of the two. Townships were incorporated with a view to ability to maintain a settled ministry, and to the convenience of the people in attending public worship. Provision was made by law for the support of pastors, and for all necessary expenses. The choice of a pastor belonged to the Church." Throughout the whole of the early history of New England, the affairs and discussions of Church and State were blended in what would now seem an extremely curious manner. Though the doctrine of Congregationalism is, that, according to Scripture, every Church is confined to the limits of a single congregation, "the fellowship of the Churches has always been maintained, and all 'matters of common concernment' have been decided by the common consent of the whole body, and sometimes embodied in the pronounced opinions of general bodies convened for the special occasion. Denying the authority of any standing judicatory, Congregationalists recognize the necessity and desirableness of occasional synods for deliberation and advice on great public interests." Until within recent times the Congregational Churches had not made rapid growth west of the Hudson River; but, latterly, movements to spread the sect in all parts of the United States have been pushed with great energy, and the Churches have increased rapidly.

Constellations are the groups into which astronomers have divided the fixed stars, and which have received names for the convenience of description and reference. It is plain that the union of several stars into a constellation, to which the name of some animal, person, or inanimate object is given, must be entirely arbitrary, since the several points (the stars) may be united in a hundred different ways, just as imagination directs. The grouping adopted by the Egyptians was accordingly modified by the Greeks, though they retained the Ram, the Bull, the Dog, etc.; and the Greek constellations were again modified by the Romans, and again by the Arabians. At various times, also, Christianity has endeavored to supplant the pagan system, the Venerable Bede having given the names of the twelve apostles to the signs of the zodiac, and Judas Schillerius having, in 1627, applied Scripture names to all the constellations. Weigelius, a professor of Jena, even grouped the stars upon a heraldic basis, introducing the arms of all the princes of Europe among the constellations. The old constellations have, however, been for the most part retained. Ptolemy enumerated, in the "Syntaxis," forty-eight constellations, still called the *Ptolemæan*. They are the following: (1) The twelve signs of the zodiac. (2) Twenty-one constellations found in the northern hemisphere — the Great Bear (*Ursa Major*), the Little Bear (*Ursa Minor*), Perseus, the Dragon, Cepheus, Cassiopeia, Andromeda, Pėgasus, Equuleus (Horse's Head), the Triangle, the Charioteer (*Aurīga*), Boötes, the Northern Crown (*Corona Boreālis*), Ophiuchus, the Serpent (*Serpentarius*), Hercules, the Arrow (*Sagitta*), the Lyre, the Swan (*Cygnus*), the Dolphin, the Eagle (*Aquīla*). (3) Fifteen constellations in the southern hemisphere — Orion, the Whale (*Cetus*), Eridanus, the Hare (*Lepus*), the Great Dog (*Canis Major*), the Little Dog (*Canis Minor*), Hydra, the Cup (*Crater*), the Crow (*Corvus*), the Centaur, the Wolf (*Lupus*), the Altar (*Ara*), the Southern Fish (*Piscis Austrālis*), the Argo, the Southern Crown (*Corōna Austrālis*). Others were subsequently added, this being especially rendered necessary by the increased navigation of the southern hemisphere, and now the different groups of stars have come to be associated with all sorts of animals and objects, including the Camelopard, the Fly, the Air-pump, the Compasses, etc.

Continuity, Law of. The principle that nothing passes from one state to another without passing through all intermediate states. From this law, for instance, if it be known that at two instants of time a body had a temperature of 20°, and at another a temperature of 40°, then there must have been an instant between these at which the temperature was 30°. If a body, at two different times, had velocities of twelve feet and twenty feet per second, respectively, we may conclude, from the law of continuity, that between these times it had all velocities between twelve feet and twenty feet. The principle is of considerable use in investigations on motion and physical change; it was distinctly laid down by Galileo, who ascribed it to Plato; but Leibnitz was the first to apply it extensively to test physical theories. He established its truth by the method of *reductio ad absurdum*. If a change were to happen without the lapse of time, the thing changed must be in two different conditions at the same instant, which is obviously impossible.

Contractile Force or **Contractility.** That property or power inherent in certain elastic bodies, on account of which, after having been extended, they reduce themselves again to their former dimensions, if permitted to do so. It has been calculated from Joule's data that the force exerted by heat in expanding a pound of iron between 0° and 100° during which it increases about $\frac{1}{2\,8\,0}$ of its bulk, is equal to 16,000 foot pounds; that is, it could raise a weight of seven tons through a height of one foot. An application of this contractile force is seen in the mode of securing the tires on wheels. The tire being made red-hot, and thus considerably expanded, is placed on the circumference of the wheel and then cooled. The tire, when cold, embraces the wheel with such force as not only to secure itself on the rim, but also to press home the joints of the spokes into the felloes and nave.

Convection. When a liquid is heated from above, the temperature of the mass rises with extreme slowness, because liquids possess but little conducting power for heat; thus water may be boiled on ice, although separated from it by a very thin stratum of water. But if the liquid be heated from below, we notice at once that currents of liquid ascend from the bottom to the top of the vessel, and the liquid acquires a uniform temperature. This transport of heat by masses of matter is known as Convection. The layers of a liquid or gas which are nearest to the source of heat are expanded, and thus become specifically lighter than surrounding portions, consequently they rise; while colder, and consequently heavier, portions descend, are heated in their turn, and then ascend to make way for other colder portions. Thus, however badly a liquid or gas conducts heat, it can rapidly acquire a uniform temperature by the convection of heat; and convection takes place in gases far more readily than in fluids, because for equal increments of heat they expand to a greater extent than liquids.

Cooper Union or Cooper Institute. An institute founded in New York City in 1857, by Peter Cooper. Its object is to provide free schools of art and science, and free reading rooms and library for the working classes. There are lecture courses, a museum, an art gallery, and a library of 31,000 volumes, with a reading room containing current numbers of nearly 500 magazines and newspapers. The institute was built at a cost of $630,000 and was endowed by Mr. Cooper with $300,000. It has received additional gifts from time to time from Edward Cooper and Abram S. Hewitt, and in 1899 Andrew Carnegie gave $300,000 for the founding of a day school of mechanical arts.

Correlation of the Physical Forces. The principle that any one of the various forms of physical force may be converted into one or more of the other forms. Thus, heat may mediately or immediately produce electricity, electricity may produce heat, and so of the rest, each merging itself as the force it produces becomes developed; and that the same must hold good of other forces, it being an irresistible inference from observed phenomena that a force cannot originate otherwise than by devolution from pre-existing force or forces. This principle is also called *Transmutation of Energy.*

Cosmogony. A theory of the origin or formation of the universe. Such theories may be comprehended under three classes: (1) The first represents the world as eternal, in form as well as substance. (2) The matter of the world is eternal, but not its form. (3) The matter and form of the universe is ascribed to the direct agency of a spiritual cause; the world had a beginning, and shall have an end. Aristotle appears to have embraced the first theory; but the theory which considers the *matter* of the universe eternal, but not its *form*, was the prevailing one among the ancients, who, starting from the principle that nothing could be made out of nothing, could not admit the creation of matter, yet did not believe that the world had been always in its present state. The prior state of the world subject to a constant succession of uncertain movements which chance afterwards made regular, they called *chaos.* The Phenicians, Babylonians, and also Egyptians, seem to have adhered to this theory. One form of this theory is the atomic theory, as taught by Leucippus, Epicurus, and Lucretius. According to it atoms or indivisible particles existed from eternity, moving at hazard, and producing, by their constant meeting, a variety of substances. After having given rise to an immense variety of combinations they produced the present organization of bodies. The third theory of cosmogony makes God, or some deity, the Creator of the world out of nothing. This is an ancient and widely-spread theory, and is that taught in the book of Genesis. Anaxagoras was the first among the Greeks who taught that God created the universe from nothing. The Romans generally adopted this theory, notwithstanding the efforts of Lucretius to establish the doctrine of Epicurus.

Councils of the Church. General councils, called also œcumenical or universal, are summoned by the Pope of Rome, and are designed to settle questions affecting the Universal Church. The Roman Catholic Church recognizes twenty-one general councils; the Greek Church, the first seven of these, besides that of Jerusalem; and the Protestant Churches generally admit the full authority of none of them, and reckon as œcumenical only the first six. The following are the most notable of the councils of the Church of Rome:

A. D.
50. Of the Apostles at Jerusalem.
314. Of the Western Bishops at Arles, in France, to suppress the Donatists; three fathers of the English Church went over to attend it.
325. The first Œcumenical or General Nicene, held at Nice, Constantine the Great presided; Arius and Eusebius condemned for heresy. This council composed the Nicene Creed.
335. At Tyre, when the doctrine of Athanasius was canvassed.
337. The first held at Constantinople, when the Arian heresy gained ground.
342. At Rome, concerning Athanasius, which lasted eighteen months.
347. At Sardi; 370 bishops attended.
359. Of Rimini; 400 bishops attended, and Constantine obliged them to sign a new confession of faith.
381. The second General at Constantinople; 350 bishops attended and Pope Damasius presided.
431. The third at Ephesus, when Pope Celestine presided.
451. Fourth at Chalcedon; the Emperor Marcian and his Empress attended.
553. The fifth at Constantinople, when Pope Vigilius presided.
650. The sixth at Constantinople, when Pope Agatho presided.
715. Authority of the six general councils reëstablished by Theodosius.
787. The second Nicene Council, seventh General; 350 bishops attended.
869. Of Constantinople, eighth General; the Emperor Basil attended.
1122. The first Lateran, the ninth General; the right of investitures settled by treaty between Pope Calixius II. and the Emperor Henry V.
1139. The second Lateran, tenth General, Innocent II. presided; the preservation of the temporal ties of ecclesiastics, the principal subject which occasioned the attendance of 1,000 fathers of the Church.
1179. The third Lateran, eleventh General; held against schismatics.
1215. Fourth Lateran, twelfth General; 400 bishops and 1,000 abbots attended; Innocent III. presided.

A. D.
1245. Of Lyons, the thirteenth General, under Pope Innocent IV.
1274. Of Lyons, the fourteenth General, under Gregory X.
1311. Of Vienne in Dauphine, the fifteenth General; Clement V. presided and the kings of France and Arragon attended. The order of the Knights Templar suppressed.
1409. Of Pisa, the sixteenth General; Gregory XII. and Benedict XIII. deposed, and Alexander elected.
1414. Of Constance, the seventeenth General; Martin V. is elected pope; and John Huss and Jerome of Prague condemned to be burnt.
1431. Of Basil, the eighteenth General.
The fifth Lateran, the nineteenth General, begun by Julius II.
1512. Continued under Leo X., for the suppression of the Pragmatic sanction of France against the Council of Pisa, etc.
1545. Of Trent, the twentieth Œcumenical, as regarding the affairs of all the Christian world; it was held to condemn the doctrines of the reformers, Luther, Zuinglius, and Calvin.
1870. Of Rome, the last Œcumenical which adopted the dogma of Papal infallibility.

Creed. A summary of belief, from the Latin *credo* (I believe), with which the Apostles' and Nicene Creeds begin. These two creeds, together with the Athanasian Creed, are the most ancient authoritative Christian creeds, though numerous ancient formularies of faith are preserved in the writings of the early fathers. The Nicene Creed was set forth by the Council of Nicea in 325, and is closely similar in wording to ancient creeds of Oriental Churches, and specially founded upon the baptismal creed of the Church of Cæsarea in Palestine. The Apostles' Creed was originally a baptismal confession, and not a summary of apostolic teaching.

Dew. The moisture which rises into the atmosphere during the day, and is afterwards deposited on the earth in gentle drops during the night. The air, when heated during the day, is capable of holding a larger quantity of water in solution as vapor, than when cooled during the night, the low temperature of which causes some of the water to separate. The separated particles, uniting, form drops of dew. When the night is cloudy, the surfaces on which the dew would be deposited are not sufficiently cooled down for the purpose, since the clouds give back some of the heat which passed off by radiation.

Digestion is that process in the animal body by which the aliments are so acted upon that the nutritive parts are prepared to enter the circulation, and separated from those which cannot afford nourishment to the body. The organs effecting this process are called the *digestive* organs, and consist of the stomach, the great and small intestines, etc., the liver, and pancreas. When the aliments, after being properly prepared and mixed with saliva by mastication, have reached the stomach, they are intimately united with a liquid substance called the *gastric juice*, by the motion of the stomach. By this motion the aliments are mechanically separated into their smallest parts, penetrated by the gastric juice, and transformed into a uniform pulpy or fluid mass. The gastric juice acts upon the albuminous parts of the food, converting them into peptones, which can pass through organic membranes and thus enters the blood. This action is aided by the warmth of the stomach. The pulpy mass called *chyme* proceeds from the stomach, through the pylorus, into that part of the intestinal canal called the small intestine, where it is mixed with the pancreatic juice, bile, and intestinal juice. The pancreatic juice converts starch into sugar, albumins into peptones, and emulsionizes fats, so that all these kinds of food are rendered capable of absorption. The process is aided by the intestinal juice. The bile also acts upon fats, and thus the food is formed into the *chyle*, which is absorbed into the system by the capillary vessels called *lacteals*, while the non-nutritious matters pass down the intestinal canal and are carried off.

Dissenter. One who secedes from, or is opposed to, the service and worship prescribed by any established or state Church. In England, the term is applied (indifferently with that of *Nonconformist*) to those who do not conform to the rites and services of the Church as established by law of the land. It must be understood that the term does in no case apply to either Jews or Roman Catholics. Thus the apparent paradox exists that in England the Presbyterian body are Dissenters, while in Scotland they form the Established Church, leaving the Episcopalians as the chief dissenting body. In this country, there being no state Church, such differences in the ecclesiastical polity have, necessarily, no existence.

Distillation. An operation by which a liquid is converted into vapor by heat, which vapor is condensed by cold in a separate vessel. It may be employed for various purposes: thus simple distillation purifies liquids; it enables a more volatile to be separated from a less volatile substance; by its means a liquid possessing a definite boiling-point may be separated from other liquids possessing other boiling-points. This latter is known as *fractional distillation*, and is much used in the separation of hydrocarbons, the various products being collected at intervals of, say, ten degrees of temperature. The essential parts of a distilling apparatus are a vessel in which the substance is heated, called sometimes a *still* and sometimes a *retort;* a *condenser* or *refrigerator*, in which the vapor is cooled, and a *receiver*, in which the condensed products are collected. Distillation was an important operation in the earliest alchemical processes of which we have any record; it does not, however, appear to have been known before the time of Pliny.

Dominicans. An order of preaching friars, founded at Toulouse in 1215, by the Spanish St. Dominic de Guzman, who was born in Old Castile, in 1170, became one of the instigators of the crusade against the Albigenses, and died in 1221. This order, confirmed by bull of Pope Honorius, 1216, rapidly multiplied in Christendom. In course of time, however, the Dominicans were superseded in the schools by the Jesuits, and were also eclipsed by the great rival order of the Franciscans. Among the lights of the Dominican order may be counted St. Thomas Aquinas and Albertus Magnus. In more modern times, the order has been resuscitated in France by the propaganda of Père Lacordaire, and they are likewise to be found in Belgium, Hungary, Switzerland, and the United States. Their rule is very strict, including rigorous fasting and total abstinence from flesh. They wear a

white robe, with a black gaberdine, and a pointed black cap.

Dynamics. That branch of science which treats of the action of force in producing motion. It treats of bodies not in equilibrium, as *statics* treats of bodies at rest. Dynamics is divided into two parts — *kinematics*, which investigates the circumstances of mere motion without reference to the bodies moved, the forces producing the motion, or to the forces called into action by the motion; and *kinetics*, which investigates the nature and relation of the forces which produce motion. Dynamics has to do with the primary conceptions of space, matter, time, and velocity, each of which admits of numerical estimation by comparison with units arbitrarily chosen: hence dynamics is a science of numbers. It is usual to consider the subject in two parts: the dynamics of a particle, and the dynamics of a rigid body. The science owes its origin to Galileo, to whom is due the law of the acceleration of falling bodies. Huyghens added the theories of the pendulum and centrifugal force, and Newton developed the science, and applied it to the infinitesimal calculus.

Einstein Theory of Relativity. A theory concerning the relations of matter in time and space, which was introduced in a *special form* by Albert Einstein in 1905. It was developed further and presented as a *general theory* in 1915. The methods of reasoning involved are so highly mathematical that Einstein is reported to have once said that there were perhaps not more than twelve men in the world who were capable of fully understanding them. His conclusions would have received but little attention had they not solved problems which Newton's theory of gravitation left unexplained.

The new theory explains a slight shifting of the path of Mercury around the sun, which had puzzled astronomers for years. It also requires that light, which has always been believed to travel in a straight line, must take a curved path when passing near some large body. Photographs made during the eclipse of the sun, May 29, 1919, showed that light coming from distant stars was actually bent in toward the sun. A further requirement is that the spectrum of light from distant stars shall have slightly more than the normal amount of red. The theory will not stand if this is untrue.

The idea of the relativity of motion is easily grasped. A passenger on a rapidly moving train can see that he is in motion relative to the earth. But the earth is also in rapid motion relative to the sun; while it is quite possible that the sun is moving with respect to some greater system. Further, if all windows were closed, and the train moved without jolting or changing speed, no measurement which the passenger could make would tell him whether he was moving.

Now if motion, which is a movement of material through time and space, is relative, time and space may also be relative. For if there were no separated objects, there would be no space between them; and if nothing happened, there would be no time. The *mathematical* relation of time and space is used by Einstein as a fourth dimension, in addition to length, breadth, and thickness, with which to locate any object or system of objects in the universe.

According to Einstein, light has the greatest possible velocity, and this velocity is independent of its source. Further the shape and size of any body depends on the speed and direction in which it moves. A yard stick, if held parallel to the direction of the moving earth, is slightly shorter than when it is turned across the direction of motion. Parallel lines *may* meet if they pass across a "warp in space" caused by the presence of a material body. There is no method of telling whether two clocks on different systems are running together. But the new theory does not, as many seem to imagine, overthrow that of Newton. It is different in principle, but in practice merely serves as a correcting factor where motion takes place at enormous velocity.

Electricity, from the Greek elektron (amber), the name applied originally to the unknown cause of the attractions, repulsions, sparklings, etc., which attend the friction of amber and similar substances. The same cause is now recognized as giving rise, under various circumstances, to many phenomena. Many attempts have been made to ascertain the true nature of electricity, but it cannot be said that we have yet any sure knowledge of what this subtle agent really is. Electricity behaves as if it were an incompressible fluid substance, but it differs from all known fluids in so many particulars that it may be asserted that whatever else it may be, it is not a fluid in the ordinary sense of the word. Neither is it a form of energy, though electrification as distinguished from electricity certainly is such. Many scientific men hold the view that electricity is the ether itself (the elastic, incompressible medium pervading all space and conveying luminous and other vibrations), and that the phenomena of positive and negative electrifications are due to displacement of the ether at the surfaces of bodies. The researches of Hertz, who, by direct experiment, verified James Clerk Maxwell's brilliant theory that electrical action is propagated through space by wave motion in the ether, differing only in respect of wave length and period from the vibrations which constitute light, have been of the utmost value in helping to arrive at a solution of this question. Investigations into the phenomena of electric discharges in high vacua, followed by the discovery of Roentgen of the X-Rays, have also thrown great light on the subject. The applications of electricity are extremely varied. It is used in telegraphy, telephony, and electro-metallurgy, for chemical and medical purposes, for producing light, and for driving vehicles and machinery.

Motor. For practical purposes, to produce continuous power, it is most convenient to use a machine called a *motor*, which is so arranged that the electricity traverses a wire wound (in the form of one or more coils) many times around a suitably-shaped frame of iron called a field magnet or simply a field. The current so circulating round the field magnetizes, or as it is

called, excites it, causing it to exert an attraction or pull upon another part of the machine known as the armature. The armature is also wound with wire through which the current passes, and is placed between the extremities of the field magnet which are called poles. The electrical connections are so adjusted that the attraction or pull between the field and armature is up on one side of the armature and down on the other, thus causing the latter to rotate with any desired speed and power according to the size of the motor. The power may be brought in by wires through the window-casing, and the whole machinery started and stopped by turning a switch. Being entirely noiseless, perfectly clean, susceptible of being started, regulated, or stopped as stated by the mere pressure of a button, and cheap, both in constructing and operating, its utility for the lighter kinds of industrial service is beyond question. There is no delay with electric motors similar to that in getting up steam in a steam-engine, and this quality is of the utmost importance in the fire-engine service, and is made use of in the electric fire-engine. Upon reaching a fire the connecting wires from the electric engine are hooked into the box on the electric light post, from which wires run up to the electric light wires above. The engine is then ready for instant operation at full power. The revival of interest in the electric motor causes it to seem like a new invention to those not familiar with the record of electrical science. As a matter of fact, the electrician Jacobi, under the patronage of the Czar of Russia, propelled a boat on the Neva by electricity more than half a century ago; and not many years later Professor Page, in this country, succeeded in driving a car by an electric locomotive between Washington and Bladensburg at a speed of nineteen miles an hour. But nothing resulted from those early experiments on account of the rudimentary methods of generating electricity; and had not the dynamo machine been made commercially successful the motor would still be floating in the brain of scientists as a future but very indefinite possibility. Now, however, it has been caught and made objective. Thousands of electric motors are at work in various parts of the country, ranging in capacity from one-half to twenty horse-power, and they are transferring freight and passengers, running printing-presses, lifting elevators, driving ventilators, and making themselves generally useful at domestic and industrial service. The adaptability of the motor for operating street railways is its chief recommendation to the American people.

The Dynamo. This machine is very like the modern motor just described. In fact a dynamo may be used as a motor by supplying it with electricity from another dynamo or any other source of electricity, and if the armature of a motor be rotated by a steam-engine or other prime mover, it will give a current of electricity and become for the time being a dynamo. The only difference between the dynamo and motor is in the proportioning of parts, the modes of regulating speed power, etc. Only after the invention of the modern dynamo was this fact discovered, and in the early and partially successful attempts to make both, the experimenters did not appear to even guess that there was any particular connection between them. The designing of motors does not stop with the simple application of the revolving wheel principles explained above, but furnishes unlimited room for skill in making them in forms convenient for use, and adapted for direct connection to various kinds of machinery. American ingenuity has undoubtedly taken the lead in making motors of all kinds.

The Trolley. An electric street car, such as may be seen in the majority of towns and cities throughout the Union, is known as a trolley car because the current is taken from the overhead wire through the trolley or wheel, whence it goes down the pole and through a wire to the motor which is situated under the floor, then into car wheels and so to the rails and ground and back to the generator or dynamo in the power station.

Electric Light, is one of the many electric processes which depend upon the faculty of being easily converted into heat at any desired place and in any part of its conductor. In itself electric lighting covers a range of sizes or powers more extensive than the candle, the gas-burner, and the calcium light combined. Heat is the vibratory motion of the atoms which compose substances, which kind of motion electricity always produces when moving through a conductor. The temperature increases with the current, and it becomes possible, therefore, to raise the temperature of a given conductor to a red or white heat. If such a current be sent through an iron, a copper, or a platinum wire it will glow very brightly and be in danger of fusing; but if a filament of carbon be used instead, inclosed in a vacuum, it cannot fuse, but gives out a bright light. It is also a great advantage to be able to produce intense heat at a particular spot by passing a current through a wire and thinning the wire at the desired place. The higher incandescent or luminous heat is obtained by making the section of the wire still thinner, which brings it to a heat of dazzling brilliancy. This is the whole principle of the incandescent electric light in a nutshell. Electric lights are of two classes, known as "arc" and "incandescent." The latter, named from the incandescent heat of the thin wire, consists of a fine wire or filament of any substance which will stand enormous heat, inclosed in a glass, with the air removed to prevent its burning up at the high temperature. These lights, which are usually small, are very soft and pleasant to the eye, and are used for indoor illumination. The arc light is produced by the current passing from the end of one rod of carbon to the end of another rod through the vapor produced by the burning of the carbon and is named from the curved or arc-shaped path which the current takes in passing through this vapor. The passage of the current heats the particles of carbon in the vapor as well as the tips of the rods to an intense degree, and gives off a light of absolutely unapproached brilliancy. They are used for street illumination, man-of-war search-lights, etc., and have been tried in the more important light-houses of the world. An ordinary gas-burner

is of 16 candle-power. The bright electric lights in the street are 1,200 to 1,500 candle-power. The Statue of Liberty light is 48,000 candle-power. Going to the other extreme, we have very small lights of 1, ½, and even ⅛ candle-power for special purposes. They are used for house decorations, in the hair with ball costumes, in bouquets, etc., but the important uses are for illuminating for exploration places into which no burning light could be introduced, as in the method recently devised by medical electricians of illuminating the interior of the stomach for examination.

Engineering, the branch of science dealing with the design, construction, and operation of various machines, structures, and engines used in the arts, trades, and everyday life. Engineering is divided into many branches, the more important being civil, mechanical, electrical, mining, military, marine, and sanitary engineering. Mechanical engineering has to do with the design, construction, and operation of machinery, the design of manufacturing plants, and all branches of industrial production. The mechanical engineer's education should be similar to that of the civil engineer, with the addition of a knowledge of the theory and practice of machine construction. Electrical engineering is a branch of mechanical engineering and includes the application of electricity to mechanical and industrial pursuits, as derived from some other source of energy. Mining engineering is a combination of the three preceding branches as applied to the discovery and operation of mines, the building of mineral working plants, and treatment of ores. Military engineering deals entirely with the arts of war, the design, construction and maintenance of fortifications, machines of defense and attack, ordnance, and the surveying of country in preparation for military operations. Marine engineering is partly military and partly civil, embracing naval architecture, building and operating of ships and naval accessories. In the military sense, it comprises the construction of war vessels and the construction and placing of torpedoes, submarine mines, etc. Sanitary engineering consists of the construction of sewers and drains, providing for the cleaning of city streets and the disposal of garbage and sewage, reclaiming of swamps, and overcoming of all conditions tending to interfere with public health. The education and training of the engineer in modern times have called for the establishment of technical schools and courses in engineering in the large colleges and universities. These schools provide the student with the theories of mathematics, mechanics, and engineering, and by means of extensive laboratory and outside work provide him with practice in the design, construction, and use of modern engineering appliances.

Episcopal Church, Protestant, a denomination in the United States directly descended from the Church of England, which doctrinally claims to be based on the Holy Scriptures, as interpreted in the Apostles and other ancient creeds of the Church that have been universally received, and to have kept herself aloof from all the modern systems of faith, whether of Calvin, or Luther, or Arminius, leaving its members free to enjoy their own opinions on all points not represented in the Scriptures as necessary to soul's health, and refusing to be narrowed down to any other creed or creeds than those of the Apostles and the Primitive Church. It claims also to have retained all that is essential to Church organization in its episcopate, and in its liturgy to have not only a wise and judicious compend of doctrine and devotion, but also one of the most effectual of all possible conservative safeguards for the faith once delivered to the saints. Three clerical orders are recognized — bishops, priests, and deacons — the first deriving their office in direct succession from the apostles by episcopal consecration, and the others receiving ordination at the hands of a bishop. Those of the second order are entitled archdeacons, deans, rectors, vicars, or curates, according to their functions. A reader is a layman licensed by the bishop to read in a church or chapel where there is no clergyman. Parson signifies a clergyman in possession of a parochial church. From the time of the first congregations of the Church of England, in America, in 1607, to the close of the Revolution, all the clergy in the colonies were regarded as under the supervision of the Bishop of London. The first American Bishop was Rev. Samuel Seabury, who, in 1783, was consecrated in Scotland as Bishop of Connecticut. All Protestant Episcopal Churches in the United States are associated in one national body, called the General Convention, which meets triennially.

Fathers of the Church, the name given to certain writers, or apologists, of the early Christian Church. They are usually divided into three classes — the Apostolic Fathers, the Primitive Fathers, and (simply) the Fathers. The *Apostolic Fathers*, who were contemporary to some extent with the apostles, are Hermas, Barnabas, Clemens Romanus, Ignatius, and Polycarp. The *Primitive Fathers*, who lived in the Second and Third Centuries, include Justin Martyr, Irenæus, Athenagoras, Clemens Alexandrinus, Hippolytus, and Origen (who wrote in Greek), and Tertullian, Minutius Felix, and Cyprian (who wrote in Latin). The *Fathers*, or those of the Fourth and Fifth Centuries, belonged either to the Greek or to the Latin Church. The principal Greek Fathers are Eusebius, Athanasius, Ephraem Syrus, Basil, Cyril of Jerusalem, Gregory Nazienzen, Macarius, Gregory Nyssen, Epiphanius, John Chrysostom, Cyril of Alexandria, and Theodoret. The principal Latin Fathers are Hilary, Lactantius, Ambrose, Jerome, and Augustine.

Friends, Society of, the organization commonly called Quakers, founded in the middle of the Seventeenth Century by George Fox. They are distinguished from other Christian bodies by the special stress they lay on the immediate teaching and guidance of the Holy Spirit, and their belief that no one should be paid or appointed by human authority for the exercise of the gift of the ministry. In obedience to this belief they hold their meetings without any prearranged service or sermon, and sometimes in total silence. The Friends believe that the sacraments of Baptism and the Lord's

Supper are to be taken spiritually, and not in an outward form. Their protests against the use of oaths and against the exaction of tithes and church rates cost them much suffering and frequent imprisonment during the first fifty years of their existence. The simplified dress which Friends adopted from conviction 200 years ago became stereotyped into a uniform. This dress has generally been given up, as have also the antipathy to music and singing in its rigid application, and the peculiarities of speech, such as the use of "thee" and "thou" instead of "you" (though many Friends still retain this custom among themselves), and the avoidance of all titles of courtesy. Of late years there has been a very decided evangelical movement among Friends, under the influence of which the old quietism is dying out. As a result of this change the influence of the Society beyond its own borders, through home and foreign missions and adult First Day (Sunday) Schools, has developed to a remarkable extent. There is in the United States a numerous body of Friends called Hicksites (from their founder, Elias Hicks), who separated from the orthodox community. They hold latitudinarian views. The Wilburite section are conspicuous in Pennsylvania by their adherence to the livery and the "plain language." Large numbers of persons who do not appear in the statistical returns attend the Mission meetings of the Society of Friends, and very large numbers come under their influence in the foreign mission field.

Greek Church, The, taken in the widest sense, comprehends all those Christians following the Greek or Greco-Slavonic rite who receive the first seven general councils, but reject the authority of the Roman pontiff and the later councils of the Western Church. The Greek Church calls itself "the Holy Orthodox Catholic and Apostolic Church," and it includes three distinct branches — the Church within the Ottoman Empire, subject directly to the patriarch of Constantinople; the Church in the kingdom of Greece; and the Russo-Greek Church in the dominions of the czar. The proper history of the Greek Church as a separate body dates from the commencement of the Greek schism, or rather from the commencement of the efforts on the part of the Church of Constantinople to establish for itself a distinct jurisdiction, and an independent headship in the eastern division of the empire. The ecclesiastical preëminence of Constantinople, it need hardly be said, followed upon the political distinction to which it rose as the seat of the imperial residence and the center of the imperial government. Originally Byzantium was but a simple episcopal see, subject to the metropolitan of Heraclea; but the rank of the see rose with the fortunes of the city; and before the close of the Fourth Century a canon of the council of Constantinople, held in 381, assures to it, on the ground that "Constantinople is the new Rome," the "precedence of honor" next after the ancient Rome. The United Greek Church comprehends those Christians who, while they follow the Greek rite, observe the discipline of the Greek Church and make use of the Greek liturgy, are yet united with the Church of Rome, admitting the double procession of the spirit and the supremacy of the Roman pontiff.

The United Greeks or Greek Catholics are found chiefly in Rumania, Czecho-Slovakia, Hungary, Poland, and Russia. Exclusive of Russia, where their numbers are decreasing and difficult to ascertain, the total united Greek population is computed to exceed 4,000,000. The Rumanian United Greeks are settled for the most part in Wallachia and Transylvania. The Ruthenian United Greeks are mostly located in Czecho-Slovakia and Poland. The union of the Greek Christians of Wallachia and Transylvania dates from the end of the Twelfth Century; and although the Reformation made some progress among them, they still for the most part remained true to the union. The union of the Galician Greeks or Ruthenians is of much later date, about the close of the Seventeenth Century. The usage of the United Greek Church as to the law of celibacy is, with the consent of the Roman pontiffs, the same as among the other Greeks.

The Greek Church, in its various branches, is estimated to embrace about 100 million adherents. In the United States, the Syrian, Serbian, Bulgarian, and Rumanian Christians of the Greek faith have upwards of 50 churches with more than 140,000 adherents.

Heart. A hollow muscular organ, the function of which is to maintain the circulation of the blood. The human heart is formed of a firm thick muscular tissue, composed of fibers interlacing with each other, and is supplied with nerves and vessels, which are termed *coronary.* Its coronary arteries branch off from the aorta, and the coronary veins return the blood in the right auricle. Its nerves are branches of the eighth and great intercostal pairs. It is divided in the middle by a strong partition, and on each side by two cavities, called *ventricles;* one the right or *pulmonic,* and the other the left or *systemic.* Attached to the base of the heart are two *auricles,* so-called from their resemblance to an ear. In the right auricle there are four apertures: two of the *venæ cavæ,* one of the coronary vein, and one an opening into the right ventricle. There are five apertures in the left auricle; one into the left ventricle, and those of the four pulmonary veins. Each ventricle has two orifices; one from the auricle, and another into the artery. The ventricles are supplied with valves; those at the arterial opening being, from their form, called *semi-lunar;* those at the orifice of the right auricle, *tricuspid;* and those at the orifice of the left auricle, *mitral.* The valve at the termination of the *vena cava inferior,* just within the auricle, is called the *valve of Eustachius.* The dilatation of the heart is called *diastole;* its contraction, *systole.* The alternate contraction and dilatation of the heart are entirely involuntary, and dependent on the nervous system. It has been calculated that the daily work of an ordinary human heart, in propelling the blood, is equal to the lifting 124 tons a foot high.

Horse Power, the measure of a steam engine's power, as originally settled by James Watt, being a lifting power equal to 33,000 pounds raised one foot high per minute. Thus,

an engine is said to be of 100 horse power (h. p.) when it has a lifting capacity equivalent to 3,300,000 pounds one foot high per minute. To ascertain the horse power of an engine multiply together the pressure in pounds on a square inch of the piston, the area of the piston in inches, the length of the stroke in feet, and the number of strokes per minute, divide the result by 33,000 and the quotient, less one-tenth, allowed for loss by friction, will give the horse power. Engines are frequently said to be of so many horse power nominal; the real or indicated horse power, however, often exceeds the nominal by as much as three to one.

Illiteracy. The following percentages indicate the relative illiteracy of the chief nations of the world. In Rumania, 60.6 per cent. of the population can neither read nor write; in Servia, 78.9 per cent.; in Portugal, 68.9; in Spain, 58.7 per cent.; in Russia, 69 per cent.; in Hungary, 33.3 per cent.; in Austria, 18.7 per cent.; in Italy, 37 per cent.; in Greece, 57.2 per cent.; in Belgium, 12.7 per cent.; in Ireland, 9.2 per cent.; in France, 14.1 per cent.; in England, 1.8 per cent.; in Scotland, 1.6 per cent.; in The Netherlands, 0.8 per cent.; in Finland, 1.5 per cent.; in Denmark, .2 per cent.; in Switzerland, .3 per cent.; in Sweden and Norway, .2 per cent.; in Germany, .05 per cent.; and in Saxony, Bavaria, Württemberg and some other German states only rarely a person can be found who cannot read and write. In the United States the ratio of illiteracy among native whites is 2.0 per cent.

Libraries. Libraries existed in ancient Egypt and Assyria, and Pisistratus is credited with the honor of introducing a public library at Athens about B. C. 337. Cicero and various wealthy Romans made collections of books, and several Roman emperors established libraries, partly with books obtained as spoils of war. By far the most celebrated library of antiquity was the Alexandrian. In western Europe libraries were founded in the second half of the eighth century by the encouragement of Charlemagne. In France one of the most celebrated medieval libraries was that in the Abbey of St. Germain des Prés, near Paris. In Germany the libraries of Fulda, Corvei, Reichenau, and Sponheim were valuable. In Spain, in the twelfth century, the Moors are said to have had seventy public libraries, of which that of Cordova contained 250,000 volumes. In Britain and Italy many medieval libraries were also founded. After the invention of printing libraries increased with great rapidity in number, size, and importance. Among the foremost libraries of modern times are:

Library	City	No. of Vols.
Archives of the Senate,	Petrograd,	4,061,042
Bibliothèque Nationale,	Paris,	4,050,000
British Museum,	London,	3,000,000
Imperial Public Library,	Petrograd,	2,615,374
Public Library,	New York City,	2,410,379
Library of Congress,	Washington,	2,363,873
Library, Polish Kingdom,	Warsaw,	1,749,837
Königl. Bibliothek,	Berlin,	1,500,000
Biblioteca Arch. di Stato,	Naples,	1,378,000
K. Hof- u. Staatsbibliothek,	Munich,	1,190,000
Harvard University,	Cambridge(U.S.)	1,183,317
Public Library,	Boston,	1,131,747
K. U.- u. Landesbibliothek,	Strassburg,	1,023,133
Rumiantseff Museum,	Moscow,	1,000,000
K. K. Hofbibliothek,	Vienna,	1,000,000
Yale University,	New Haven,	1,000,000
K.K.Univ.-Bibliothek,	Vienna,	883,394
Brooklyn Public Library,	New York City,	862,112
Cambridge University,	Cambridge(Eng.)	860,000
Bodleian Library,	Oxford,	800,000
Det Kong. Bibliothek,	Copenhagen,	770,000
Bibliothèque Royale,	Brussels,	700,000
Columbia University,	New York City,	696,139
K.Univ.-Bibliothek,	Munich,	691,475
Public School Library,	New York City,	661,519
Public Library,	Chicago,	653,657
Biblioteca Nacional,	Madrid,	650,000
Advocates Library,	Edinburgh,	632,000
Bibliothèque de l'Arsenal,	Paris,	624,904
K. Univ.-Bibliothek,	Göttingen,	619,162
Universitäts Bibliothek,	Leipzig,	610,000
K.Landesbibliothek,	Stuttgart,	603,186
Univ.-Bibliotheek,	Amsterdam,	600,000
Koninklijke Bibliotheek,	The Hague,	600,000
Bibliothèque de l'Université,	Paris,	600,000
Biblioteca Nazionale Cen.,	Florence,	595,592
Warsaw University,	Warsaw,	576,387
K. Off. Bibliothek,	Dresden,	570,000
Bibl. Arch. di Stato,	Florence,	566,000
Free Library,	Philadelphia,	565,550
Gross.Hof-Bibliothek,	Darmstadt,	564,512
K. Univ. Bibliothek,	Tübingen,	555,283
Bibl. de l'Insti.de France,	Paris,	550,000
Public Library,	Cleveland,	542,992
Smithsonian Institution,	Washington,	521,616
Imperial Cabinet,	Tokyo,	507,500
Chicago University,	Chicago,	507,000
Univer.-Bibliothek,	Heidelberg,	500,000
University Library,	Kiev,	500,000
Public Free Libraries,	Manchester(Eng.)	500,000
Imp. Academy of Science,	Petrograd,	500,000

Light. That peculiar property of matter which affects the nerves of sight, and causes us to see. A *ray of light* is an exceedingly small portion of light as it comes from a luminous body. A *beam of light* is a collection of parallel rays. A *medium* is a body which affords a passage for the rays of light. A *pencil of rays* is a mass of diverging or converging rays. *Converging* rays are those which tend to a common point; *diverging* rays, those which come from one point, and continually separate as they proceed. The rays of light are *parallel*, where the lines which they describe are so. The *radiant point* is the point from which diverging rays proceed. The *focus* is the point to which the converging rays are directed. Light passes off from a luminous body in all directions, and its intensity decreases as the square of the distance increases: thus, if one object is twice as far from a luminous body as another of the same size, it will receive only one-fourth as much light as the latter. The velocity with which light travels is enormous. According to determinations by Foucault, Michelson, Newcomb, Cornu, and others, employing both the "turning mirror" and the "toothed wheel" methods, light has a velocity of 300,000 kilometers, about 186,600 miles, per second, so that it requires but little more than eight minutes to pass from the sun to the earth.

When light encounters an obstacle, some of it is reflected, some absorbed, and, if the interposed body is not opaque, some of it is transmitted. During transmission it is modified, being in some cases, as with doubly refracting crystals, decomposed into two white rays, possessing different properties; and in others, as with glass prisms, decomposed into a number of *colored* rays, accompanied by rays which are colorless, and in fact *invisible*, but which have marked chemical and calorific properties. When luminous rays pass into a dark chamber through a small aperture, and are received upon a screen, they form images of external objects. These

images are inverted; their shape is always that of the external objects, and is independent of the shape of the aperture. The inversion of the images arises from the fact that the luminous rays proceeding from external objects, and penetrating into the chamber, cross one another in passing the aperture. Continuing in a straight line, the rays from the higher parts meet the screen at the lower parts, and inversely, those which come from the lower parts meet the higher parts of the screen. Hence the inversion of the image.

Liquid Air is prepared by cooling air that has been placed under a pressure of some 200 atmospheres, or about 3000 pounds to the square inch. A part of this compressed air is allowed to expand through a small opening, whereupon it becomes much cooler. The cold, expanded air is then used to cool further that which is still under pressure, and this *regenerative* process is continued until the compressed air becomes a liquid which boils at about 310° below zero Fahrenheit. At this temperature copper becomes a better conductor of electricity than silver, milk is phosphorescent, and an egg shines with a blue light. Liquid air is easily handled in double-walled vacuum bottles. From liquid air, nitrogen, for making ammonia and fertilizers, and oxygen, for various practical uses, are readily prepared on a large scale.

Lungs, the sole breathing organs of reptiles, birds, mammals, and in part of amphibians (frogs, newts, etc.), the latter forms breathing in early life by branchiæ or gills, and afterwards partly or entirely by lungs. The essential idea of a lung is that of a sac communicating with the atmosphere by means of a tube, the *trachea* or windpipe, through which air is admitted to the organ, and through structural peculiarities to its intimate parts, the air serving to supply oxygen to the blood and to remove carbonic acid. In the mammalia, including man, the lungs are confined to and freely suspended in the cavity of the thorax or chest, which is completely separated from the abdominal cavity by the muscular diaphragm or "midriff." In man the lungs are made up of honeycomb-like cells which receive their supply of air through the bronchial tubes. If a bronchial tube is traced it is found to lead into a passage which divides and subdivides, leading off into air cells. The walls of these air-cells consist of thin, elastic, connective tissue, through which run small blood vessels in connection with the pulmonary artery and veins. By this arrangement the blood is brought into contact with, and becomes purified by means of, the air. The impure blood enters at the root of the lung through the pulmonary artery at the right side of the heart, and passes out purified through the pulmonary veins towards the left side of the heart. Both lungs are enclosed in a delicate membrane called the *pleura,* which forms a kind of double sac that on one side lines the ribs and part of the breast bone, and on the other side surrounds the lung. Pleurisy arises from inflammation of this membrane. The lungs are situated one on each side of the heart, the upper part of each fits into the upper corner of the chest, about an inch above the collar bone, while the base of each rests upon the diaphragm. The right lung is shorter and broader than the left, which extends downwards farther by the breadth of a rib. Each lung exhibits a broad division into an upper and lower portion or *lobe,* the division being marked by a deep cleft which runs downwards obliquely to the front of the organ; and in the case of the right lung there is a further division at right angles to the main cleft. Thus the left lung has two, whilst the right lung has three lobes. These again are divided into *lobules* which measure from one-fourth to one-half inch in diameter, and consist of air cells, blood vessels, nerves, lymphatic vessels, and the tissue by which the lobules themselves are bound together. The elasticity of the lungs by which they expand and expel the air is due to the contractile tissues found in the bronchial tubes and air cells, this elasticity being aided by a delicate, elastic, surface tissue. The lungs are popularly termed "lights," because they are the lightest organs in the body, and float when placed in water, except when they are diseased.

Lutherans. A designation originally applied by their adversaries to the Reformers of the Sixteenth Century, and afterward appropriated among Protestants themselves to those who took part with Martin Luther against the Swiss Reformers, particularly in the controversies regarding the Lord's Supper. It is so employed to this day as the designation of one of the two great sections into which the Protestant Church was divided, the other being known as the Reformed Church. Lutheranism is the prevailing form of Protestantism in Germany; it is the national religion of Denmark, Sweden, and Norway; and there are Lutheran churches in the Baltic provinces of Russia, in Holland, France, Poland, and the United States. The growth in Continental Europe has been most marked. Among the Lutheran symbolical books the "Augsburg Confession," Luther's "Shorter Catechism," and the "Formula Concordiæ" ("Formula of Harmony") hold the principal place. It is often alleged that the chief difference between the Lutherans and the Reformed is that the Lutherans hold to the doctrine of consubstantiation and reject transubstantiation. This, however, is repudiated by the Church's theologians without a dissenting voice. In the "Wittenberg Concord," prepared in 1536, and signed by Luther and the other leaders in the Church, it is said: "We deny the doctrine of transubstantiation, as we do also deny that the body and blood of Christ are locally included in the bread." The "Formula of Concord" says: "The presence of Christ in the supper is not of a physical nature, nor earthly, nor Capernaitish, and yet it is most true." In its constitution the Lutheran Church is generally unepiscopal without being properly Presbyterian. It is consistorial, with the civil authorities so far in place of bishops. In Denmark, Sweden, and Norway there are bishops, and in Sweden an archbishop (of Upsala), but their powers are very limited. In the United States wider extremes in the mode of worship have existed than in other parts of the world. There are five general bodies of Lutherans in the United States, besides nineteen independent synods, with a total, in 1920, of 10,061.

ministers, 14,955 churches, and over 2,494,000 members.

Methodist. A branch of the Christian Church which originated in England during the Eighteenth Century. In 1729 John Wesley, with his brother Charles and a few other associates at Oxford, organized a meeting for their mutual moral improvement. They were soon joined by others, among them Hervey and George Whitefield, till at the end of six years they numbered fourteen or fifteen. The term "Methodists" was applied to them on account of their methodical mode of life and work. After his return from Georgia, in 1738, Wesley began to preach with great fervor. In the early part of 1739, Whitefield set the first example of open-air preaching at Kingswood, near Bristol, addressing an immense crowd of colliers. John Wesley, as well as his brother Charles, followed this example. Being denied admission to the churches by the clergy, they preached in private houses, barns, market places, and the open fields. The converts made by their preaching were either despised or utterly neglected by the Church, and hence Wesley, at their own request, formed them into societies for mutual edification and improvement, called "the United Societies." For their government a few simple rules were proposed by the Wesleys, which, with slight exceptions, are still recognized as the "General Rules" by all branches of the Methodist Church. Methodism strove at first only to restore a purified and intensified spiritual life. The substance of its doctrines is to be found in the writings of John Wesley, John Fletcher, Richard Watson, and others, and in the generally uniform teachings of the Methodist pulpit. The articles which Wesley prepared for the Methodist Church in America were taken substantially from the thirty-nine articles of the Church of England. Methodism holds that the salvation or non-salvation of each human being depends solely on his own free action in respect to the enlightening, renewing, and sanctifying inworkings of the Holy Spirit; hence it is Arminian in distinction from Calvinistic. It emphasizes the doctrine of assurance, *i. e.*, that the Holy Spirit bears witness of pardon and acceptance to the justified sinner. It also makes prominent the doctrine of Christian perfection, or perfect love. Methodist polity, like the Methodist confession, is to be understood only by regarding Methodism as a revival and missionary movement. Wesley thought as little of establishing a separate Church polity as of publishing a separate theology. But the neglect and frequent ridicule of the converts by the clergy of the establishment caused many to relapse; and this led him to consent reluctantly to the appointment of lay preachers. The first assembly that took the name of "conference" was held in the Foundery, London, June 25, 1744, and thereafter annually. Secession was discouraged, and they distinctly denied that they were dissenters. Previous to the conference of 1744, the greater portion of England had been divided into "circuits," and provision had been made to supply these with preachers for such time as the need of the work seemed to indicate. Wesley's views of ecclesiastical authority and polity underwent radical changes, and led him, at the recognition of the independence of the American colonies, to provide a separate Church organization for the Methodists of America, and at his death to perpetuate his work by constituting the "United Societies" a distinct ecclesiastical body in regular legal form. Methodism holds to no inspired or divinely imposed Church polity. In Great Britain it recognizes but one order of clergy, while in America it has provided two.

The Methodist Episcopal Church is the original and largest body of Methodists in the United States. Wesley and Whitefield, during their visits to America, had organized no Methodist societies. In 1766, a class was formed by Philip Embury, greatly assisted by Captain Thomas Webb, an officer of the British Army stationed in New York, one of Wesley's local preachers. Webb preached and formed classes during 1768, on Long Island, and in New Jersey, Delaware, and Philadelphia. In the same year the first chapel was dedicated in John Street, New York; and, in 1770, the first Methodist Church in Philadelphia was erected. In 1769, Boardman and Pilmore, the first missionaries sent to America by Wesley, arrived in New York. In 1771, Francis Asbury arrived, and the next year he was appointed by Wesley superintendent of the American societies. He was soon superseded by Thomas Rankin. The first American conference was held in 1773, and consisted of ten preachers, all of European birth. The societies then aggregated 1,160 members. At the beginning of the revolutionary struggle nearly all the preachers of English descent, except Asbury, returned home. During the war the English Church in America was nearly extinguished, and the dependence of the Methodists on the English clergy for the sacraments almost entirely failed them. Wesley in 1780, applied to the Bishop of London to ordain at least one presbyter to administer the sacraments among the American Methodists, but was refused. Therefore, in 1784, Wesley, assisted by the Rev. Thomas Creighton and Richard Whatcoat, presbyters, ordained the Rev. Thomas Coke, LL. D., as superintendent of the American Methodist Churches, with the instruction that Asbury should be assistant superintendent. On Coke's arrival a general conference of sixty ministers met in Baltimore, December 24, 1784, adopted the episcopal form of government, made the episcopal office elective, and held the superintendents amenable to the body of ministers and preachers. The "Sunday Service" and twenty-five "Articles of Religion" were adopted. In 1800, Richard Whatcoat was elected bishop, and, in 1808, William McKendree. In 1808, the plan of a delegated general conference was adopted. This body, composed of ninety members, held its first session in 1812. The doctrines of the Methodist Episcopal Church are expressed in the twenty-five "Articles of Religion," which, with the exception of the twenty-third, which recognizes the civil authority of the United States, were prepared by Wesley from the thirty-nine articles of the Church of England.

There are five judicatory bodies, termed respectively the "general conference," the "judicial conference," the "annual conference," the

"district conference," and the "quarterly conference." Prior to 1872, the general conference was composed exclusively of preachers. It subsequently consisted of two laymen for each annual conference and one minister for every forty-five members. In 1900, the representation was made equal. The general conference meets quadrennially, and is presided over by the bishops. It is the sole legislative body of the Church. It elects bishops, missionary and educational secretaries, book agents, and editors of its periodicals, and is also the court of final appeal. The annual conference consists of traveling preachers. A bishop is the presiding officer, or in his absence the conference may appoint its president. Its powers are simply administrative. It holds its members responsible, passing their character under examination each year. The district conference is composed of the presiding elder of the district, pastors, local preachers, exhorters, and one steward and Sunday school superintendent from each pastoral charge.

Mohammedanism, the name commonly given in Christian countries to the creed established by Mohammed. His followers call their creed *Islam.* Their common formula of faith is, "There is no God but Allah, and Mohammed is his prophet." The dogmatic or theoretical part of Mohammedanism embraces the following points: (1) Belief in God, who is without beginning or end, the sole Creator and Lord of the universe, having absolute power, knowledge, glory, and perfection. (2) Belief in his angels, who are impeccable beings, created of light. (3) Belief in good and evil Jinn (genii), who are created of smokeless fire, and are subject to death. (4) Belief in the Holy Scriptures, which are his uncreated word revealed to the prophets. Of these there now exist, but in a greatly corrupted form, the Pentateuch, the Psalms, and the Gospels; and in an uncorrupted and incorruptible state the Koran, which abrogates and surpasses all preceding revelations. (5) Belief in God's prophets and apostles, the most distinguished of whom are Adam, Noah, Abraham, Moses, Jesus, and Mohammed. Mohammed is the greatest of them all, the last of the prophets and the most excellent of the creatures of God. (6) Belief in a general resurrection and final judgment, and in future rewards and punishments, chiefly of a physical nature. (7) The belief, even to the extent of fatalism, of God's absolute foreknowledge and predestination of all events both good and evil. The practical part of Mohammedanism inculcates certain observances or duties, of which four are most important. The first is prayer, including preparatory purifications. Prayer must be engaged in at five stated periods each day. On each of these occasions the Moslem has to offer up certain prayers held to be ordained by God, and others ordained by his prophet. During prayer it is necessary that the face of the worshiper be turned towards the kebla, that is, in the direction of Mecca. Prayers may be said in any clean place, but on Friday they must be said in the mosque. Second in importance to prayer stands the duty of giving alms. Next comes the duty of fasting. The Moslem must abstain from eating and drinking, and from every indulgence of the senses, every day during the month of Ramadhan, from the first appearance of daybreak until sunset, unless physically incapacitated. The fourth paramount religious duty of the Moslem is the performance at least once in his life, if possible, of the pilgrimage to Mecca, after which he becomes a Hadji. Circumcision is general among Mohammedans, but is not absolutely obligatory. The distinctions of clean and unclean meats are nearly the same as in the Mosaic code. Wine and all intoxicating liquors are strictly forbidden. Music, games of chance, and usury are condemned. Images and pictures of living creatures are contrary to law. Charity, probity in all transactions, veracity (except in a few cases), and modesty, are indispensable virtues. After Mohammed's death Abu Bekr, his father-in-law, became his successor, but disputes immediately arose, a party holding that Ali, the son-in-law of Mohammed, was by right entitled to be his immediate successor. This led to the division of the Mohammedans into the two sects known as Shiites and Sunnites. The former, the believers in the right of Ali to be considered the first successor, constitute at present the majority of the Mussulmans of Persia and India; the latter, considered as the orthodox Mohammedans, are dominant in the Ottoman Empire, Arabia, Turkestan, and Africa. The total Mohammedan population of the world is estimated at fully 215,000,000.

Moon. The orb which revolves round the earth; a secondary planet or satellite of the earth, whose borrowed light is reflected to the earth and serves to dispel the darkness of night. Its mean distance from the earth is about 237,000 miles; its diameter is 2,160 miles and its magnitude about one-forty-ninth of that of the earth. It completes its revolution round the earth, in a mean or average period of twenty-seven days, seven hours, forty-three minutes, eleven and one-half seconds, which constitutes the sidereal month. The satellite of any planet.

Moravians. A religious sect, called at first Bohemians, and constituting a branch of the Hussites, who, when the Calixtines came to terms with the council of Basel, in 1433, refused to subscribe the articles of agreement, and constituted themselves into a distinct body. Their tenets were evangelical. In 1522, they made advances to Luther, who partially recognized them, but they ultimately adopted Calvinistic views as to the Lord's Supper. Driven by persecution, they scattered abroad, and for a time their chief settlement was at Fulnek in Moravia, whence they were called Moravian Brethren, or Moravians. On May 26, 1700, was born Nicolaus Ludwig, Count von Zinzendorf, son of the chamberlain and state minister of Augustus II., Elector of Saxony and King of Poland. Having met with a Moravian refugee, who told him of the persecutions to which his sect was exposed in Austria, Count Zinzendorf offered him and his coreligionists an asylum on his estate. The man, whose name was David, accepted the offer, and in 1722, settled with three other men, at a place called by Zinzendorf "Herrnhut" (the Lord's guard). Under his fostering care, the sect greatly increased in strength. Till his death, on May 9, 1760, he

traveled, largely spreading their views. Though they have never been numerous, yet in the latter part of the Eighteenth Century and the beginning of the Nineteenth they acquired great reputation from having a larger proportion of their membership engaged in foreign missions than any Christian denomination since apostolic times. Statistics of the denomination in the United States show about 150 ministers, 143 churches, and 23,000 members.

Mormons, or Latter-Day Saints, form a religious body officially named "The Church of Jesus Christ of Latter-Day Saints." The distinguishing characteristic of this sect is the belief in continued divine revelation in harmony with the doctrine of Christ and his apostles combined with a church organization corresponding to that of the primitive Christians. The church was formally established at Fayette, New York, on April 6, 1830, through the instrumentality of Joseph Smith, the son of a Vermont farmer. Joseph Smith declared that in 1820, when he was fourteen years of age, he received, in answer to prayer, a visitation by heavenly personages; and that seven years later, in 1827, an angel delivered to him an ancient record engraved on plates of gold. This record, so he affirmed, he was enabled by divine aid to translate, and the version made by him appeared in 1830 as the Book of Mormon. This book, which purports to be a history of the ancient inhabitants of America, is regarded by the Latter-Day Saints as a sacred writing equal in authority to the Jewish and Christian scriptures, but not superseding or supplanting them. Opposition assailed the youthful prophet and the new church from the first. The adherents removed in 1831 from Fayette, New York, to Kirtland, Ohio, where they erected a temple. After organizing branches in several states, increasing persecution led to a general westerly migration in 1838. Most of the people located in Illinois, where, in 1839, they began building the town later known as Nauvoo. Here they erected another more costly temple. The hostility that followed the church to its new home finally culminated, June 17, 1844, in the killing of Joseph Smith and his brother Hyrum by a mob which attacked the jail at Carthage, Illinois, where the two were held awaiting trial. Brigham Young then became the head of the church and in 1846 the historic exodus from Nauvoo began. The people again fled westward, finally reaching the valley of the Great Salt Lake, then a part of Mexico. The first pioneers entered the valley, July 24, 1847. Under Brigham Young's able direction large tracts of land were brought under cultivation. With remarkable energy in the face of great hardship and sacrifice, these zealous religionists transformed the desert into fertile fields and each year witnessed the steady growth of the church. The commonwealth thus established in the center of the great American desert has made practically uninterrupted progress. In 1877 Brigham Young died. He has been succeeded in the presidency by John Taylor, 1877, Wilford Woodruff, 1887, L. Snow, 1898, J. F. Smith, 1901, and H. J. Grant, 1918. In 1915 the Mormon church had a following of about 500,000. According to a summary given over the signature of the founder and as stated in the present official handbook, the religion of the Latter-Day Saints consists of doctrines, commandments, ordinances, and rites revealed from God to the present age. Four essential principles and ordinances are faith in God and Jesus Christ, repentance, baptism, and the laying on of hands for the gift of the Holy Ghost. Obedience to these is necessary to membership in the church. The earlier practice of plural marriage, nevertheless, inevitably led to much persecution. This practice, however, was at no time general throughout the membership and has long since been formally discontinued. Moreover, it has been confused in the minds of many with "celestial marriage" which differs from the ordinary ceremony of marriage only in being a covenant between husband and wife for "time and all eternity" instead of a contract lasting "until death do us part."

The Reorganized Church of Jesus Christ of Latter-Day Saints claims to be the true church in succession, teaching the doctrines proclaimed by Joseph Smith, insisting that Brigham Young's followers were led by him from the truth, and denying Young's claim of a revelation concerning polygamy. The reorganization of the church was effected in 1852 and 1853. In 1860 Joseph Smith, son of the first president, became president and occupied this position until his death in 1914, when his son, Frederick M. Smith, was installed. The church numbers about 75,000 members, with headquarters at Lamoni, Iowa.

Mosque (mosk,) a Mohammedan temple or house of worship. The first mosque, square and capacious, erected by Mohammed at Medina, partly with his own hands, became in its plan the model for all others, which was, however, subsequently modified by the addition of the cupola and minaret. This mosque, that at Mecca, and the mosque of Omar at Jerusalem are considered peculiarly holy by the Moslems. The *jumma musjid* or great mosque at Delhi, built by Shah Jehan in 1631–37, is generally considered the noblest building ever erected for Mohammedan worship.

Music. The origin of music is involved in obscurity, and it has been said that speech and song are coeval. From several passages in the Old Testament it is evident that music was made use of at an early period, but probably without any regard to rhythm. The Greeks, who inherited the art from the Egyptians, were the first to reduce music to a system; but it was not until the introduction of Christianity into Western Europe that marked signs of improvement took place, and not until the Fifteenth Century that any rapid progress was made. The great distinction between the music of the ancients and that of modern times lies in the peculiarity of the scales in which it is written. The scales or modes of the ancients varied from four to fourteen, and were distinguished by the position of the semitones, as in our modern major and minor scales. Many of our national melodies are written in these ancient scales, their peculiar character being derived from the position of the semitones. *Melody* was probably the sole characteristic of the music of the ancients, and it was not until the Seventh Century that composition in harmony, either vocal or

instrumental, came into use. In the Eleventh Century we also find an innovation by the introduction of notes of unequal length, giving variety to melody; and the question of time and rhythm came into consideration. It is supposed that the art of composition was first cultivated in Flanders. The earliest example is of the Tenth Century, and consists simply of a succession of fourths and fifths. *Harmony* probably belongs exclusively to the music of the most civilized nations of modern times. In the Sixteenth and Seventeenth Centuries we have Palestrina and his contemporaries, Boyd, Gibbons, etc., who enriched the art by their compositions, simplifying the harmonies, and giving more flowing and natural melodies. In the Seventeenth and Eighteenth Centuries we have Handel, Bach, Haydn, Mozart; and in the Eighteenth and Nineteenth Centuries, perfection of the art has almost been attained in Beethoven, Spohr, Weber, Cherubini, Mendelssohn, Chopin, and Schumann, etc. The science of music is treated in works on acoustics, and has reference to the nature of musical sounds and their relation to each other. Under this branch of the science are classed musical sounds, the vibrations required to produce them, pitch, harmonies, etc. The theory of music has reference to the symbols and the language in which music is expressed, and to the rules generally laid down in order to produce correct and effective musical composition. The symbols used in music are scales, clefs, forms of notes and equivalent rests, tune divisions, and others, respecting which information may be obtained from any catechism of music. These symbols and signs were not completed in their present form until very recent times. Having obtained the necessary materials, the laws of composition may be studied, the simplest form being that of melody, produced by a single voice or instrument. The higher branches of the art are harmony, composition, modulation, and counterpoint, the rules for which are laid down in textbooks on the subject.

Ozone. A substance discovered by Schönbein, occasionally existing in the atmosphere, and having a peculiar odor resembling that produced when repeated electric sparks, or electric discharges, from a point are transmitted through the air. It is supposed to be an allotropic form of oxygen. It is also formed in certain cases of the slow action of air upon phosphorus. The ozone existing from time to time in the atmosphere has been supposed to have an influence on the health of the community, and observations with regard to it are frequently made by means of an apparatus called an ozonometer, the essential parts of which consist of strips of paper steeped in a mixture of starch and iodide of potassium. Ozone turns the paper brown, the tint varying with the quantity of ozone.

Paganism. The religion of the heathen world, in which the deity is represented under various forms, and by all kinds of images or idols; it is therefore called idolatry or image worship. The theology of the pagans was of three sorts — fabulous, natural, and political or civil. The *fabulous* treats of the genealogy, worship, and attributes of their deities,who were for the most part the offspring of the imagination of poets, painters, and statuaries. The *natural* theology of the pagans was studied and taught by the philosophers, who rejected the multiplicity of gods introduced by the poets, and brought their ideas to a more rational form. The *political* or civil theology of the pagans was instituted by legislators, statesmen, and politicians, to keep the people in subjection to the civil power. This chiefly related to their temples, altars, sacrifices, and rites of worship. The word *pagan* was originally applied to the inhabitants of the rural districts, who, on the first propagation of the Christian religion, adhered to the worship of false gods, or who refused to receive Christianity after it had been adopted by the inhabitants of the cities. In the Middle Ages, this name was given to all who were not Jews or Christians, they only being considered to belong to a true religion; but in more modern times, Mohammedans, who worship the one supreme God of the Jews and Christians, are not called *pagans*.

Pagoda. A Hindoo place of worship, containing an idol. It consists of three portions: an apartment surmounted by a dome, resting on columns, and accessible to all; a chamber into which only Brahmins are allowed to enter; and, lastly, a cell containing the statue of the deity, closed by massive gates. The most remarkable pagodas are those of Benares, Siam, Pegu, and particularly that of Juggernaut, in Orissa.

Parsees. The name given in India to the fire-worshiping followers of Zoroaster, chiefly settled in Bombay, Surat, etc., where they are amongst the most successful merchants. They have a great reverence for fire in all its forms since they find in it the symbol of the good deity Ahurâ-Mazda (Ormuzd). To this divinity they have dedicated "fire temples," on whose altar the sacred flame is kept continually burning. Benevolence is the chief practical precept of their religion, and their practice of this finds its evidence in their many charitable institutions. One of the most curious of their customs is in the disposal of their dead. For this they erect what are called "towers of silence," built of stone, about twenty-five feet high, and with a small door to admit the corpse. Inside is a large pit with a raised circular platform round it on which the body is exposed that it may be denuded of flesh by vultures, after which the bones drop through an iron grating into the pit below.

Perfectionists, or Bible Communists, popularly named free lovers, an American sect founded in 1838 by John Humphrey Noyes. Noyes was employed as a law clerk at Putney, in Vermont, when the fierce religious revival of 1830 spread over the New England States; but he abandoned law for religion, and took upon himself the restoration of the primitive Christian ideal. His distinctive doctrines were: (1) reconciliation to God and salvation from sin — purely matters of faith; (2) recognition of the brotherhood and the equality of man and woman; and (3) community of labor and its fruits. In 1838 he succeeded in organizing a society giving expression to his views at Putney. Besides himself this included his wife, his mother, and his sister and brother, who were joined by several other families. All property

was thrown into a common stock; all debts, all duties fell upon the society, which ate in one room, slept under one roof, and lived upon one common store. All prayer and religious service were stopped, Sunday was unobserved, family ties were broken up, and a complex marriage system was established, by which each man became the husband and brother of every woman; every woman the wife and sister of every man. They held that true believers are free to follow the indications of the Holy Spirit in all things, nothing being good or bad in itself. Consequently, they rejected all laws and rules of conduct, except those which each believer formulated for himself; but to prevent the inconveniences arising from an ignorant exercise of individual liberty they introduced the "principle of sympathy," or free public opinion, which, in fact, constituted the supreme government of the sect.

Presbyterian Church. A name applied to those Christian denominations which hold that there is no order in the Church as established by Christ and His apostles superior to that of presbyters, and who vest Church government in presbyteries, constituted of ministers and elders, possessed of equal powers, thus without superiority among themselves. Presbyterianism does not recognize the term bishop as the superior of the presbytery, because these two names or titles in the New Testament are used interchangeably of the same persons. Presbyterians hold that the authority of their ministers is derived from the Holy Spirit, which is symbolized by the imposition of the hands of presbytery collectively. They affirm that all Christian ministers, being ambassadors of Christ, are equal by their commission. The congregation elects its own minister and elders, and also its deacons and trustees — the former of the last two takes charge of the charities of the Church, and the latter of its temporal or financial affairs. The session, consisting of the minister and elders, has the spiritual oversight of the church members. The presbytery is constituted by ministers and elders in equal numbers. A congregation for the time without a pastor can be represented in the presbytery by an elder. An appeal may be made to the presbytery from congregations or sessions. A synod consists of a number of presbyteries within defined boundaries. The general assembly is the highest court of the Church, and consists of representatives from all the presbyteries, each minister is accompanied by an elder from the same presbytery. The first Presbyterian Church in modern times was founded in Geneva by John Calvin, about 1541; and the constitution and doctrines were thence introduced, with some modifications, into Scotland by John Knox, about 1560, though the Presbyterian was not legally recognized as the national form of Church government till 1592. The first Presbyterians in America were emigrants from the British Isles, and the first Presbyterian Church in America was founded in the colony of Massachusetts in 1629. It was the outgrowth of a Presbyterian congregation that landed there in 1625. This movement was projected by Presbyterian leaders in the south of England and also in London. It was designed to be a colonization on a higher principle than the desire for gain. The Church now has twelve theological seminaries. A revision of the confession was commenced in 1891, and was completed in 1902. It is also proposed to formulate a creed which shall express the doctrine of all the branches of the Church. There are several branches which virtually hold the polity of the Presbyterian Church in the United States, each having its own theological seminaries and colleges, such as the Presbyterian churches northern and southern, the Reformed, the United Presbyterian, the Reformed Dutch and German, etc. The Presbyterian Church in Canada is strong and prosperous, with six theological colleges. Statistics show that the total number of Presbyterians in the Dominion of Canada exceeds 1,115,000. In the Australasian colonies, Presbyterianism is also vigorous. In the Cape Colony and in various minor colonies, Presbyterianism is also represented.

Reformed Church. In general, comprehends those Churches which were formed at the Reformation; but the term is specifically applied to those Protestant Churches which did not embrace the doctrines and discipline of Luther. The title was first assumed by the French Protestants, but afterwards became the common denomination of all the Calvinistic churches on the European continent. The Reformed Church of America is a body known up to 1867 as the Reformed Protestant Dutch Church, being founded by settlers from Holland and holding Calvinistic doctrines. The first minister was the Rev. George Michael Weiss, who emigrated with about 400 people of the Palatinate in 1727. These and most of the immigrants who followed settled in Pennsylvania, east of the Susquehanna. In 1746, the Rev. Michael Schlatter was commissioned by the synods of North and South Holland to visit their German missions in America, and to regulate their ecclesiastical relations. He assembled in Philadelphia the first synod (or, as it was then called, *coetus*) of the German Reformed Church, September 29, 1747. The German Reformed coetus continued under the jurisdiction of the Church of Holland till 1793, when an independent synod was formed. It increased rapidly in membership and congregations. The spread of the English language led to a closer connection with other Protestant Churches of the United States; and many ministers and congregations showed a tendency to drop certain customs of the Church, as confirmation and church holidays. The first triennial general synod, with jurisdiction over the whole Church, met in Pittsburgh in November, 1863. The general synod of 1869 resolved to drop the word German from the name of the Church. The Heidelberg catechism is the only standard of doctrine. As this book was intended to harmonize the Melanchthonian and Calvinistic tendencies, it has been construed by theologians of these two schools in different ways. In the German Reformed Church the Melanchthonian element has been predominant, so that many representative theologians have incurred the charge of Romanizing tendencies. The worship of the Church is liturgical; its government is presbyterian.

RELIGIOUS STATISTICS*

DIVISIONS OF EUROPE

Countries	Catholic Church	Protestant Churches	Orthodox Churches	Jews	Moham-medans	Unclas-sified
Austria-Hungary,	30,000,000	5,200,000	5,000,000	2,200,000	.....	100,000
Belgium,	6,000,000	28,000	.....	13,200	.....	3,000
Bulgaria,	29,000	.....	1,393,000	.....	571,000	.....
Denmark,	3,000	2,089,000	.....	4,000	.....	4,000
France,	30,000,000	650,000	.....	50,000	.....	7,000,000
Germany,	22,000,000	37,750,000	200,000	600,000	.....	30,000
Gibraltar,	16,000	.....	.....	.....	.....	.....
Greece,	10,000	10,000	1,930,000	5,000	45,000	.....
Italy,	31,500,000	65,000	2,500	35,000	.....	800,000
Luxemburg,	200,000	.....	.....	.....	.....	.....
Malta,	160,000	.....	.....	.....	.....	.....
Montenegro,	5,000	.....	290,000	.....	.....	1,000
Netherlands,	1,545,000	2,756,000	.....	83,000	.....	16,000
Norway,	1,000	1,958,000	.....	.....	.....	1,000
Ottoman Empire,	320,000	11,000	1,700,000	60,000	2,708,000	70,000
Portugal,	4,300,000	.....	.....	.....	.....	1,000
Roumania,	100,000	15,000	4,800,000	400,000	30,000	55,000
Roumelia,	30,000	.....	700,000	4,000	240,000	2,000
Russia,	11,500,000	7,000,000	87,000,000	5,215,000	14,000,000	700,000
Servia,	6,000	1,000	1,973,000	5,000	15,000	.....
Spain,	16,850,000	7,000	.....	4,000	.....	20,000
Sweden,	1,000	4,698,000	.....	2,000	.....	1,000
Switzerland,	1,172,000	1,710,000	.....	8,000	.....	10,000
United Kingdom,	6,000,000	38,000,000	.....	100,000	.....	500,000
Total followers,	161,748,000	101,948,000	104,988,500	8,788,200	17,609,000	9,314,000

The distinction between followers and actual communicants should be observed.

* Previous to the World War.

DENOMINATIONS IN THE UNITED STATES (1920)

Denominations	Ministers	Churches	Communicants
Adventists	1,665	2,984	134,725
Baptists	47,983	58,933	7,207,578
Brethren (Dunkards)	3,843	1,276	134,179
Brethren (Plymouth)*	.....	458	13,244
Brethren (River)	203	122	5,962
Buddhists*	34	12	5,639
Catholic Apostolic*	13	13	2,768
Catholics (Eastern Orthodox)	414	55	65,000
Catholics (Roman)	21,765	16,580	15,202,799
Christadelphians	.....	74	3,812
Christian American Convention	826	1,094	104,390
Christian Scientists	3,200	1,600	85,096*
Christian Union	350	320	16,800
Churches of God (Winebrenner)	421	525	28,672
Churches of the Living God (colored)	425	165	12,000
Churches of the New Jerusalem	131	146	9,772
Communistic Societies*	.....	19	1,901
Congregationalists	5,695	5,959	809,496
Disciples of Christ	8,506	14,416	1,493,515
Evangelical	1,597	2,399	209,047
Evangelical Protestant†	34	37	17,962
Evangelical Synod†	1,133	1,294	269,842
Friends	1,331	1,985	119,294
Jewish Congregations*	721	1,901	357,135
Latter-Day Saints	7,910	1,640	452,797
Lutherans	10,061	14,955	2,493,894
Mennonites	1,753	930	83,201
Methodists	42,426	63,645	7,705,258
Moravians	150	143	23,370
Presbyterians	14,309	15,844	2,255,693
Protestant Episcopal	5,806	7,993	1,087,037
Reformed	2,286	2,771	521,574
Salvationists	2,918	957	48,786
Scandinavian Evangelical	546	428	38,652
Social Brethren	10	19	950
Society for Ethical Culture	9	7	2,741
Spiritualists	500	600	50,000
Theosophical Society	.....	200	7,347
Unitarians	516	473	101,215
United Brethren	2,098	3,923	371,293
Universalists	620	850	59,650
Independent Congregations	267	879	48,673

* Census of 1916. † Formerly German.

Respiration. A function proper to animals, the object of which is to place the materials of the blood — the mixture of the venous blood with lymph and chyle — in contact with atmospheric air, in order that it may acquire the vivifying qualities which belong to arterial blood. The organs for executing this function are, in the mammalia, birds, and reptiles, the *lungs*. In man, respiration is both a mechanical and a chemical process. The mechanical process consists of *inspiration* and *expiration*. The chemical process consists of the excretion of carbon dioxide gas from the blood and the absorption of oxygen by the blood. In health, respiration is easy, gentle, regular, and noiseless. Respirations are about 35 per minute in infancy, 25 per minute during the second year of life, and 18 per minute at adult age.

Rhodes Scholarships, The. By the provisions of the will of Cecil Rhodes, who died in 1902, an educational foundation was established, creating a fund for free scholarships at Oxford university. This bequest, providing for the maintenance of about 175 British, German, and American students at Oxford university, was made in the belief that "a good understanding between England, Germany, and the United States will secure the peace of the world, and that educational relations form the strongest tie." The founder proposed the following basis for awarding these scholarships: (1) literary and scholastic attainments to count three-tenths; (2) proficiency in outdoor sports, two-tenths; (3) qualities of character and manhood, three-tenths; (4) qualities of leadership, two-tenths. The first and fourth qualifications were to be decided upon by the masters of the schools where the candidates prepare, the second and third by vote of their fellow students. Examinations when held to be qualifying, not competitive. The number of scholarships to be distributed was at first as follows: South Africa, 24; Australasia, 21; Canada 6; Atlantic Islands, 6; West Indies, 3; United States, 96; and Germany, 15; but by Act of Parliament, 1921, the scholarships originally granted to Germany were allotted to India. These scholarships are tenable for three years and have an annual value of about $1500.

In the United States, 32 scholars are elected each year. The first qualifying examinations were held in 1904. Candidates must be 20 to 25 years of age, unmarried, and must have completed two years' work at a recognized institution of learning.

Salvation Army, The. A religious organization, founded in England by William Booth, having for its aim the evangelization of the masses who are outside of the influence of the churches. The first open-air meetings were held in London in 1865, and the mission soon after established became known in 1869 as the Christian Mission. In 1878 the name Salvation Army was assumed, military terms were adopted, and William Booth was called "General" of the Army. In 1880 George Railton was sent from England to organize the Salvation Army in the United States. The organization has since steadily extended its field so that in 1920 its flag was flying at more than 11,000 posts distributed in 70 countries and colonies, embracing every continent of the world. In connection with the evangelistic work, social relief institutions have been extensively developed. These now include rescue homes, shelters, and boarding houses for women, shelters and industrial homes for men, slum settlements, employment bureaus, free coal and ice distribution, missing friends bureau, poor men's lawyer, prison department, anti-suicide bureau, day nurseries, fresh-air camps, and farm colonies. The Army publishes about 80 weekly and monthly periodicals in more than 20 languages, with a combined circulation somewhat exceeding 1,375,000.

Sciences. The name for such portions of human knowledge as have been more or less generalized, systematized, and verified. The term "Philosophy" is to a certain extent, but not altogether, coincident with science, being applied to the early efforts and strainings after the explanation of the universe, that preceded exact science in any department. Both names denote the pursuit of knowledge as knowledge, or for intellectual satisfaction, in contrast to the search that is limited to immediate utility.

We shall here describe the mode of classifying the sciences in accordance with present usage, and with the principles most generally agreed upon. It is convenient to prepare the way by distinguishing between Theoretical Sciences, which are the sciences properly so called, and Practical Science. A theoretical science embraces a distinct department of nature, and is so arranged as to give, in the most compact form, the entire body of ascertained (scientific) knowledge in that department: such are mathematics, chemistry, physiology, zoölogy. A practical science is the application of scientifically obtained facts and laws in one or more departments to some practical end, which end rules the selection and arrangement of the whole; as, for example, navigation, engineering, mining, medicine.

The abstract or theoretical sciences, as most commonly recognized, are these six: mathematics, physics, chemistry, biology (vegetable and animal physiology), psychology (mind), sociology (society). The concrete sciences are the natural history group — meteorology, mineralogy, botany, zoölogy, geology, also geography, and we might, with some explanations, add astronomy. The abstract or fundamental sciences have a definite sequence, determining the proper order for the learner, and also the order of their arriving at perfection. We proceed from the simple to the complex, from the independent to the dependent. Thus, mathematics relates to *quantity*, the most pervading, simple, fundamental, and independent attribute of the universe. The consideration of this attribute has therefore a natural priority; its laws underlie all other laws. As mathematics is at present understood, it has an abstract department, which treats of quantity in its most general form, or as applied to nothing in particular — including arithmetic, algebra, and the calculus — and a concrete or applied department — viz., *geometry*, or quantity in space or extension. It has been suggested that general mechanics, or the estimation of quantity in *force*, should be considered a second concrete

department. But usually mechanics ranks with the next fundamental science in order, called physics.

Natural philosophy has long been considered the name of a distinct department of science: the designation physics is now more common. This science succeeds mathematics, and precedes chemistry. Of all the fundamental sciences, it has the least unity, being an aggregate of subjects with more or less connection. Mechanics, hydrostatics, hydraulics, pneumatics, acoustics, astronomy, are all closely related; they represent the phenomenon of movement in *mass*, as applied to all the three states of matter, solid, liquid, and gas. The remaining subjects — heat, light, and electricity — together with the attractions and repulsions that determine cohesion, crystallization, etc., are described as relating to movement in the *molecule*. We have thus molar physics and molecular physics; and the tendency is now to treat the two separately.

Chemistry lies between physics and biology, reposing upon the one and supporting the other. It assumes all the physical laws, both molar and molecular, as known, and proceeds to consider the special phenomenon of the composition and decomposition of bodies considered as taking place in definite proportions, and leading to change of properties. The composition of a cup of tea from water, sugar, milk, and infusion of tea-leaf, is physical; the composition of marble from oxygen, carbon, and calcium, is chemical. In the one case, the properties of the separate ingredients are still discernible; in the other, these are merged and untraceable.

Biology, or the science of living organization, involves mathematical, physical, and chemical laws, in company with certain others, called vital. It is most usually expounded under the designations vegetable and animal physiology; and in the concrete departments, botany, zoölogy, and anthropology.

Psychology, or the science of mind, makes a wide transition, the widest that can be taken within the whole circle of the sciences, from the so-called material world, to the world of feeling, volition, and intellect. The main source of our knowledge of mind is self-consciousness; and it is only from the intimate connection of mind with a living organism, that the subject is a proper sequel to biology. Not until lately has any insight into mind been obtained through the consideration of the physical organ — the brain; so that psychology might have been placed anywhere, but for another consideration that helps to determine the order of the sciences — viz: that the *discipline*, or method, of the simpler sciences is a preparation for the more abstruse. Mathematics and physics especially are an admirable training of the intellect for the studies connected with mind proper, although the laws of physics may not of themselves throw any direct light on the successions of thought and feeling.

These five sciences embrace all the fundamental laws of the world, and, if perfect, their application would suffice to account for the whole course of nature. To a person fully versed in them, no phenomenon of the explained universe can appear strange; the concrete sciences and the practical sciences contain nothing fundamentally new. They constitute a liberal scientific education. It is not uncommon, however, to rank sociology, or the laws of man in society, as a sixth primary science following on psychology, of which it is a special development.

The practical sciences do not admit of any regular classification. They are as numerous as the separate ends of human life that can receive aid from science, or from knowledge scientifically constituted. Connected with mind and society, we have ethics, logic, rhetoric, grammar, philology, education, law, jurisprudence, politics, political economy, etc. In the manual and mechanical arts, there are navigation, practical mechanics, engineering, civil and military, mining and metallurgy, chemistry applied to dyeing, bleaching, etc.

The medical department contains medicine, surgery, midwifery, materia medica, medical jurisprudence. A science of living, or of the production of happiness by a skilled application of all existing resources, would be the crowning practical science.

Septuagint (*sĕp'tu-a-jint*). A Greek version of the Books of the Old Testament; so called because the translation is supposed to have been made by seventy-two Jews, who, for the sake of round numbers, are usually called the *seventy interpreters*. It is said to have been made at the request of Ptolemy Philadelphus, King of Egypt, about 280 years B. C. It is that out of which all the citations in the New Testament and the Old are taken. It was also the ordinary and canonical translation made use of by the Christian Church in the earliest ages; and is still retained in the Churches both of the East and West. According to the chronology of the Septuagint, there were fifteen hundred years more from the creation to Abraham than according to the present Hebrew copies of the Bible.

Shorthand. An art by which writing is abbreviated, so as to keep pace with speaking. Its great and general utility has been recognized in every age, and numberless systems have been devised to facilitate its acquirement. It was practiced by the ancients for its secrecy as well as for its brevity, and a work is extant on the art, which is ascribed to Tiro, the freedman of Cicero. The first English treatise on stenography, in which marks represent words, was published in 1588, by Timothy Bright, M. D., under the title, "Characterie: an Art of Short, Swift, and Secret Writing by Character." In 1837, appeared Pitman's "Phonography" — the first really popular system. Melville Bell, following in the path marked out by Pitman, founded his system on the sounds of the language. The first sketch appeared in 1849; in 1852, the first complete edition, under the title "Semi-Phonography." Shorthand is now largely practiced in both the United States and England, and has extended its benefits to many classes besides that of the professional reporter. This is due chiefly to the excellence of Pitman's system and to his activity in disseminating its principles. The existence of two styles of phonography, one adapted for letter writing and the other for reporting — the second, however, being

only an extension of the first, and not a new system in itself — has been the chief basis of the popularity of phonetic shorthand. Popular modifications of Pitman's system have been made in the United States by Graham, Burnz, and Munson.

Skeleton. A term which is popularly used to denote the system of hard parts forming the bony framework of the body. The skeleton of mammalia consists of an axial portion which comprises the skull, the vertebral column, the sternum and ribs, and an appendicular portion consisting of the limbs. The skull consists mainly of the cranium, which is the strong bony case or frame which encloses the brain, and affords support and protection to the organs of smell, taste, sight, and hearing. To the inferior surface of the cranium are suspended the mandible, or lower jaw, and also a group of skeletal structures termed the hyoidean apparatus, which supports the tongue, etc. The vertebral or spinal column consists of a series of bones called vertebræ, arranged in close connection with each other on the dorsal side of the neck and trunk. It generally extends posteriorly beyond the trunk to form the tail, and anteriorly it articulates with the skull. The number of distinct bones of which the vertebral column consists varies in different animals, the variation being mainly due to the development of the tail. The vertebræ differ in form in the different regions of the column, but they are nevertheless constructed on a common plan. The sternum consists of a series of bones placed longitudinally in the middle line of the ventral side of the thorax or chest, and connected on each side with the vertebral column by a series of long, narrow, and more or less flattened bones termed the ribs. The anterior limbs consist of the following bones: the humerus, or arm-bone; the radius and ulna, which together constitute the forearm; the carpal, or wrist bones; and the metacarpals and phalanges, or bones of the hand. The posterior limbs consist of the femur, or thigh bone; the tibia and fibula, or leg bones; the tarsal bones, forming the ankle; and the meta-tarsals and phalanges, constituting the bones of the foot.

Skin. The integument which invests and surrounds the exterior of the body. The skin of man consists of two fundamental layers, viz: the cuticle, or epidermis, and the cutis, dermis, or true skin. The cuticle, or epidermis, is a layer of epithelial cells; it differs in thickness in different parts of the body, is without blood-vessels and nerves, and is, therefore, quite devoid of sensibility. It may be divided into two groups of strata, a superficial and a deep stratum. The superficial one is what is usually termed the epidermis, in the more precise meaning of the word. The inner or deep layer is molded on to the true skin, and consists of softer, moister, and more rounded cells than the outer layer. It is sometimes called the Malphigian layer, or rete mucosum; and it is the seat of the coloring material or pigment of colored races, such as the negro. The cutis or dermis, or true skin, forms the more complex lower layer of the skin. It consists of densely-interwoven tissues, and is well supplied with blood-vessels and nerves. This layer contains the sudoriparous or sweat-glands, which excrete the perspiration, and also the sebaceous glands, which secrete oily matter, and the function of which it is to keep the skin soft and flexible. The papillæ of the skin consist of small conical processes on the surface of the cutis. The central portion of each papilla contains a group of blood-vessels and a nerve, and on the more sensitive parts of the skin touch-corpuscles are also present. Hair, nails, etc., are developed from skin. The skin is the organ of the sense of touch; it protects the superficial parts of the body; is an organ of respiration, excretion, and absorption; and regulates the temperature of the body.

Smithsonian Institution. A scientific institute in Washington, organized by Act of Congress in 1846, to carry into effect the provisions of the will of James Smithson, the founder. Smithson was a natural son of the Duke of Northumberland; was educated at Oxford, and was, in 1790, elected a Fellow of the Royal Society. He died at Genoa in 1829, leaving his property (worth $600,000) to his nephew, with the condition that if the latter died without issue the property was to go to the United States to found an establishment for the increase and diffusion of knowledge. In 1835, the nephew died childless, and in 1838, the sum of $515,169 was paid to the treasury of the United States. In 1846, the interest on this sum (the principal itself must remain untouched) was applied to the erection of a suitable building, with apartments for the reception and arrangement of objects of natural history, including a geological and mineralogical cabinet, a chemical laboratory, a library, a gallery of art, and the necessary lecture-rooms. The building is one of the finest in Washington. A portion of the funds of the institution is devoted to scientific researches and the publication of works too expensive for private enterprise. Three series of publications are issued: "Contributions to Knowledge," "Miscellaneous Collections," and "Annual Reports." The institution contains the National Museum, which is, however, wholly maintained by the government. The institution is administered by regents, composed of the chief-justice of the United States, three members of the Senate, and three of the House of Representatives, with six other persons, not members of Congress. The president vice-president, and members of the cabinet for the time being have the position of governors or visitors of the institution, the president being *ex officio* at the head.

Stars, The, are mostly suns, but being, the nearest of them, at a distance from us more than 500,000 times our distance from the sun, are of a size we cannot estimate, but are believed to be 300 times larger than the earth; they are of unequal brightness, and are, according to this standard, classified as of the first, second, down to the sixteenth magnitude; those visible to the naked eye include stars from the first to the sixth magnitude, and number 3,000, while 20,000,000 are visible by the telescope; of these in the Milky Way alone there are 18,000,000; they are distinguished by their colors as well

as their brightness, being white, orange, red, green, and blue, according to their temperature and composition; they have from ancient date been grouped into constellations of the northern and the southern hemispheres and of the zodiac, the stars in each of which being noted by the Greek letters, according to their brightness.

Stomach. In comparative anatomy, a membranous sac, formed by a dilation of the alimentary canal, in which food is received and subjected to the processes of digestion. The human stomach is an elongated, curved pouch, from ten to twelve inches long, and four or five inches in diameter at its widest part, lying almost immediately below the diaphragm, nearly transversely across the upper and left portion of the abdominal cavity, and having the form of a bagpipe. It is very dilatable and contractile, and its average capacity is about five pints. The food enters the stomach through the œsophagus by the cardia or cardiac orifice, and after having been acted on by the gastric juice, is passed on in a semi-fluid or pulpy state through the pylorus into the small intestines. Owing to the recent improvements in electrical apparatus, the physiology and pathology of the human stomach in life is becoming much better known. Medical electricians have recently devised a plan by which the interior of the human stomach may be illuminated for examination. The patient is laid on the operating table and a slender tube, carrying a glass bead on its end, is introduced into the stomach. A small light inside the bead is supplied by fine wires running out through the tube and connected to a small battery. The interior of the stomach is plainly lighted and all its parts are brought into view by a small movable mirror at the end of the tube.

Sun. The central orb of the solar system that around which revolve the earth and the other planets. The sun appears to be a perfect sphere, with a diameter of 866,900 miles; its mean density is about one-fourth, taking that of the earth as one; its mean distance from the earth is taken as 93,000,000 miles. It rotates on its own axis; this axis of rotation being inclined to the ecliptic at an angle of 82° 40′; and its rotation period is variously estimated at from twenty-five to twenty-eight days. The mass of the sun is about 750 times that of all the other members of the solar system combined, and the center of gravity of the solar system lies somewhere in the sun, whatever may be the relative positions of the planets in their orbits. The dark spots on the sun discovered by Galileo have been shown to be hollows, and their depth has been estimated at from 3,000 to 10,000 miles. The spots are very changeable in their figure and dimensions, and vary in size from mere points to spaces of 50,000 miles or more in diameter. It is from observations of these spots that the sun's rotation on its axis has been calculated. The frequency of sun spots attains a maximum every ten and a half years, the number of spots falling off during the interval to a minimum, from which it recovers gradually to the next maximum. This periodicity has been thought to be intimately connected with the meteorological phenomena observed on the earth, especially with the rainfall. Spots are called *maculæ*, brighter portions of the sun are called *faculæ*, and the lesser markings are called *mottlings*. The sun is now generally believed to be of gaseous constitution, covered with a sort of luminous shell of cloud formed by the precipitation of the vapors which are cooled by external radiation. This dazzling shell is termed the *photosphere*. The spots are supposed to be cavities in this cloud-layer, caused by the unequal velocities of neighboring portions of the solar atmosphere. Zöllner, who considers the body of the sun to be liquid, sees therein slags or scoriæ floating on a molten surface, and surrounded by clouds. It is estimated that the sun's radiation would melt a shell of ice covering its own surface to a depth of between thirty-nine and forty feet in one minute, but the temperature of the surface has not yet been ascertained. It is evident, however, that the temperature and radiation have remained constant for a long period. The photosphere is overlaid by an atmosphere which is shown by the spectroscope to contain nearly all the materials which enter into the composition of the sun. The region outside the photosphere in which these colored prominences are observed has been called the *chromosphere*, which has an average depth of from 3,000 to 8,000 miles. The incandescent hydrogen clouds stretch out beyond this to altitudes of 20,000 to 100,000 miles, and jets of chromospheric hydrogen have been observed to reach a height of 200,000 miles in twenty minutes, and disappear altogether within half an hour. Outside the chromosphere, extending very far out from the sun, is the *corona*, an aurora of light observed during total eclipses. The amount of light sent forth by the sun is not exactly measurable, but the amount of heat has been pretty accurately computed, and it is equivalent in mechanical effect to the action of 7,000 horse-power on every square foot of the solar surface, or to the combustion on every square foot of upwards of thirteen and one-half hundred pounds of coal per hour.

Theology is the science which treats of the existence of God, his attributes, and the Divine will regarding our actions, present condition, and ultimate destiny. In reference to the sources whence it is derived theology is distinguished into *natural* or *philosophical* theology, which relates to the knowledge of God from His works by the light of nature and reason; and *supernatural*, *positive*, or *revealed theology*, which sets forth and systematizes the doctrines of the Scriptures. With regard to the contents of theology it is classified into *theoretical theology* or *dogmatics*, and practical theology or ethics. As comprehending the whole extent of religious science, theology is divided into four principal classes, *historical*, *exegetical*, *systematic*, and *practical theology*. Historical theology treats of the history of Christian doctrines. Exegetical theology embraces the interpretation of the Scriptures and Biblical criticism. Systematic theology arranges methodically the great truths of religion. Practical theology consists of an exhibition, first, of precepts and directions; and, secondly, of the motives from which we should be expected to

comply with these. *Apologetic* and *polemic* theology belong to several of the above-mentioned four classes at once. The *Scholastic theology* attempted to clear and discuss all questions by the aid of human reason alone.

Theosophy, according to its etymology, is the science of divine things. At the present day the term is applied to the tenets of the Theosophical Society, founded in New York in 1875 by Madame Blavatsky and others, the objects of which are: to form the nucleus of a universal brotherhood of humanity, to promote the study of Eastern literature and science, and chiefly to investigate unexplained laws of nature, and the psychical powers of man, and generally the search after divine knowledge — divine applying to the divine nature of the abstract principle, not to the quality of a personal God.

Unitarian Church. A communion comprising those who maintain that God exists in one person only. The name Unitarian is applied specially to a small Christian sect whose distinguishing tenet is the unity as opposed to the trinity of the Godhead. In the more general sense the name of course includes the Jews and the Mohammedans. From the middle of the Second Century to the end of the Third Century there was a succession of eminent Christian teachers — Monarchians — who maintained, against the ecclesiastical doctrine of the Logos, the undivided unity of God. The great theological struggle which followed in the Fourth Century between the Arians and the Athanasians may be regarded as a phase of the Unitarian controversy. Unitarians of all shades of opinion are agreed in rejecting the orthodox doctrines of the Trinity, the vicarious atonement, the deity of Christ, original sin, and everlasting punishment — as both unscriptural and irrational.

United Brethren in Christ. A denomination of evangelical Christians founded through the labors of Rev. William Otterbein, a minister of the German Reformed Church. His meeting with Rev. Martin Boehm, a minister of the Mennonite Society, about 1766, marked the beginning of a wide-spread revival, in which he and Boehm were the recognized leaders. Preachers were licensed, the Church was to a certain extent brought under system, conferences were held in 1789 and 1791, but the religious movement did not take the form of a Church till 1800. At this time the name of the denomination was definitely fixed, and Otterbein and Boehm were chosen bishops. Thereafter conferences were held yearly. The Church is Arminian in doctrine, aggressive in work, and characterized by a strong reform spirit, from the first opposing slavery, intemperance, and secret societies.

Universalists. A religious sect who maintain as a fundamental article of their belief that saving grace is given to all men, without reserve, and that its operation is *universal* — whence their denomination. Universalists, it may be observed, generally differ from the prevalent bodies of Christians in other important doctrines, though it is not because of such differences that they have received their name, nor is it necessary to merit the name that one should share these differences. Most of them agree with Unitarians — but there are eminent examples to the contrary — in rejecting the doctrine of the Trinity; they are also Pelagian in the matter of original sin, and reject the notion that the new birth is something supernatural. Universalism, as a mode of belief, is of very ancient origin; but it was in 1770 that the Rev. John Murray became a propagator of Universalist views, and some years later Universalism, as a sect, was founded in the United States by Hosea Ballou, a learned divine and indefatigable preacher.

X-Rays. By discharging a high-tension electric current through a glass vacuum tube, invisible rays are obtained. These produce fluorescence upon striking certain substances and possess the power of penetrating opaque bodies and of acting upon a photographic plate. Discovered by Röntgen in 1895, their remarkable nature and properties have since been successfully investigated and explained by Thomson, Laue, the Braggs, Moseley, and others. Their practical use in photographing the skeleton and the internal organs of the body has proved of great value in medicine and surgery.

Young Men's Christian Association. An organization founded in London by George Williams in 1844. Its primary object was the holding of religious meetings in business houses in the center of London. The movement grew rapidly and soon sought to promote not only the spiritual welfare of young men, but also their social, mental, and physical improvement. In 1915 the associations throughout the world, 8906 in number, enrolled a membership of 1,066,765. In 1921 the organization in North America reported 2120 associations with a membership of 935,581. A national war work council was organized in April, 1917, to promote the welfare of the army and navy in America and overseas. Within six months work was being conducted at more than 500 centers with upwards of 2000 secretaries in charge. To meet these extraordinary needs the Y. M. C. A. authorities in the United States asked for a fund of $35,000,000 to be used in war work. During a single week set aside for the purpose in November, 1917, contributions were received exceeding $50,000,000.

Young Women's Christian Association. An organization for the improvement of the religious, intellectual, social, and physical life of young women which dates its beginnings to the year 1855, during which Miss Emma Robarts formed the English Prayer Union and Mrs. Arthur Kinnaird opened the General Female Home and Training Institution in London. The first organization in the United States, the Ladies' Christian Association of New York City, was formed in 1858. The earliest student group, the Young Ladies' Christian Association of Normal University, was organized at Normal, Ill., in 1873. The World's Young Women's Christian Association was formed in 1894. At the world conference held at Stockholm in 1914 some 800 delegates from 18 countries represented a total membership of about 800,000. In the United States in 1921 there were 1,075 affiliated Y. W. C. A's, with 119 branches, enrolling a total membership of 559,000.

BEAVER
FLYING SQUIRREL
SABLE
PORCUPINE
PRAIRIE DOGS
RACCOON
SQUIRREL
OPOSSUM
FOX
AMERICAN BADGER
MANATEE

Alligator. A genus of saurian reptiles, natives of America and China. They differ from the true crocodiles in having a broader head, blunter nose, and cavities or pits in the upper jaw, into which the long canine teeth of the under jaw fit. The largest grow to the length of sixteen feet. The female lays from thirty to forty eggs in a low mound of sand, muck, or vegetable mould, where they are hatched by the heat of the sun or by the fermentation of the vegetable mass. The female watches the eggs until the young are hatched. (See Crocodile.)

American Badger. See **Badger.**

American Magpie. See **Magpie.**

Ant. An insect belonging to the same order as the bees and wasps. Like bees, the ants form communities, consisting of males, females, and workers. The males and females are at first winged, and are produced in great numbers at certain times of the year. They then leave the nest and take flight, in swarms, into the air where the fertilization of the females takes place. In a few hours they return to earth where the males soon die, and the females tear off their own wings and become the mothers of new colonies. The workers perform all the labor of the colony, feed the young, defend the nest and carry on war with other ant societies. Many singular habits and instincts of ants have been observed. Two of the most interesting are the instinct of making slaves, and that of milking, so to speak, the little plant lice. As regards the former, it is found that certain ants capture the pupæ of other species of ants (*i. e.*, when they are in the quiescent or pupa stage), and bring them up as slaves.

Antelope. In zoölogy, a genus of ruminating mammals, belonging to the hollow-horned family, and distinguished by the round, annulated form of their horns, which are unbranched, and by the grace and symmetry of their proportions. Externally, they very much resemble deer, from which, however, they are to be distinguished by various points of structure, such as the horns, which in the deer are solid and branched. Generally speaking, antelopes are gregarious, and unite in large flocks or herds. Africa may be considered the headquarters of the antelope. The species are numerous, and include the spring bok, hartebeest, gnu, eland, and gazelle, among others. The prong-horned antelope is found only in North America, and, although there is but a single species, the zoölogists have separated it into a separate family, *Antilocapridæ*. Two characteristics which distinguish it from other antelopes are the absence of dew claws, and the horns which are pronged and are shed every year.

Anura, Ecaudata, or **Salientia.** An order of amphibians characterized by the absence of a tail, and including the frogs and toads. In the Anura, the adult is destitute of gills and tail, and two pairs of limbs are always present; there are no ribs, and the skin is soft; the mouth is sometimes without teeth, but the upper jaw is usually provided with teeth, and, more rarely, both jaws; the hind limbs usually have the toes webbed for swimming, and are much larger than the fore limbs. In the adult anura the breathing is carried on by means of lungs; but, as there are no movable ribs, the process of breathing is somewhat peculiar—in fact, it is one of swallowing, and it is possible to suffocate a frog simply by holding its mouth open. The moist and delicate skin, however, also performs an important part in respiration. The young, or larvæ, of frogs and toads are familiarly known as "tadpoles." The eggs are deposited in masses in water, and the young, when hatched, are fish-like in form, with a broad, rounded head and a compressed tail. There are at first two sets of gills, one external and the other internal; but the outer ones disappear very shortly after birth, and the inner ones are subsequently replaced by lungs. The hind limbs first make their appearance, and are followed by the fore limbs; as the limbs become fully developed the tail gradually disappears. In both the common frog and the toad the tongue is fixed to the front of the mouth, while it is free behind, so that it can be protruded for some distance from the mouth. The tree frogs have the toes of all the feet furnished with terminal suckers, by the help of which they climb with ease; they are mostly found in America, but one species is European.

Ape. A name somewhat loosely employed, in common language, as a synonym for monkey, but, in its more restricted sense, applicable only to the anthropoid apes, the highest section of the order *Quadrumana*, or four-handed mammals; those which make a nearer approach, in anatomical structure, to the human species than do any other animals. The group of apes includes the gibbons, orang-utans, Chimpanzees, and gorillas. They are all devoid of tails and cheek pouches; the arms are remarkable for their extreme length, and the hind limbs for their remarkable shortness. On the ground these animals are awkward and waddling. They tread rather on the outer edge of the sole than on the sole itself, which imparts to their hind limbs a bowed appearance, while their long fore limbs are employed somewhat after the manner of crutches, on the half-closed fists of which, planted firmly on the ground, they rest their bodies. The great length of their arms, on the other hand, gives these animals peculiar advantages in their native forests, and they climb to the topmost branches, or pass from tree to tree, with surprising facility. The apes in general appear to be more grave, and less petulant and mischievous, than the ordinary monkey.

Apple. The name applied to a tree belonging to the rose family of plants, as well as to its

fruit. There are two real types, the common apple, *Pyrus malus*, and the crab apple, *Pyrus baccata*, from which all the cultivated apples of the world have developed. The fruit of the apple is a pome, consisting of a thickened fleshy calyx, inclosing the horny cells forming the core, and covering the true seeds. The apple has been known since prehistoric times. The genus extends around the world in the north temperate zone. The crab apple is of value for making jelly, but chiefly because it transmits its hardiness to its crosses with the common apple, producing a fruit of good quality that can endure northern climates. America is the chief apple growing country, producing, in 1899, 175,397,626 bushels, worth over $83,000,000. The export trade to Europe is constantly increasing. The apple is used principally for eating out of hand, for cooking, and for making cider, vinegar, and brandy.

Baboon. The name applied in popular language to members of the family *Cercopithecidæ* of the four-handed mammals. The baboons rank next to the anthropoid apes in the ascending series of animals, and are distinguished externally by a short tail, large callosities on the buttocks, limbs of nearly equal length, and by the large head, which has a muzzle resembling that of a dog, the nostrils being situated at its extremity. They are large, strong animals, extremely unattractive in outward appearance, and of great ferocity. More than any other of the monkeys, they employ the fore limbs in terrestrial progression, running upon all fours with the greatest ease. They live upon the ground, travel in troops of ten or more, and steal grain and fruit with great boldness. The baboons are all inhabitants of Africa. They attain a height of about two feet, and an average specimen weighs about forty-five pounds. The mandrill has a brilliant blue and scarlet muzzle and a yellow beard on its chin. The common baboon, a native of South Africa, is very often brought to Europe, and is that most usually seen in menageries and museums. It is of a uniform reddish-brown color, with black face and white eyelids.

Bacteria. (Gr. *bakterion*, a rod). A class of very minute microscopic organisms, often of a rod-like form, which are regarded as of vegetable nature, and as being the cause of putrefaction; they are also called *microbes* or *microphytes*. The genus *Bacterium*, in a restricted sense, comprises microscopic unicellular vegetable organisms without chlorophyll which multiply by transverse division of the cells. Species are found in all decomposing animal and vegetable liquids. Bacteria are of various shapes. The *bacillus* forms rods which divide into two; these increase in length and divide again. *Micrococcus* consists of single rounded cells. *Streptococcus* forms chains of rounded cells. *Sarcinæ* form irregular cubes. *Spirillum* is spiral in form. While many forms of bacteria are harmless or even beneficial to man, others are known to be the cause of diseases which are contagious or infectious, such as scarlet fever, typhoid fever, tuberculosis, and many others.

Badger. A plantigrade, carnivorous mammal, allied both to the bears and to the weasels, of a clumsy make, with short, thick legs, and long claws on the forefeet. The common badger (*Meles vulgaris*) is as large as a middling-sized dog, but much lower on the legs, with a flatter and broader body, very thick, tough hide, and long, coarse, grizzly-gray hair. It inhabits the north of Europe and Asia. *Badger baiting*, or *drawing the badger*, is a barbarous sport formerly, and still to some extent, practiced in Europe generally as an attraction to public houses of the lowest sort. A badger is put in a barrel, and one or more dogs are put in to drag him out. When this is effected he is returned to his barrel, to be similarly assailed by a fresh set. The badger usually makes most determined and savage resistance. The American badger belongs to the genus *Taxidea*. It is intermediate in size between the skunk and the wolverine. It is of a sullen disposition, lives in burrows, and feeds on small ground mammals. Its home is the western part of the United States.

Balata. A reddish-brown gum yielded by *Mimusops balata*, a tree growing abundantly in British, French, and Dutch Guiana, Honduras, and Brazil. It is obtained in a milky state by tapping the tree, and hardening to a substance resembling gutta-percha, and used for similar purposes.

Balm of Gilead. The exudation of a tree, *Balsamodendron gileadense*, a native of Arabia Felix, and also obtained from the closely allied species *Balsamodendron opobalsamum*. The leaves of the former tree yield when bruised a strong aromatic scent; and the balm of Gilead of the shops, or balsam of Mecca or of Syria, is obtained from it by making an incision in its trunk. It has a yellowish or greenish color, a warm, bitterish, aromatic taste, and an acidulous, fragrant smell. It is valued as an odoriferous unguent and cosmetic. In the United States the *populus balsamifera* is called balm of Gilead tree.

Balsam. An aromatic, resinous substance, flowing spontaneously or by incision from certain plants. A great variety of substances pass under this name. But in chemistry the term is properly applied only to resins and oleoresins which contain cinnamic or benzoic acid or both. Balsam is soluble in alcohol and ether. The balsams are either liquid or more or less solid; as, for example, the balm of Gilead, and the balsams of copaiba, Peru, and Tolu. Benzoin, dragon's blood, and storax are not true balsams, though sometimes called so. The balsams are used in perfumery, medicine, and the arts.

Bamboo. The common name of the arborescent grasses belonging to the genus *Bambusa* or of allied genera. There are many species, belonging to the warmer parts of Asia, Africa, and America, and growing from a few feet to as much as one hundred feet in height and reaching a foot in diameter. The best known species is *Bambusa arundinacea*, common in tropical and sub-tropical regions. From the creeping underground rhizome, which is long, thick, and jointed, spring several round jointed stalks, which are generally straight and erect. The stems grow to their full height unbranched, but afterward throw out horizontal branches.

Some of the plants are armed with spines. The oval leaves, eight or nine inches long, are placed on short footstalks. The flowers grow in large panicles from the joints of the stalk. Some stems grow to eight or ten inches in diameter, and are so hard and durable as to be used for walking sticks, flutes, etc.; the plant is used for innumerable purposes in the East Indies, China, and other Eastern countries, Cottages are almost wholly made of it, also bridges, boxes, water pipes, ladders, fences, bows and arrows, spears, baskets, mats, paper, masts for boats, etc. The young shoots are pickled and eaten, or otherwise used as food; the seeds of some species are also eaten. The substance called *tabasheer* is a siliceous deposit that gathers at the internodes of the stems. The bamboo is imported into Europe and America as a paper material as well as for other purposes. One species of arundinaria forms the canebrakes of southern United States.

Banana. A plant of the genus *Musa*, natural order *Musaceæ*, being *Musa sapientum*, while the plantain is *Musa paradisiaca*. It is originally indigenous to the East Indies, and an herbaceous plant with an underground stem. The apparent stem, which is sometimes as high as thirty feet, is formed of the closely compacted sheaths of the leaves. The leaves are six to ten feet long and one or more broad, with a strong midrib, from which the veins are given off at right angles; they are used for thatch, basket making, etc., besides yielding a useful fiber. The spikes of the flowers may grow nearly four feet long, in bunches, covered with purple-covered bracts. The fruit is four to ten or twelve inches long, and one inch or more in diameter; it grows in large bunches, weighing often from forty to eighty pounds. The pulp is soft and of a luscious taste; when ripe it is eaten either raw or cooked. The banana is cultivated in tropical and sub-tropical countries, and is an important article of food. Manilla hemp is the product of a species of banana.

Banyan, or **Banian,** *Ficus bengalensis*. A tree of India, of the fig genus. The most peculiar feature of this tree is its method of throwing out from the horizontal branches supports which take root as soon as they reach the ground, enlarge into trunks, which extend branches in their turn, soon covering a prodigious extent of ground. A celebrated banyan tree has been known to shelter seven thousand men beneath its shade. The wood is soft and porous, and from its white, glutinous juice birdlime is sometimes prepared. Both juice and bark are regarded by the Hindoos as valuable medicines.

Baobab, or **Monkey-Bread Tree.** A tree belonging to the natural order (or sub-order) *Bombaceæ*, and the only known species of its genus, which was named after the naturalist Adanson. It is one of the largest of trees, its trunk sometimes attaining a diameter of thirty feet; as the profusion of leaves and drooping boughs sometimes almost hides the stem, the whole forms a hemispherical mass of verdure fifteen to sixty feet in diameter and sixty to seventy feet high. It is a native of western Africa, and is found also in Abyssinia; it is cultivated in many of the warmer parts of the world. The roots are of extraordinary length, a tree seventy-seven feet in girth having a taproot one hundred ten feet in length. The leaves are deep green, divided into five unequal parts, lanceolate in shape, and radiating from a common center. The flowers resemble the white poppy, having snowy petals and violet-colored stamens; the fruit, which is large and of an oblong shape, is said to taste like gingerbread, with a pleasant acid flavor. The wood is pale-colored, light and soft. The tree is liable to be attacked by a fungus, which, vegetating in the woody part, renders it soft and pith-like. By the negroes of the west coast these trunks are hollowed into chambers, and dead bodies are suspended in them. There they become perfectly dry and well preserved, without further preparation or embalming. The baobab is emollient and mucilaginous; the pulverized leaves constitute *lalo*, which the natives mix with their daily food to diminish excessive perspiration, and which is even used by Europeans in fevers and diarrhœas. The expressed juice of the fruit is used as a cooling drink in putrid fevers, and also as a seasoning for various foods.

Barbary Ape. A terrestrial species of ape, or tailless monkey, of the size of a large cat, remarkable for docility. It is grouped with the macaques. In color it is light yellowish-brown below with the naked parts of the face flesh colored. It inhabits Morocco, Algeria, and the Rock of Gibraltar, being the only European monkey, though probably not indigenous. It has been the "showman's ape" from time immemorial.

Barberry. A genus of shrubs, the common barberry having bunches of small, beautiful red berries, somewhat oval; serrated and pointed leaves; thorns, three to seven together, upon the branches, and hanging clusters of yellow flowers. The berries nearly approach the tamarind in respect of acidity, and when boiled with sugar make an agreeable preserve, rob, or jelly. They are also used as a dry sweetmeat, and in sugarplums or comfits; they are pickled with vinegar, and are used for the garnishing of dishes. The bark is said to have medicinal properties, and the inner bark and roots with alum yield a fine yellow dye. The shrub was originally a native of eastern countries, but is now generally diffused in Europe, as also in North America. In England it has been almost universally banished from hedgerows, from the belief that it causes rust on grain—a supposition supported by the fact that it carries on its leaves a yellow fungus, the "ædidium stage" of the common grain rust. Numerous other species belong to Asia and America.

Bark. The exterior covering of the stems of exogenous plants. It is composed of cellular and vascular tissue, is separable from the wood, and is often regarded as consisting of four layers: (1) The *epidermis* or *cuticle*, which, however, is scarcely regarded as a part of the true bark; (2) the *epiphlœum* or outer brown corky cellular layer of the true bark or cortex; (3) the *mesophlœum* or green middle layer, also cellular;

(4) an inner vascular layer, the *liber* or *endophlœum*, commonly called *bast*. Endogenous plants have no true bark. Bark contains many valuable products, as gum, tannin, etc.; cork is a highly useful substance obtained from the epiphlœum; and the strength and flexibility of bast makes it of considerable value. Bark used for tanning is obtained from oak, hemlock, species of acacia growing in Australia, etc. Angostura bark, Peruvian or cinchona bark, cinnamon, cascarilla, etc., are useful barks.

Bark, Peruvian. The bark of various species of trees of the genus *Cinchona*, found in many parts of South America, but more particularly in Peru, and having medicinal properties. It was formerly called *Jesuit's bark*, from its having been introduced into Europe by Jesuits. Its medicinal properties depend upon the presence of *quinine*, which is now extracted from the bark, imported, and prescribed in place of nauseous mouthfuls of bark.

Barley. One or more species of cereal plants yielding a grain used as food and also for making malt, from which are prepared beer, porter, and whisky. Barley has been known and cultivated from remote antiquity, and beer was made from it among the Egyptians. Excellent barley is produced in Britain. The species principally cultivated are *Hordeum distichon*, two-rowed barley; *Hordeum vulgare*, four-rowed barley; and *Hordeum hexastichon*, six-rowed, of which the small variety is the sacred barley of the ancients. The varieties of the four and six-rowed species are generally coarser than those of the two-rowed and adapted for a poorer soil and more exposed situation. Some of these are called *bere* or *bigg*. In Britain barley occupies about the same area as wheat, but in North America the extent of it as a crop is comparatively small, being in Canada, however, relatively greater than in the United States. Canadian barley is of very high quality. Barley is better adapted for cold climates than any other grain, and some of the coarser varieties are cultivated where no other cereal can be grown. Some species of the genus, three of which are natives of Britain, are mere grasses. Pot or Scotch barley is the grain deprived of the husk in a mill. Pearl barley is the grain polished and rounded and deprived of husk and pellicle. Patent barley is the farina obtained by grinding pearl barley. Barley water, a decoction of pearl barley, is used in medicine as possessing emollient, diluent, and expectorant qualities.

Barnacle. The name of a family of marine crustaceous animals always found attached to some object such as a ship's bottom, piles, or floating timbers. They have a partially segmented body surrounded by a mantle which is generally calcified and forms more or less of a shell. They have no heart, gills, or other organs of respiration. They feed on small marine animals, brought within their reach by the water and secured by their tentacula. Some of the larger species are edible. According to an old fable, these animals produced barnacle geese.

Barnacle Goose. A summer visitant of the northern seas, in size rather smaller than the common wild goose, and having the forehead and cheeks white, the upper body, bill, and neck black. A fable asserts that the crustaceans called barnacles (see preceding article) changed into geese, and various theories have been framed to account for its origin. Max Müller supposes the geese were originally called *Hiberniculæ* or Irish geese, and that barnacle is a corruption of this; but the resemblance of a barnacle to a goose hanging by the head may account for it. The Brent goose is also sometimes called the Barnacle goose, but the two should be discriminated.

Basalt. A well-known igneous rock occurring in the ancient trap and the recent volcanic series of rocks, but most abundantly in the former. It is a fine-grained, heavy crystalline rock, consisting of felspar, augite, and magnetic iron, and sometimes contains a little olivine. Basalt is amorphous, columnar, tabular, or globular. The columnar form is straight or curved, perpendicular or inclined, sometimes nearly horizontal; the diameter of the columns from three to eighteen inches, sometimes with transverse semispherical joints, in which the convex part of one is inserted in the concavity of another; and the height from five feet to one hundred fifty. The forms of the columns generally are pentagonal, hexagonal, or octagonal. When decomposed it is found also in round masses, either spherical or compressed and lenticular. These rounded masses are sometimes composed of concentric layers, with a nucleus, and sometimes of prisms radiating from a center. Fingal's Cave, in the island of Staffa, furnishes a remarkable instance of basaltic columns. The pillars of the Giant's Causeway, Ireland, composed of this stone, and exposed to the roughest sea for ages, have their angles as perfect as those at a distance from the waves. Basalt often assumes curious and fantastic forms, as for example, those masses popularly known as "Sampson's Ribs" at Arthur's Seat, Edinburgh, and "Lot" and "Lot's Wife" near the southern coast of St. Helena.

Bass. The name of a number of fishes of several genera, but originally belonging to the perch family, and found in both salt and fresh waters. *Morone labrax*, a typical European species, called also sea dace and, from its voracity, sea wolf, resembles somewhat the salmon in shape; it is much esteemed for the table, weighing about fifteen pounds. *Morone lineata*, or striped bass, an American species, weighing from thirty to ninety pounds, is much used for food, and is also known as rockfish. Both species occasionally ascend rivers, and attempts have been made to cultivate British bass in fresh-water ponds with success. Two species of black bass, American fresh-water fishes, are excellent as food and give fine sport to the angler. One of these is called the large-mouthed black bass, from the size of its mouth, the other the small-mouthed bass. Both make nests and take great care of their eggs and young. The great *Jewfish* or *black sea bass* of the California coast is one of the largest of the spiny-finned fishes. Specimens weighing over four hundred pounds have been caught at Santa Catalina, California, with rod and line.

Bat. One of the group of wing-handed, flying mammals, having the fore limb peculiarly modified so as to serve for flight, and constituting the order *Chiroptera*. Bats are animals of the twilight and darkness, and are common in temperate and warm regions, but are most numerous and largest in the tropics. The family *Vespertilionidæ* includes most of the common, small, naked-faced bats found in Europe and America. A common species found in the United States is the little red bat, *Lasiurus borealis*, which may be seen flitting about in the streets and among the trees at twilight. During the day it remains in caverns, in the crevices of ruins, hollow trees, and such-like lurking places, and flits out at evening in search of food, which consists of insects. Many bats are remarkable for having a singular nasal cutaneous appendage, bearing in some cases a fancied resemblance to a horseshoe. Two of these horseshoe bats occur in Britain. Bats may be conveniently divided into two sections: the insectivorous or carnivorous, comprising most of the European, African, and American species; and the fruit-eating, belonging to tropical Asia and Australia, with several African forms. An Australian fruit-eating bat, commonly known as the kalong or flying fox, is the largest of all the bats, some specimens measuring forty inches from wing tip to wing tip; it does much mischief in orchards. At least five species of South American bats are known to suck the blood of other mammals, and thence are called "vampire-bats" (though this name has also been given to a species not guilty of this habit). The best known is the javelin bat of the Amazon region. As winter approaches in cold climates bats seek shelter in caverns, vaults, ruinous and deserted buildings, and similar retreats, where they cling together in large clusters, hanging head downward by the feet, and remain in a torpid condition until the returning spring recalls them to active exertions. Bats bring forth one or two young, which, while suckling, remain closely attached to the mother's teats, which are two, situated upon the chest. The parent shows a strong degree of attachment for her offspring, and, when they are captured, will follow them, and even submit to captivity herself rather than forsake her charge.

Batrachia. See **Anura.**

Bean. A name given to several kinds of leguminous seeds and the plants producing them, probably originally belonging to Asia. They belong to several genera, particularly to *Vicia*, garden and field bean; *Phaseolus*, French or kidney bean; and *Dolichos*, Egyptian or black bean. The common bean of England, *Vicia vulgaris*, is cultivated both in fields and gardens as food for man and beast. There are many varieties, as the Mazagan, the Windsor, the long-pod, etc., in gardens, and the horse or tick bean in fields. The seed of the Windsor is fully an inch in diameter; the horse bean is much less, often not much more than half an inch in length and three-eighths of an inch in diameter. Beans are very nutritious, the dry seeds containing 59.6 per cent. of carbohydrates, and 22.5 per cent. of nitrogenous matter called legumin, analogous to the casein in cheese. The bean is an annual, from two to four feet high. The flowers are beautiful and fragrant. The kidney bean, French bean, or haricot, is the *Phaseolus vulgaris*, a well-known culinary vegetable. There are two principal varieties, annual dwarfs and runners. The beans cultivated in America and largely used as articles of food belong to the genus *Phaseolus*. The scarlet-runner bean (*Phaseolus multiflorus*), a native of Mexico, is cultivated on account of its long, rough pods and its scarlet flowers. St. Ignatius' bean is not really a bean, but the seed of a large climbing shrub, of the order *Loganiaceæ*, nearly allied to the species of *Strychnos* which produces *nux vomica*.

Bear. The name of several large plantigrade carnivorous mammals of the family *Ursidæ*. The teeth are forty-two in number, as in the dog, but there is no carnassial or sectorial tooth, and the molars have a more tubercular character than in other carnivora. The head is broad and massive, the nose prominent and mobile, and the tail very short. In temperate regions bears are unable to procure food in winter, and therefore hibernate or pass that season in a dormant condition. The European brown bear is a native of almost all the northern parts of Europe and Asia, and was at one time common in the British islands. It feeds on fruits, roots, honey, ants, and, in case of need on mammals. It sometimes reaches the length of seven feet, the largest specimens being found farthest to the north. It lives solitarily. In North America seventeen species of bear are known. The American black bear is the *Ursus americanus*, with black shining hair, and rarely above five feet in length. It is a great climber, is less dangerous than the brown bear, and is hunted for its fur and flesh. It is very amusing in captivity. The grizzly bear (*Ursus horribilis*) is an inhabitant of the Rocky mountains; it is a ferocious animal, sometimes nine feet in length, and has a bulky and unwieldy form, but is nevertheless capable of great rapidity of motion. The extinct cave bear of ancient Europe (*Ursus spelæus*) seems to have been closely akin to the grizzly. The polar or white bear (*Thalarctos maritimus*) is characterized by its flat head and comparatively long neck. It inhabits the shores and ice packs of the Arctic ocean. See **Polar Bear.**

Beaver. A quadruped of the order *Rodentia*, or gnawers, the only species of its genus. It is very widely distributed, being found in the northern parts of Europe, Asia, and America, nowadays most abundantly in the northern and thinly peopled parts of North America, dwelling in communities on the banks of rivers and ponds in forested regions. At one time immense numbers of these animals were killed for their fur, which was largely used in making hats, but in more recent times they have suffered less persecution on this account, their fur now not being held in high estimation. The beaver is about two feet in length from the nose to the root of the tail; its body is thick and heavy, large specimens weighing over forty pounds; the head compressed, and somewhat arched at the

front, the upper part rather narrow; the snout obtuse. The eyes are placed rather high in the head, and the pupils are rounded; the ears are short, elliptical, and almost concealed by the fur. The skin is covered by two sorts of hair, of which one is long, rather stiff, elastic, and of a gray color for two-thirds of its length next the base, and terminated by shining, reddish-brown points; the other is short, thick, tufted, and soft, being of different shades of silver-gray or light lead color. The hair is shortest on the head and feet. The hind legs are longer than the fore, and are completely webbed. The tail is ten or eleven inches long, flattened horizontally, and, except the part nearest the body, is covered with hexagonal scales.

Bee. A well-known family of insects, belonging to the order *Hymenoptera* an order which also includes the wasps, ants, and gall-flies. This family includes several genera of solitary bees among which are the mining bees that make their nests in the ground and carpenter bees that bore tunnels in the pith of plants or in solid wood. The social bees include our native bumblebees and the domestic honey bee which was originally a European species. The queen bumblebee lays her eggs on a little ball of pollen which she has deposited in a deserted mouse nest. From these eggs the young bees hatch and form a colony. In the autumn all the bees except the young queens perish. These pass the winter in some sheltered spot and found new colonies in the following spring. The honey bees produce the honey of commerce. During the greater part of the year the population of our hives is composed exclusively of two sorts of individuals, namely, the female or mother bee, called also the queen bee, and the workers, which are, properly speaking, females imperfectly developed. A third kind of individuals, the males, called also drones, are generally not met with except from May to July. The working bees constitute essentially the bee community; they are recognized by their small size, dull black color, and, above all, by the palettes and brushes with which the hind legs are furnished. The three pairs of legs, which are inserted in the thorax, or chest, of the bee, are its tools. The two hind legs are longer than the other pairs, and present on the exterior a triangular depression, resembling a palette, which is surrounded by stiff hairs, forming the borders of a sort of basket in which the insect deposits the pollen of flowers. To each of these hind legs is jointed a square expanded piece, which might be termed the ankle, smooth on the exterior, but having hairs on its interior surface, which has caused it to be named the brush, and which is employed in collecting the pollen. The lower lip of the worker is elongated into a highly specialized organ for procuring nectar from deep flowers. From this organ the nectar passes to the honey stomach of the bee when it is changed into honey and then regurgitated into the honey cells of the comb. The males, or drones, are broader and blunter than the working bees; they emit a buzzing sound, have no palettes, and no sting. The female, or queen, has a longer body than the workers, and the wings are shorter in proportion. The only part she has to play is that of laying eggs, and so she has no palettes or brushes. Only one queen lives in each hive, of which she is perfect sovereign, all the workers submissively obeying her. The number of males is scarcely one-tenth that of the working bees, and they live only about three months. The wax of which the cells of the honeycomb are constructed is secreted in little pockets situated in the abdomen, or belly, of the bee; but, in addition to wax, another substance, much resembling it, but not identical, called *propolis*, is elaborated from the resin which the bees collect from the buds of poplar and other trees, and use to cement crevices in the hive. Bee bread is made from the pollen of flowers and is brought in on the legs of the bees. The cells of the comb are hexagonal in shape, that is, having six equal sides—the most economical form as regards space—and are of two kinds, namely, store-cells, which are filled with honey, as a reserve store of food, and cradle-cells, in which the eggs are deposited. At a certain time of the year the queen leaves the hive, accompanied by the drones, and takes what is called her "nuptial flight" through the air. About forty-eight hours after her return to the hive she begins laying her eggs, at the rate of about two to four thousand a day. The eggs which are destined to develop into workers are first laid, then those which are to produce males. The eggs are not long in being hatched, and the larvæ, or caterpillars, which emerge from them are tender and fed by the workers. In five or six days the larvæ pass into the condition of pupa, or chrysalis, and in about seven or eight days after this the perfect insect is hatched. When a queen is desired, the workers break away the partitions between three neighboring cells containing worker eggs, and destroy two of the eggs. The larva which hatches from the remaining egg is fed upon a special food known as "royal jelly," and eventually becomes a queen.

Beet. A genus of biennial, fleshy-rooted plants of the natural family *Chenopodiaceæ*. About fifteen species of this genus are known, only one of which, *Beta vulgaris*, has much economic importance. This, the common beet of the garden, includes all the fleshy-rooted varieties, such as red beet (with a fleshy large carrot-shaped root), yellow beet, sugar beet, mangel-wurzel, etc. The beet requires a rich light soil, and being a native of the Mediterranean region is impatient of severe cold, requiring to be taken up in the beginning of winter and packed in dry sand, or in pits like potatoes, the succulent leaves having been first removed. Red beet is principally used at table, but if eaten in great quantity is said to be injurious. The beet may be taken out of the ground for use about the end of August, but it does not attain its full size and perfection until the month of October. A good beer may be brewed from the beet, and it yields a spirit of good quality. From the white beet the French, during the wars with Napoleon I., succeeded in preparing sugar. Since that time, with the increase of chemical and technical knowledge, the making

of beet sugar has become an important industry in France, Germany, Austria, Russia, Belgium, Holland, and some parts of the United States. A variety of *Beta vulgaris* known as Swiss Chard is grown as a leaf vegetable. The whole leaf is eaten for "greens" like spinach, or the petiole and broad fleshy midrib is cooked and eaten like asparagus.

Beetle. An insect of the order *Coleoptera* characterized by having a pair of horny wing covers called *elytra* which meet in a straight line on the back. Beneath the covers is a single pair of membraneous wings, the tips of which are often folded transversely. The mouth parts are formed for biting. The beetles form a numerous group, more than eleven thousand species being known in North America, exclusive of Mexico and Central America.

Begonia. An extensive genus of succulent-stemmed herbaceous plants, order *Begoniaceæ*, with fleshy oblique leaves of various colors, and showy monœcious flowers, the whole perianth colored. They readily hybridize, and many fine varieties have been raised from the tuberous-rooted kinds. From the shape of their leaves they have been called *elephant's ear*. Almost all the plants of the order are tropical, and they have mostly pink or red flowers.

Belladonna. A European plant (*Atropa belladonna*), or deadly nightshade. It is a native of Britain. All parts of the plant are poisonous, and the incautious eating of the berries has often produced death. The inspissated juice is commonly known as the extract of belladonna. It is narcotic and poisonous, but is of great value in medicine, especially in nervous ailments. It has the property of causing the pupil of the eye to dilate. The fruit of the plant is a dark brownish-black shining berry. The name signifies "beautiful lady," and is said to have been given from the use of the plant as a cosmetic.

Betel. (*Betle*). A species of pepper, *Chavica betel*, a creeping or climbing plant of the East Indies, native order *Piperaceæ*. The leaves are employed to inclose a piece of the areca or betel nut and a little lime into a pellet, which is extensively chewed in the East. The pellet is hot and acrid, but has aromatic and astringent properties. It tinges the saliva, gums, and lips a brick red, and blackens the teeth. The word betel is also applied to other species of *Chavica* which are used for the same purpose.

Bighorn. See **Sheep.**

Birch. (*Betula*). A genus of trees, order *Betulaceæ*, comprising only the birches and alders, which inhabit Europe, northern Asia, and North America. The common birch is indigenous throughout the north, and on high situations in the south of Europe. It is extremely hardy, and only one or two other species of trees approach so near to the north pole. *Betula alba* is a European variety, the oil of which is used in dressing Russia leather and imparts a pleasant odor to it. The wood of the birch, which is light in color, and firm and tough in texture, is used for chairs, tables, bedsteads, and the woodwork of furniture generally, also for fish cases and hoops, and for smoking hams and herrings, as well as for many small articles. In France wooden shoes are made of it. The bark is whitish, yellowish, or brown in color, smooth and shining, separable in thin sheets or layers. Fishing nets and sails are steeped with it to preserve them. In some countries it is made into hats, shoes, boxes, etc. In Lapland bread has been made from it. The dwarf birch, *Betula nana*, a low shrub, two or three feet high at most, is a native of all the most northerly regions. *Betula lenta*, the cherry birch of America, and the black birch, *Betula nigra*, of the same country, produce valuable timber, as do other American species. The largest of these is the yellow birch, *Betula lutea*, which attains the height of eighty feet. It is named from its bark being of a rich yellow color. The paper birch of America, *Betula papyracea*, has a bark that may be readily divided into thin sheets almost like paper. From it the Indian bark canoes are made.

Bird of Paradise. The name for members of a family of birds (*Paradiseidæ*) of splendid plumage, allied to the crows, inhabiting New Guinea and the adjacent islands. The family includes eleven or twelve genera and a number of species, some of them remarkably beautiful. The largest species, *Paradisea apoda*, has thick-set feathers like velvet pile, straw colored above and emerald green below. From under the shoulders spring tufts of orange plumes about two feet in length which the bird can elevate over the back at will. In the tail of most species are two narrow wire-like feathers sometimes elongated to the length of thirty inches. The feathers of the *Paradisea apoda* and *Paradisea minor* are those chiefly worn in plumes. These splendid ornaments are confined to the male bird.

Birds. A class of animals comprising all oviparous vertebrates which are clothed with feathers, furnished with a bill, and organized for flight. They have warm blood, and a complete double circulation. They are all bipeds; the body is inclined before their feet, the thighs are directed forward, and the toes elongated, forming a broad supporting base. The head and the neck are more or less prolonged, the latter very flexible, and generally containing twelve or more vertebræ. At present birds are divided into nineteen orders, only a few of which can be considered here. In the first order the foot has three toes before and one behind, all armed with long, strong, crooked, and more or less retractile talons, adapted to seize and lacerate living prey (except in vultures). This structure is associated with a strong, curved, sharp-edged and sharp-pointed beak, often armed with a lateral tooth; a very muscular body, and capability of rapid and long-continued flight. This order is termed *Raptores*. The second type of foot presents three toes before and one behind, and placed on the same level; slender, flexible, of moderate length, and provided with long, pointed, and slightly curved claws. A foot so constructed is especially adapted for the delicate operations of nest building, and for grasping and perching among the slender branches of trees; hence the order so characterized has been termed *Insessores*,

and, from including the smaller tribes of birds, *Passeres*. In the third type of foot the hinder toe is raised above the level of the three anterior ones; this lessens the power of perching. The other toes are strong, straight, and terminated by robust obtuse claws, adapted for scratching up the soil, and for running along the ground; the legs are for this purpose very strong and muscular. In this group are found the *Gallinæ* or scratching fowls like the hen and the grouse, and the *Columbæ* or pigeons. The modification by which birds are enabled to wade and seek their food in water along the margins of rivers, lakes, and estuaries is gained simply by elongating the bones of the leg (tibia and metatarsus) which are covered with a naked scaly skin. The three anterior toes are very long and slender with the fourth toe either on a level with the others or raised slightly with them. This group includes the *Paludicolæ*, the cranes and rails; the *Herodiones* or herons; and the *Limicolæ* or shore birds. Swimming birds or *Natatores* comprise several groups generally with webbed or flattened toes. These birds have the body protected by a dense covering of feathers, and a thick down next to the skin. The whole organization is especially adapted for aquatic life.

Bison. The name applied to two species of ruminants closely related to the true ox. One of these, the European bison, *Bison europæus*, is now found only in the forests of southern Russia and the Caucasus. The other, or American bison, improperly termed buffalo (*Bison americanus*) is now nearly extinct. In 1903 a herd of about six hundred inhabited the region southwest of Great Slave lake, and there were also thirty-four wild specimens in the Yellowstone park. In addition to these, about eleven hundred individuals were held in captivity in zoölogical collections in Europe, Canada, and the United States. These are all that are left of the millions which, as late as 1870, roamed the region between the Mississippi river and the Rocky mountains. The two species closely resemble each other, the American bison, however, being for the most part smaller, and with shorter and weaker hind quarters. The bison is remarkable for the great hump or projection over its fore shoulders, at which point the adult male is almost six feet in height, and for the long, shaggy, rust colored hair over the head, neck, and fore part of the body. In summer, from the shoulders backwards, the surface is covered with a very short fine hair, smooth and soft as velvet. The tail is short and tufted at the end. The flesh of the American bison can not be distinguished from beef, either in appearance or flavor. The American bison has been found to breed readily with common cattle, but the strain of buffalo blood thus introduced has not been permanent where the experiment has been made.

Bittern. The name of several wading birds, family *Ardeidæ* or herons, genus *Botaurus*. There are two British species, the common bittern, *Botaurus stellaris*, and the little bittern, *Botaurus minutus*, a native of the South, and only a summer visitor to Britain. Both, however, are becoming rare from the reclamation of the marshy grounds that form their favorite haunt. The American bittern, *Botaurus lentiginosus*, is about twenty-six inches in length, about forty-five in expanse of wing; general color, yellowish-brown, with spots and bars of black or dark brown; feathers on the breast long and loose; tail short; bill about three inches long. It is remarkable for its curious booming or bellowing cry, from which come the provincial names of "stake-driver" and "thunder-pumper." The eggs, greenish-brown in color, are four or five in number. The little bittern, *Ardetta exilis*, is about a foot in length and more highly colored than its larger relative.

Blackbird (*Turdus merula*), called also the *merle*, a well-known species of thrush, common in Britain and throughout Europe. It is larger than the common thrush, its length being about eleven inches. The color of the male is a uniform deep black, the bill being an orange yellow; the female is of a brown color, with blackish-brown bill. The American blackbirds belong to the family *Icteridæ* and include several well-known species. The largest of these is the grackle or crow blackbird, a purple-black, or bronze-black colored bird a little larger than a robin. It nests by preference in evergreen trees, or in cities on lofty buildings. The red-winged blackbird is smaller than the grackle and has a tuft of scarlet and white feathers on each shoulder. It frequents marshes, nesting on low bushes or in tufts of high grass. The cowbird or cow blackbird is about the size of the redwing. It is deep black with a brown head and neck. It associates with cattle which, in grazing, stir up insects upon which the bird feeds. It lays its eggs in the nests of other birds who hatch and rear its young, often to the detriment of their own.

Bloodhound. A variety of hound or hunting dog with long, smooth, pendulous ears, remarkable for its keenness of scent which has been developed by long and careful breeding. Through this abnormally developed sense it is able to follow the track of a man or other animal, even though the trace is old, obscure, or partly effaced by the tracks of other creatures. Bloodhounds were formerly used in southern United States to track fugitive slaves, and are still used by police authorities to trace fugitives and missing people.

Bluebird. A small bird of the thrush family *Sialia sialis*, very common in the United States. The upper part of the body is blue, and the throat and breast of a dirty red. It makes its nest in the hole of a tree or in the box that is so commonly provided for its use by the friendly farmer. The bluebird is the harbinger of spring to the Americans; its song is cheerful, continuing with little interruption from March to October, but is most frequently heard in,the serene days of the spring. It is also called blue robin or blue redbreast, and is regarded with the same sort of sentiments as the robin of Europe.

Bluefish (*Pomatomus saltatrix*). A fish common on the eastern coasts of America, allied to the mackerel, but larger, specimens often reaching a weight of ten to fifteen pounds, and much esteemed for the table. It is very destructive to other fishes. It is also called horse mackerel, greenfish, skip-jack, etc.

Boa. A non-venomous snake of the family *Boidæ*, which also includes pythons and anacondas. The boa constrictor of South America is a typical individual of this group. A full-grown specimen is about twelve feet long. It has a prehensile tail by which it suspends itself, head downward, from a tree while waiting for its prey. It feeds mostly upon birds and small mammals. When one of these comes within reach, the boa seizes it with its jaws by a quick darting movement of the head, and instantly throws about its victim a fold of the upper part of the body, enveloping and crushing it. After the prey is dead, the boa coats it with saliva and swallows it, a process which sometimes takes several hours. While digestion is going on, a process which may require one or more weeks, the snake is sluggish and torpid. Boas are reputed to have swallowed deer, young cattle, and even horses, but such stories lack verification. By reason of the structure and loose articulation of the jaws, common to other snakes, the boa is able to swallow creatures larger than its own head, but it is extremely unlikely that it could swallow a horned mammal or a man.

Boll-Weevil. The name applied to various insects which attack the cotton plant. The most destructive of these, the Mexican boll-weevil (*Anthonomus grandis*), was formerly confined chiefly to Central America and the West Indies. About 1888 it reached Matamoras, Mexico, and soon after appeared across the Rio Grande near Brownsville whence it spread throughout the cotton belt of Texas, causing enormous damage. The adult insect, a long-snouted, grayish weevil, somewhat less than a fourth of an inch long, punctures the bolls in which it lays its eggs. Upon hatching, the larvæ feed upon the soft tissues of the buds and bolls. The mature larvæ pupate within the bolls. After hibernating, chiefly in old bolls, the adult weevils appear about blossoming time. The most effective protection is afforded by early planting in wide rows to admit the sunshine, by frequent cultivation, and by burning or plowing under affected plants early in autumn.

Boneset, or **Thoroughwort.** (*Eupatorium perfoliātum*). A useful perennial plant, indigenous to America, and easily recognized by its tall stem, four or five feet in height, passing through the middle of a large double hairy leaf, and surmounted by a broad, flat corymb of white flowers. It is much used as a domestic medicine in the form of an infusion, having tonic and diaphoretic properties.

Bony Pike, or **Garfish.** A remarkable order of fishes inhabiting North American lakes and rivers, and one of the few living forms that now represent the order of ganoid fishes so largely developed in previous geological epochs. The body is covered with diagonal whorls of smooth enameled scales, so hard that it is impossible to pierce them with a spear. The common long-nosed garfish attains the length of five feet, and is easily distinguished by the great length of its jaws. The short-nosed garfish resembles the common garfish, but has shorter jaws. The alligator gar of southern United States attains a length of six feet and has a head resembling an alligator.

Bower Bird. A name given to certain Australian birds, members of the bird of paradise family, from a remarkable habit they have of building bowers to serve as places of resort. The bowers are constructed on the ground, and usually under overhanging branches in the most retired parts of the forest. They are decorated with variegated feathers, shells, small pebbles, bones, etc. At each end there is an entrance left open. These bowers do not serve as nests at all, but seem to be places of amusement and resort, especially during the breeding season. The *Satin bower bird* is so called from its beautiful glossy plumage, which is of a black color. Another common species is the *Spotted bower bird*, which has pink collar-like markings on the necks of the males, and is the most lavish of all in decorating its bowers.

Box Tree. A shrubby evergreen tree, twelve or fifteen feet high, order *Euphorbiaceæ*, a native of England, southern Europe, and parts of Asia, with small oval and opposite leaves, and greenish, inconspicuous flowers, male and female on the same tree. It was formerly so common in England as to have given its name to several places—Boxhill, in Surrey, for instance, and Boxley, in Kent. The wood is of a yellowish color, close grained, very hard and heavy, and admits of a beautiful polish. On these accounts it is much used by turners, wood carvers, engravers on wood (no wood surpassing it in this respect), and mathematical-instrument makers. Flutes and other wind instruments are formed of it. The box of commerce comes mostly from the regions adjoining the Black sea and Caspian, and from Spain and Portugal. Boxwood is also obtained from Minorca, but it is of inferior quality. In gardens and shrubberies box trees may often be seen clipped into various formal shapes. There is also a dwarf variety reared as an edging for garden walks and the like.

Bramble. The name commonly applied in science to the genus *Rubus* of the order *Rosaceæ* and including the blackberries, raspberries, mulberries, and dewberries. In England and Scotland the word is used to designate the native blackberry, *Rubus fruticosus*, which is there a wild plant of little economic importance. The fruit of this species ripens in the autumn.

Brazilwood. A kind of wood yielding a red dye, obtained from several trees of the genus *Cæsalpinia*, natives of the West Indies and South America. The best kind is *Cæsalpinia echinata*; other varieties are *Cæsalpinia brasiliensis*, *Cæsalpinia crista*, and *Cæsalpinia sappan*—the last being a native of the East Indies. The wood is hard and heavy, and as it takes on a fine polish it is used by cabinet makers for various purposes, but its principal use is in dyeing red. The heart wood is used for this purpose. The dye is obtained by reducing the wood to powder and boiling it in either alcohol or water, when the fluid receives the red coloring principle, which is a crystallizable substance called brazilin. The color is not permanent unless fixed by suitable mordants.

Breadfruit. A large globular fruit, about the size of a child's head, marked on the surface with irregular six-sided depressions, and containing a white and somewhat fibrous pulp. When ripe the fruit becomes juicy and yellow. The tree that produces it grows wild in Otaheite and other islands of the South Seas, whence it was introduced into the West Indies and South America. It is about forty feet high, with spreading branches growing from the top of a slender stem, and large, bright green leaves deeply divided into seven or nine spear-shaped lobes. The fruit is generally eaten immediately after being gathered, but is also often prepared so as to keep for some time either by baking it whole in close underground pits or by beating it into paste and storing it underground, when a slight fermentation takes place. The eatable part lies between the skin and the core, and is somewhat of the consistency of new bread. Mixed with cocoanut milk it makes an excellent pudding. The inner bark of the tree is made into a kind of cloth. The wood is used for the building of boats and furniture. The *Jack*, much used in India and Ceylon, is another member of this genus.

Breadnuts. The seeds of the *Brosimum alicastrum*, a tree of the same order as the breadfruit. The breadnut tree is a native of Jamaica. Its wood, which resembles mahogany, is useful to cabinet makers, and its nuts make a pleasant food, in taste not unlike hazelnuts.

Brussels Sprouts. One of the cultivated varieties of cabbage, having an elongated stem two to five feet high, with small, clustering, green heads like miniature cabbages. They are cultivated in great quantities near Brussels, as well as in other parts of the world.

Buckwheat, or **Brank.** A plant with branched herbaceous stem, somewhat arrow-shaped leaves, and purplish-white flowers, growing to the height of about thirty inches, and bearing a small triangular grain of a brownish-black without and white within. The shape of its seeds gives it its German name *Buchweizen* "beech wheat", whence the English name. The plant is said to have been first brought to Europe from Asia by the crusaders, and hence in France is often called Saracen corn. It grows on the poorest soils. It is cultivated in China and other eastern countries as a bread corn. In Europe buckwheat has been principally cultivated as food for oxen, swine, and poultry; but in Germany it serves as an ingredient in pottage, puddings, and other food, and in America buckwheat cakes are common.

Buffalo. See **Bison.**

Bulldog. A variety of the common dog, remarkable for its short, broad muzzle, and the projection of its lower jaw, which causes the lower front teeth to protrude beyond the upper. The head is massive and broad; the lips are thick and pendulous; the ears pendent at the extremity; the neck robust and short; the body long and stout; the shoulders wide, and the legs short and thick. The bulldog is a slow-motioned courageous animal, better suited for savage combat than for any purpose requiring activity and intelligence. For this reason it is often employed as a watchdog. It was formerly used—as its name implies—for the barbarous sport of bull baiting. The bull terrier was originally from a cross between the bulldog and the terrier. It is smaller than the bulldog, lively, docile, and very courageous.

Bullfrog. The largest species of frog found in North America, seven to eight inches long, of a greenish-brown color, usually spotted with black. These frogs live in stagnant water, and utter a low croaking sound resembling the lowing of cattle, whence the name.

Bullhead. The popular name of certain fishes of the families *Siluridæ* and *Cottidæ*. In America this name is given to certain members of the catfish order, particularly to the "bullpout", *Amiurus nebulosus*. They live by preference in still, muddy water, feed on worms, crustaceans, and insects, and are easily taken with a hook. The flesh is palatable and remarkably free from bones.

Bustard. A bird of the old world belonging to the family *Otidæ*, a group intermediate between plovers and cranes. The great bustard is the largest European bird, the male often weighing thirty pounds, with a breadth of wing of six or seven feet. The bustard is now extinct in Britain, but abounds in the south and east of Europe and the steppes of Russia, feeding on green corn and other vegetables, and on earthworms. Its flesh is esteemed for food. All the species run fast, and take flight with difficulty. The little bustard occasionally visits Britain. The Australian species is a magnificent bird highly prized as food.

Butterfly. The butterflies belong to the order *Lepidoptera* or scaly-winged insects. The antennæ terminate in club-shaped knobs. They fly only by day, and when at rest they hold their wings erect above the back. One of the most remarkable and interesting circumstances connected with these beautiful insects is their series of transformations before reaching a perfect state. The female butterfly lays a great quantity of eggs, which produce larvæ, commonly called caterpillars. After a short life these assume a new form, and become chrysalids or pupæ. These chrysalids are attached to other objects in various ways, and are of various forms; they often have brilliant golden or argentine spots. Within its covering the insect develops, to emerge as the active and brilliant butterfly. These insects in their perfect form suck the nectar of plants, but take little food, and are all believed to be short lived, their work in the perfect state being almost entirely confined to the propagation of the species.

Buzzard. Properly large raptorial birds of the genus *Buteo*, including both American and European species. In America *Buteo borealis*, the red tailed hawk, is the largest, reaching a length of twenty to twenty-three inches, and measuring nearly four feet from tip to tip of wing. The red shouldered hawk, *Buteo linearis*, is nearly as large and has similar habits. Both are called "hen hawks". *Buteo latissimus* is another species found in the Adirondack mountains. The food of hawks consists chiefly of frogs, toads, mice, and other small mammals

and insects. Hawks also invade the poultry yard, and for that reason are considered harmful; but on the whole they are more beneficial than harmful. For **Turkey Buzzard,** see **Turkey Vulture.**

Cabbage. The popular name of various species of cruciferous plants of the genus *Brassica,* and especially applied to the plain-leaved, heading, garden varieties of *Brassica oleracea,* cultivated for food. The wild cabbage is a native of the coasts of Britain, but is also common on other European shores. The kinds most cultivated are the common smooth-leaved cabbage, of which there are green and red varieties and the wrinkled-leaved or *Savoy.* The common cabbage forms its leaves into heads or balls, the inner leaves being blanched. The tree or cow cabbage is grown for cattle, branching and growing when in flower to the height of ten feet. The garden sorts form valuable culinary vegetables, and are used at table in various ways.

Cabbage Rose. A species of rose (*Rosa centifolia*) of many varieties, supposed to have been cultivated from ancient times, and from its fragrance eminently fitted for the manufacture of rosewater and attar. It has a large, rounded, and compact flower. Called also *Provens rose.*

Cacao, or **Cocoa.** The seeds of a plant known as *Theobroma cacao* (or "Food of the Gods," as Linnæus named the tree), a native of the West Indies and of tropical America, and cultivated in Asia and Africa. It is a small tree, seldom more than sixteen or eighteen feet high, with large oblong leaves, and clusters of flowers which have rose-colored sepals and yellowish petals. Its fruits vary from six to ten inches in length, and are shaped like a banana or cucumber. Each fruit contains numerous seeds which are the cocoa beans of commerce. The seeds are oval, and about as large as an olive. When gathered, the fruit is first fermented to remove the pulp. To prepare them for use they are roasted, and then bruised to loosen their skins which are removed by fanning. A part of the fat is removed and sold as cocoa butter. The seed lobes, commonly called "cocoa nibs," are next crushed and ground between rollers, which reduces them to a uniform pasty consistence. This paste, when sweetened, flavored with vanilla or cinnamon, and dried, constitutes chocolate. Cocoa contains an active principle called *theobromine,* resembling caffeine, the alkaloid in tea and coffee. Cocoa must not be confounded with *cuca,* or *coca,* a plant chewed by the Indians of South America.

Cactus. A Linnæan genus of plants, now used as a name for any of the *Cactaceæ,* a natural order of dicotyledons, otherwise called the Indian fig order. The species are succulent shrubs, with minute scale-like leaves (except in the genus *Pereskia,* tree cactus, with large leaves), or with bristles and spines on the stems instead of leaves. They have fleshy stems, with sweetish watery or milky juice, and they assume many peculiar forms. The juice in some species affords a refreshing beverage where water is not to be secured. All the plants of this order, except a few African species, are natives of America. They are generally found in very dry localities. Several have been introduced into the old world, and in many cases they have become naturalized. The fruits of some species are edible. The flowers are usually large and beautifully colored, and many members of the order are cultivated in hothouses.

Camel. A name applied to the camel family, including hornless ruminant animals distinguished by the presence of two incisors in the upper jaw. The genus *Camelus* embraces two species, which are known only in the domesticated state. The dromedary, or Arabian camel, has one hump on the back; the common, or Bactrian camel, has two humps. The camel, by its power of sustaining abstinence from drink for many days, from the peculiar formation of its stomach, and of subsisting on a few coarse shrubs, is peculiarly fitted for the parched and barren lands of Asia and Africa. The flesh and milk furnish food, and from their hair cloth and ropes are made. Without them the Arabs could neither carry on trade nor travel over their sandy deserts.

Camellia. A genus of plants, order *Camelliaceæ* (the tea order), with showy flowers and elegant dark green, shining, laurel-like leaves, nearly allied to the plants which yield tea, and named from George Joseph Kamel, a Moravian Jesuit. The *Camellia japonica,* in Japan and China, is a lofty tree of beautiful proportions. It is the origin of many double varieties of our gardens. Besides this species, the *Camellia sasanqua,* with small white scentless flowers, and the *Camellia reticulata* (net-veined), with its large peony-like flowers, are cultivated in the United States.

Camelopard. The camelopard or giraffe, a genus of ruminant animals, family *Cervidæ.* The only known species, *Camelopardalis girafa,* is a native of several parts of Africa, living in forests, and feeding on the leaves of trees. It has two straight horns, without branches, about eight inches long, covered with hair, truncated at the end, and tufted. The shoulders are of such a length as to render the fore part of the animal much higher than the hind part. The neck is very long, the head slender and elegant, and the color of the body of a dusky white, with large rusty spots. It is mild and inoffensive, and in case of danger has recourse to flight for safety, but when obliged to stand on self-defense it kicks its adversary.

Canada Lynx. See **Lynx.**

Canary. A popular song bird of the finch family, a native of the Canary islands. It has been domesticated for over three hundred years. There are many varieties, and in Great Britain an intense interest is displayed in the frequent canary shows. The bird usually possesses remarkable qualities as a songster. Practically all the caged varieties are of a yellow plumage, though in the native state they are of a dull greenish color. It is generally used as a house bird in the United States. Fine songsters frequently command a price of upward of one hundred dollars.

Candleberry, Candleberry Myrtle, Wax Myrtle, etc. A shrub, growing from

four to eighteen feet high, and common in North America, where candles are made from its drupes or berries, which are about the size of peppercorns, and covered with a greenish-white wax popularly known as Bayberry tallow. The wax is collected by boiling the drupes in water and skimming off the surface. A bushel of berries yields from four to five pounds of wax. Another plant belonging to the same genus is the sweetgale, which grows abundantly in bogs and marshes in Scotland—a small shrub, with leaves somewhat like the myrtle or willow, of a fragrant odor and bitter taste, and yielding an essential oil by distillation.

Canvasback Duck. A bird peculiar to North America, and considered the finest of the waterfowl for the table. They arrive in the United States from the North about the first of November, sometimes assembling in immense numbers. The plumage is black, white, chestnut brown, and slate color; length about twenty inches.

Caper. The unopened flower bud of a low trailing shrub, which grows from the crevices of rocks and walls, and among rubbish, in the countries bordering the Mediterranean. Picked and pickled in vinegar and salt they are much used as a condiment (caper sauce being especially the accompaniment of boiled mutton). The plant was introduced into Britain as early as 1596, but has never been grown on a large scale. The flower buds of the marsh marigold and the seeds of nasturtium (*Tropæolum*) are frequently pickled and eaten as a substitute for capers.

Caraway. An umbelliferous perennial plant with a tapering fleshy root, a striated furrowed stem, and white flowers. It produces a well-known seed used in confectionery, and from which both a carminative oil is extracted and the liqueur called *kümmel* prepared.

Cardinal Bird, or **Cardinal Grosbeak.** A North American bird of the finch family, with a fine red plumage, a crest on the head, and a large conspicuous white beak. In size it is about equal to the oriole. It has a rich sweet song which makes the cardinal very popular in southern United States, where it is common.

Caribou. A flat-horned member of the deer family closely related to the European reindeer, and resembling it in appearance and habits. The full-grown animal stands about four feet high and weighs about 475 pounds. Its winter coat consists of a thick felt-like covering of fine hair through which grows the coarser hair of the outer or rain-shedding portion. The legs are thick and muscular, terminating in broad flat hoofs which permit it to walk safely over snow fields or quaking bogs. Its food is moss and lichens for which it ranges the infertile wastes of arctic and sub-arctic America. Although nine species have been described, they can all be divided into two groups: the woodland caribou and the barren-ground caribou. The woodland caribou inhabits the forests and open country of British America from Manitoba eastward to Newfoundland and Nova Scotia, and the northern part of Maine. The antlers of this group are liberally palmated, and have an arborescent appearance. The barren-ground caribou inhabits the treeless and inhospitable region known as the barren ground of British America, with a range extending from western Alaska to eastern Greenland. Their most conspicuous habit is that of migration. At stated intervals they gather in great herds and migrate, the general movement being northward in spring and southward in autumn. These herds often consist of thousands of individuals. The antlers of the barren-ground caribou are longer than those of the woodland group, are more scantily branched and have fewer points. The arrangement of points suggests an arm chair. Caribou afford the principal source of food of the Indians inhabiting these regions, and the skins furnish materials for wigwams, harness for dogs, and other purposes.

Carrot. A biennial umbelliferous plant. The leaves are tripinnate, of a handsome feathery appearance. The plants rise to the height of two feet, and produce white flowers. The root, in its wild state, is small, tapering, of a white color, and strong-flavored; but that of the cultivated variety is large, succulent, and of a red, yellow, or pale straw color, and shows remarkably the improvement which may be effected by cultivation. It is cultivated for the table and as a food for cattle. Carrots contain a large proportion of saccharine matter, and attempts have been made to extract sugar from them. They have also been employed in distillation.

Cat. A well-known domesticated quadruped, order *Carnivora*, the same name being also given to allied forms of the same order. It is believed that the cat was originally domesticated in Egypt and India, and the gloved cat of Egypt and Nubia has by some been considered the original stock of the domestic cat. It was seldom, if at all, kept by the Greeks and Romans, and until long after the Christian era was rare in many parts of Europe. The domestic cat belongs to a genus—that which contains the lion and the tiger—better armed than any other quadrupeds for the destruction of animal life. The short and powerful jaws, trenchant teeth, cunning disposition, combined with nocturnal habits (for which their eyesight is naturally adapted) and much patience in pursuit, give these animals great advantages over their prey. The cat, in a degree, partakes of all the attributes of its race. Its food, in a state of domestication, is necessarily various, but always of flesh or fish if it can be obtained. Instances of its catching the latter are known, though usually the cat is extremely averse to wetting itself. It is a very cleanly animal, avoiding any sort of filth, and preserving its fur in a very neat condition. Its fur is very easily injured by water on account of the want of oil in it; it can be rendered highly electric by friction. The cat goes with young for sixty-three days, and brings forth usually from three to six at a litter, which remain blind for nine days. It is usually regarded as less intelligent than the dog, but this is by no means certain. It has a singular power of finding its way home when taken to a distance and covered up by the way. Among the various breeds or races of cat may

WALRUS
POLAR BEAR
MUSK OX
AMERICAN BISON
MOUNTAIN SHEEP
MOUNTAIN GOAT
CARIBOU
CANADA LYNX
COLLARED PECCARY

be mentioned the tailless or *Manx* cat of the Isle of Man; the *Tortoise-shell*, with its color a mixture of black, white, and brownish or fawn color; the large *Angora* and *Persian* cats with their long silky fur; and the *Blue Tabby*, with long, soft, grayish-blue fur.

Catbird. A well-known species of American song-bird, related to the wrens and mocking birds. Its home is in copses and thickets, often near dwellings. It is about nine inches in length. The plumage is a deep slate-color above and lighter below, with a black cap and tail. In habit it is lively, familiar, and unsuspicious. Its call note is a taunting, long-drawn "Kee," a most unpleasant cry; its song is rich, melodious, and often imitative of other birds. During the winter it inhabits the extreme south of the United States, and is found also in Mexico and Central America.

Cedar. A name applied to several species of coniferous trees, but particularly to the genus *Cedrus*. It is an evergreen, grows to a great size, and is remarkable for its durability. Of the famous cedars of Lebanon comparatively few now remain, and the tree does not grow in any other part of Palestine. The most celebrated group is situated not far from the village of Tripoli, at an elevation of about 6,000 feet above the sea. The circumference of the twelve largest trees here varies from about eighteen to forty-seven feet. Cedar timber was formerly much prized, but in modern times is not regarded as of much value, perhaps from the trees not being of sufficient age. The tree is hardy in England and in southern United States. The deodar, *Cedrus deodara*, of India, and the *Cedrus atlantica* of North Africa are by some botanists regarded as varieties of the cedars of Lebanon, and are used for similar purposes.

Chameleon. A genus of reptiles belonging to the order *Lacertilia* and native of Africa. The best-known species has a naked body six or seven inches long, with a prehensile tail of about five inches, and feet suitable for grasping branches. The skin is cold to the touch, and contains small grains or eminences of a bluish-gray color in the shade, but in the light of the sun all parts of the body become a grayish-brown or tawny color. It possesses the curious faculty, however, of changing its color, either in accordance with its environment, or with its temper when disturbed, the change being due to the presence of clear or pigment-bearing contractile cells placed at various depths in the skin, their contractions and dilatations being under the influence of the nervous system. Their power of fasting and habit of inflating themselves gave rise to the fable that they lived on air; but they are in reality insectivorous, taking their prey by rapid movements of a long viscid tongue. In general habit they are dull and torpid. The American chameleon, *Anolis principalis*, is a small iguanid lizard of southern United States and tropical America.

Chamois. A genus of hoofed mammals intermediate between the goats and the antelopes, and containing but one species, *Rupicapra tragus*. Its home is in the high mountains of southern Europe. Its horns, which are about six or seven inches long, are round, almost smooth, perpendicular and straight until near the tip, where they suddenly terminate in a hook directed backward and downward. Its hair is brown in winter, brown fawn color in summer, and grayish in spring. The head is of a pale yellow color with a black band from the nose to the ears and surrounding the eyes. The tail is black. Its agility, the nature of its haunts, and its powers of smell render its pursuit an exceedingly difficult and hazardous occupation.

Chimpanzee. The native Guinea name of a large ape of equatorial Africa, belonging to the anthropoid or man-like monkeys, and to the same family as the gorilla. When full grown it is sometimes about five feet high, with black hair, and is not so large and powerful as the gorilla. Like the orang-utan, it has the hair on its forearm turned backward, but differs from it in having an additional dorsal vertebra and a thirteenth pair of ribs. It walks erect better than most of the apes. It feeds on fruits, often robs the gardens of the natives, and constructs a sort of nest among the branches. It is common in menageries, where it shows much intelligence and docility.

Cloves. A very pungent aromatic spice, the dried flower buds of *Caryophyllus aromaticus*, a native of the Molucca islands, belonging to the myrtle tribe, now cultivated in Sumatra, Mauritius, Malacca, Jamaica, etc. The tree is a handsome evergreen from fifteen to thirty feet high, with large elliptic smooth leaves and numerous purplish flowers on jointed stalks. Every part of the plant abounds in the volatile oil for which the flower buds are prized. The spice yields a very fragrant odor, and has a bitterish, pungent, and warm taste. It is sometimes employed as a hot and stimulating medicine, but is more frequently used in culinary preparations.

Cocoanut, or **Coconut.** A woody fruit of an oval shape, from three or four to six or eight inches in length, covered with a fibrous husk, and lined internally with a white, firm, and fleshy kernel. The tree which produces the cocoanut is a palm, from 60 to 100 feet high. The trunk is straight and naked, and surmounted by a crown of feather-like leaves. The nuts hang from the summit of the tree in clusters of a dozen or more together. The external rind of the nuts has a smooth surface. This incloses an extremely fibrous substance, of considerable thickness, which immediately surrounds the nut. The fibrous coat of the nut is made into the well-known cocoanut matting; the coarse yarn obtained from it is called *coir*, which is also used for cordage. The hard shell of the nut is polished and made into a cup or other domestic utensil. The fronds are wrought into baskets, brooms, mats, sacks, and many other useful articles; the trunks are made into boats or furnish timber for the construction of houses. The sweet sap of the flower spathes is made into toddy and palm wine, and when fermented and distilled yields an intoxicating liquor known as *arrack*.

Coffee. The seed of an evergreen shrub which is cultivated in hot climates, and is a

native of Abyssinia and of Arabia. This shrub is from fifteen to twenty feet in height; the leaves are green, glossy on the upper surface, and the flowers are white and sweet-scented. The fruit is of an oval shape, about the size of a cherry, and of a dark red color when ripe. Each of these contains two cells, and each cell a single seed, which is the coffee as we see it before it undergoes the process of roasting. Great attention is paid to the culture of coffee in Arabia. The trees are raised from seed sown in nurseries and afterward planted out in moist and shady situations, on sloping grounds or at the foot of mountains. Care is taken to conduct little rills of water to their roots, which at certain seasons require to be constantly surrounded by moisture. When the fruit has attained its maturity, cloths are placed under the trees, and upon these the laborers shake it down. They afterward spread the berries on mats, and expose them to the sun to dry. The husk is then broken off by large and heavy rollers of wood or iron. When the coffee has been thus cleared of its husk it is again dried in the sun, and, lastly, winnowed with a large fan, for the purpose of clearing it from the pieces of husks with which it is intermingled. A pound of coffee is generally more than the produce of one tree; but a tree in great vigor will produce about two pounds. The best coffee is imported from Mocha, on the Red sea. It is packed in large bales, each containing a number of smaller bales, and when good appears fresh and of a greenish-olive color. Next in quality to the Mocha coffee may perhaps be ranked that of southern India and that of Ceylon, which is strong and well flavored. Java and Central America also produce large quantities of excellent coffee. Brazilian coffee, though produced more abundantly than any other, stands at the bottom of the list as regards quality. Of late years, however, the quality of Brazilian coffee has greatly improved through greater care in the selection of seed and harvesting, and much of the coffee now sold on the market as Mocha and Java is said to be of Brazilian growth. At present Brazil produces more coffee than all other countries combined.

Collared Peccary. See **Peccary.**

Condor. A South American bird, the largest of the vulturine birds. In its essential features it resembles the common vultures. The male attains a length of forty-eight inches, with an expanse of wing eight and one-half to nine and one-half feet. The plumage is blackish with a white ruff around the neck and white bars across the wings. It is found in greatest numbers in the Andes chain, frequenting regions from 9,000 to 16,000 feet above the level of the sea where they breed, depositing their two white eggs on the bare rock. They are generally to be seen in groups of three or four, and descend to the plains only under stress of hunger, when they will successfully attack sheep, goats, deer, and bullocks. They prefer carrion, however, and, when they have opportunity, gorge themselves until they become incapable of rising from the ground, and so become a prey to the Indians.

Crab. The popular name for a considerable group of invertebrate animals belonging to the class *Crustacea*, of which there are numerous species, exceedingly various in size, color, and modes of living. Like other crustaceans, their bodies are covered by an external skeleton or calcareous crust; they have ten jointed limbs, adapted for walking; the breathing is performed by means of gills. The head and the breast are united, constituting the *cephalothorax*, and the whole covered by a strong carapace. The tail, or abdomen, is very short, and is tucked up beneath the cephalothorax out of view; it is employed by the females to carry eggs. In the main features of their anatomy the crabs do not differ essentially from the lobster and the crawfish. The sense of sight is peculiarly acute, and enables them to distinguish the approach of objects at a considerable distance. The mouth is furnished with strong jaws, in addition to which the stomach has its internal surface studded with hard projections, or teeth, for the purpose of grinding the food. The liver is of great size, and constitutes that soft, rich, yellow substance, found immediately beneath the shell, and called the fat of the crab. The crabs, like the lobsters, molt, or throw off their entire calcareous covering, periodically, when they are soft and helpless, and usually conceal themselves until a new crust is formed. Most of them are littoral in their habits, dwelling upon the shores of the sea or those of creeks and rivers, but some live inland, and are known as land crabs.

Crane. A genus of birds belonging to the order *Paludicolæ*. They are chiefly remarkable for their long migrations. In these journeys they usually fly in large flocks led by a single leader, the whole assemblage assuming a wedge-like form; the leadership is continually changed, so that it is occupied in succession by every crane in the flock. The European crane breeds in the north of Europe and in Siberia, and migrates southward at the approach of winter. It is a fine bird, attaining nearly five feet in height; with the exception of the neck, which is black, the body is of a uniform ashy gray; it has a noble and graceful carriage, and the feathers on its tail, which rise in undulating clusters, add much to its elegance. It frequents large plains and marshes, and feeds miscellaneously on fish, reptiles, frogs, molluscs, worms, insects, and even small mammals. The whooping crane, *Grus americana*, of North America is now extremely scarce. It is nearly pure white, with the exception of the bill and the face which are dull red. A full grown specimen stands over four feet high. The sand hill crane is smaller than the preceding, and is of a dull slate color, with a head similar to the whooping crane. It inhabits the prairies of western United States. The games and dances in which cranes are said to indulge are not mere idle stories; it is certainly true that these birds form groups in various fashions, advance toward one another, make a kind of salutation, and adopt the strangest postures.

Crocodile. A family and genus of the order *Crocodilia*, comprising the largest living

saurian reptiles. The characteristics of the order are as follows: The skin of the back and the neck is thick and tough and covered with lozenge-shaped plates of bone, arranged in rows; on the throat, abdomen, and tail is a covering of tough scales. The jaws are long and their gape of enormous width; they are large and strong, and are armed with rows of sharp, conical teeth that are shed when worn out and replaced with others. The nostrils are at the extremity of the snout, and are capable of being closed to prevent the ingress of water. The heart is four-chambered. The tail is long and compressed laterally. The four feet are short, and there are five toes on each of the two fore feet, and four on each of the two hind feet, the latter more or less webbed; the limbs are short and thick. The families now existing are the *Gavialidæ* and *Crocodilidæ*. The gavials are found in northern India, Borneo, and Sumatra, and attain a maximum length of 17 feet. The snout is long and narrow and shaped like the handle of a frying pan. The crocodile family includes four genera: *Osteolæmus*, natives of equatorial Africa; *Caiman*, mostly of equatorial South America; *Crocodilus* and *Alligator*. The crocodile and alligator closely resemble each other, but may be distinguished by the following points of difference: The head of the crocodile is triangular, long, and ends in a rounded point. The head of the alligator is broad, with almost parallel sides and a wide, blunt snout. The canine tooth in the lower jaw of the crocodile fits, when the mouth is closed, into a notch in the outside of the upper jaw, the tip showing as a white spot just behind the nostril; in the alligator this same tooth fits into a pit in the upper jaw. The crocodile sometimes attains a length of 14 feet. Although the crocodile of Africa is the best-known member of this order, at least four American species are known, one living in southern Florida. They are also found in India and Maylayana. A single species of alligator is found in China, and one, *Alligator mississippiensis*, in southern United States. The alligator sometimes attains a length of 16 feet. Crocodiles are formidable from their great size and strength, but on shore their shortness of limb, great length of body, and difficulty of turning enable men and animals readily to escape pursuit. In the water they are generally active and formidable. They apparently live to a great age.

Crow. The crows are very omnivorous, and remarkable for their intelligence. The family, widely diffused over the world, includes the common crow, the raven, the fish crow, the rook, the jay, and the magpie. The common crow of North America is remarkable for its gregarious and predatory habits. They pair in March. The nest is built of sticks and is usually located in a low tree, preferably an evergreen, about 20 feet from the ground. Since the forests have been decreasing in area, crows have become bolder and now nest in orchards and solitary trees in open fields. They feed chiefly on worms and the larvæ of insects. They also eat grain and seeds, whence they have sometimes been regarded as injurious to the farmer; but they amply repay him for what they take by destroying the vermin in his fields.

Cypress. A genus of coniferous trees. The common European cypress is a dark colored evergreen with extremely small leaves entirely covering the branches. It has a quadrangular, or, where the top branches diminish in length, pyramidal shape. Cypress trees, though of a somewhat somber and gloomy appearance, may be used with great effect in shrubberies and gardens. They are much valued also on account of their wood, which is hard, compact, and very durable, of a reddish color and a pleasant smell. It was used at funerals and as an emblem of mourning by the ancients. Among other members of the genus are the Indian cypress; the *Cupressus funebris*, a native of China and Japan; and the evergreen American cypress or white cedar. The deciduous cypress of the United States and Mexico is frequently called the bald cypress. Its timber is valuable, and under water is almost imperishable. In the southern part of the United States this cypress constitutes forests hundreds of miles in extent.

Deer. A genus of ruminant quadrupeds now constituting the family *Cervidæ*, which some naturalists have divided into a number of genera, while others still regard it as forming only one. Deer are animals of graceful form, combining much compactness and strength with slenderness of limb and fleetness. They use their powerful horns for weapons of defense; but in general they trust to flight for safety. They have a long neck, a small head, which they carry high, large ears, and large full eyes. In most of them there is, below each eye, a sac or fold of the skin, sometimes very small, sometimes of considerable size, called the *suborbital sinus*, *lachrymal sinus*, or *tearpit*, the use of which is not well known. Deer have no cutting teeth in the upper but eight in the lower jaw; the males have usually two short canines in the upper but neither sex has any in the lower jaw. They are distinguished from all other ruminants by their solid branching horns (antlers), which in most of the species exist in the male sex only; the horns are deciduous, *i. e.*, fall off annually, and are renewed with increase of size, and of breadth of palmation, and number of branches, according to the kind, until the animal has reached mature age. Deer are found in almost all parts of the globe except Australia and the south of Africa, their place in the latter region being supplied by antelopes in extraordinary number and variety. Some of them live amidst the snows of very northerly regions, and some in tropical forests. The greater number inhabit the warmer temperate countries; they are chiefly found in wide plains and hills of moderate height, none dwelling on these lofty mountain summits which are the chosen abode of some animals of the kindred families of *Antilopidæ*, *Capridæ*, and *Moschidæ*, as the chamois and the bouquetin. The flesh (venison) of most kinds of deer is highly esteemed for the table. Deer have long been regarded as among the noblest objects of the chase. Only one species, the reindeer, can be said to have been fully domesticated and reduced to the service of man, although

individuals of many species have been rendered very tame.

Dog. An animal well known for its attachment to mankind, and remarkable for the almost infinite varieties, as to size, form, color, and quality of the hair, which the influence of domestication has brought about in the species. It belongs to the order of carnivorous mammals, and to that section of quadrupeds which is distinguished as *digitigrade*. The zoölogical genus is termed *Canis*, and includes, besides the dog, the jackal and the wolf. It is a question of considerable interest what was the parent stock of the dog. Some zoölogists are of opinion that the breed is derived from the wolf; others that it is a familiarized jackal; all agree that no trace of it is to be found in a primitive state of nature. That there are wild dogs, we know. The *dhole* of India and the *dingo* of Australia are remarkable examples which exist in a state of complete independence, and without any indication of a wish to approach the dwellings of man. These dogs, however, throw very little light upon the question. They may have escaped from the dominion or half-dominion of man, and have betaken themselves to a vagabond life. The food of the dog is various. It will live on cooked vegetable matter, but prefers animal food. In drinking, it laps with the tongue. It never perspires, but the nose is naked and moist, and, when hot, the tongue hangs out of the mouth, and a considerable quantity of water drops from it. The female goes with young sixty-three days, and usually has about six or eight at a litter, though sometimes more. The young are blind at birth, and do not acquire their sight until the tenth day. The dog attains its full growth at the expiration of the second year; it is old at fifteen years, and seldom lives beyond twenty years.

Eagle. A genus of birds belonging to the order *Raptores*, and to the same family as the falcons and the hawks. They are found in all parts of the globe. The size varies according to the species, but all attain imposing dimensions. The golden eagle measures about three feet in length, and the spread of its wings is seven to eight feet, while in the imperial eagle the spread of the wings is only six feet. The eagle soars at prodigious heights, and its sense of vision is very highly developed. It builds its nests in the clefts of the most inaccessible rocks, and lays generally two or three eggs; the period of incubation is thirty days. If captured young, the eagles are susceptible of a certain amount of education; when taken old they are quite untamable. Besides the golden eagle and the imperial eagle, there are other species, such as the American eagle, white-tailed eagle, Bonelli's eagle, the tawny eagle, and the booted eagle; numerous smaller species are to be met with in tropical regions.

Elephant. A genus of mammals, the only living representatives of the sub-order *Proboscidea*, or animals with a trunk or proboscis. They are exclusively confined to the tropical regions of the old world, in the forests of which they live in herds. Only two existing species are known, the Asiatic elephant and the African elephant. In both species the two upper incisors, or front teeth, are enormously developed, constituting long tusks. The lower incisors are absent, and there are no other teeth in the jaw except the large molars, or grinders, which are usually two in number on each side of each jaw. The molar teeth are of very large size, and are composed of a number of vertical plates of bone, each covered with enamel, and all cemented together. In the Indian elephant the transverse ridges of enamel are narrow and undulating, while in the African elephant they inclose lozenge-shaped intervals. The nose is prolonged into a cylindrical trunk, movable in every direction, highly sensitive, and terminating in a finger-like, prehensile lobe. The feet are furnished with five toes, but these are only indicated externally by the divisions of the hoof; the sole of the foot is formed of a thick pad of integument. The Indian elephant is the only species which is now caught and domesticated; and, as it will scarcely ever breed in captivity, the demand for it is supplied entirely by the capture of adult wild individuals, which are taken chiefly by the assistance of those which have been already tamed. The Indian elephant is distinguished by its concave forehead and its small ears; the African elephant, on the other hand, has a strongly convex forehead, and great flapping ears. The African elephant is chiefly hunted for the sake of its ivory, and there is too much reason to believe that the pursuit will ultimately end in the complete extinction of these fine animals. The elephants are all vegetable feeders, living almost entirely on the foliage of shrubs and trees, which they strip off by means of the prehensile trunk. As the tusks prevent the animal from drinking in the ordinary manner, the water is sucked up by the trunk, which is then inserted in the mouth, into which it empties its contents. Many species of fossil elephants are known, the most familiar of which is the Mammoth.

Falcon. A name of various birds of prey, members of the family *Falconidæ*. The falcons proper, for strength, symmetry, and powers of flight, are the most perfectly developed of the feathered race. They are distinguished by having the beak curved from the base, hooked at the point, the upper mandible with a notch or tooth on its cutting edge on either side, wings long and powerful, the second feather rather the longest, legs short and strong. The largest European falcons are the jerfalcon or gyrfalcon proper, a native of the Scandinavian peninsula, and the Iceland falcon, to which may also be added the Greenland falcon. Between these three species much confusion at one time prevailed, but they are now distinctly defined and described. In the Greenland falcon the prevailing color at all ages is white, in the Iceland falcon, dark. The latter more nearly resembles the true gyrfalcon of Norway, which, however, is generally darker, rather smaller, but with a longer tail. Its food consists chiefly of ptarmigans, hares, and waterfowl. It is found over a wide range of northern territory. The peregrine falcon is not so large as the jerfalcon, but is more elegant in shape. It chiefly inhabits wild

districts, and nests among rocks. It preys on grouse, partridges, ptarmigans, pigeons, rabbits, etc. Its flight is exceedingly swift, instances of 150 miles an hour being reported.

Ferns. A natural order of cryptogamous or flowerless plants, forming the highest group of the acrogens or summit growers. They are leafy plants, the leaves, or more properly fronds, arising from a rhizome or root stock, or from a hollow arborescent trunk; they are circinate in vernation, a term descriptive of the manner in which the fronds are rolled up before they are developed in spring, having then the appearance of a bishop's crosier. Ferns have a wide geographical range, but are most abundant in humid, temperate, and tropical regions. In the tropical forests the tree ferns rival the palms, rising sometimes to a height of thirty-five to forty-five feet. Ferns are very abundant as fossil plants. The earliest known forms occur in Devonian rocks. Various systems of classification for ferns have been proposed. At present the order is usually divided into six or eight families distinguished by differences in the position and structure of the sporangium. The generic characters are founded on the position and direction of the sori and on the venation. The largest division is that of the *Polypodiaceæ*, to which belong most of the herbaceous ferns of the temperate regions. A few of the ferns are used medicinally, mostly as demulcents and astringents.

Fishes. The lowest class of vertebrate animals, cold-blooded, and breathing by means of gills through life. They are wholly adapted for living in the water. The shape of the body is such as to give rise to the least possible friction in swimming, and thus to admit of rapid locomotion in water. To this end also, as well as for purposes of defense, the body is usually covered with a coating of scales. The limbs, when present, are always in the form of fins, but one or both pairs may be wanting; the anterior or fore limbs are known as the pectoral fins, and the posterior or hind limbs as the ventral fins. Besides the fins which represent the limbs, fishes possess other fins placed in the middle line of the body; one or two of these run along the back, and are known as the dorsal fins, one or two lie on the belly, near the vent, known as the anal fins, and a broad fin at the extremity of the spinal column is called the caudal or tail fin. The tail fin is always set vertically in fishes, so as to work from side to side, and is the chief organ of progression; it differs altogether from the horizontal expansion which constitutes the tail of whales, dolphins, dugongs, and manatees—animals which belong to the class of mammals. In the form of the tail, fishes exhibit two very distinct types of structure, termed respectively the homocercal and the heterocercal type of tail. The homocercal tail is the one which most commonly occurs in existing fishes; it is characterized by the fact that the two lobes of the tail are equal, and the spinal column stops short at its base. In the heterocercal tail, on the other hand, found in many fossil specimens of the fish class, the spinal column is prolonged into the upper lobe of the tail, so that the tail becomes unequally lobed. All the fins are supported by bony spines, or rays, which are of two kinds, termed respectively spinous rays and soft rays. Further, to aid in supporting themselves at varying depths in the water, most fishes are provided with a sac containing gas, situated above the alimentary tube, and known as the air or swimming bladder, by the filling or emptying of which the fish is rendered heavier or lighter in comparison with the surrounding water.

Flamingo. A genus of web-footed birds which may be regarded as in some respects intermediate between the storks and the ducks, their long legs and necks giving them a resemblance to the former, while their webbed feet connect them with the latter. There are eight species of true flamingoes. Their food appears to be mollusca, spawn, grass, water plants, insects, etc., which they fish up by means of their long neck. They breed in companies in mud flats or inundated marshes, raising the mud into a small hillock, which is concave at the top so as to form a nest. In this hollow the female lays her eggs, and hatches them by sitting on them with her legs doubled up beside her. The eggs are two in number. The young do not fly until they have nearly attained their full growth, though they can run very swiftly and swim with ease almost immediately after their exclusion from the shell. The common American species is of a deep red color, with black quills. It is peculiar to tropical America, migrating in summer to the southern and rarely to the middle states.

Flax. An important fiber and seed plant belonging to the order *Linaceæ*. The common flax (*Linum usitatissimum*), an annual plant, grows wild in western Asia between the Persian Gulf and the Caspian Sea. It has been cultivated since remote antiquity in the Old World, and is now widely diffused in the New, being grown in great quantities for fiber in Russia, Austria-Hungary, Germany, Italy, Holland, Ireland and Northern France, and for seed in Russia, India, Argentina, Canada and the United States. Russia usually produces considerably more than one-half of the world's crop of flax fiber, although western Europe contributes the finer grades. The United States and Canada each grow about one-fifth of the world's crop of flaxseed while the remainder is produced about equally by Argentina, India and Russia. The short fiber, or *tow*, is used in making rope, and the longer fiber for making linen thread and fabrics. The essentials of preparing flax fiber are found depicted on the tombs of the ancient Egyptians who wrapped the bodies of mummies in linen cloth. Flaxseed, the source of linseed oil, is a valuable article of commerce.

Flea. An insect of the order *Siphonaptera*, characterized by the absence of true wings, in place of which are minute scales believed to be aborted wings. The mouth parts are adapted for biting and sucking. All the species of the genus are very similar to the common flea. It has two single eyes or ocelli and six feet; the feelers are like threads. The flea is remarkable for its agility, leaping to a surprising distance, and its bite is very troublesome.

Flounder. One of the flat fishes, family *Pleuronectidæ*, characterized by a flattened oval or elliptical body which is whitish beneath and dark colored above. In the very young the eyes grow one on each side of the head and the body is vertical in the water like a sunfish. As it develops, the head becomes twisted so that both eyes are on the upper side of the head, while the body now becomes horizontal instead of vertical. Many of the flounders are important food fishes. They are found in cold, temperate, and tropical seas.

Flower. That part of a plant in which the organs of reproduction (*stamens* and *pistils*) are situated. The parts are arranged in whorls. In a complete flower the outer one consists of the *calyx*, formed of one or more leaves termed *sepals*; the next is the *corolla*, composed of one or more *petals;* the third whorl is formed by the stamens, and the innermost of the pistils. Sometimes there is only one whorl of floral leaves, and then the flower is said to be *monochlamydeous*; if neither whorl is present, it is termed *achlamydeous*. If both calyx and corolla are present, but so blended together that they are not easily distinguished, the floral envelope is called a *perianth*. *Double* or *semi-double* flowers are those in which, through the effect of cultivation, what should be stamens are changed into petals, as in roses, camellias, carnations, etc. The colors and odors of flowers are subjects in the investigation of which physiologists have not yet been able to go far. The chemical products on which they immediately depend are partially known; but how the chemical changes are wrought, and what various purposes they all serve as to the plant itself, can scarcely be said to have even begun to be ascertained. Both colors and odors are more or less owing to the action of the sun's rays. They are also sometimes modified by soil; diversities of color have been obtained in cultivated flowers by changing the soil in which they grow.

Fly. The word fly is generally used to designate an insect of the order *Diptera*. Members of this order have two membranous wings without wing covers. In place of the hind pair are two knobbed threads called *balancers*, which are supposed to assist the insect in maintaining equilibrium while in flight. The common house fly, *Musca domestica*, is found wherever man is, and in hot weather causes a great deal of annoyance. It is furnished with a suctorial proboscis, from which, when feeding on dry substances, it exudes a liquid, which, by moistening them, fits them to be sucked. From its feet being beset with hairs, each terminating in a disc which is supposed to act as a sucker, it can walk on smooth surfaces, as a ceiling, even with its back down. The female lays from 120 to 160 eggs in horse manure. From the eggs come little maggots which molt twice and become full grown in from five to seven days. They then pass into the pupa stage from which the perfect fly emerges about a week later. Flies act as scavengers, consuming much filth that would otherwise decay and become offensive. They also carry germs from sores or human excreta to articles of food or to healthy people and thus disseminate disease. Typhoid fever, diphtheria, and tuberculosis are among the diseases so transferred.

Flying Fish. A name common to various fishes which have the power of sustaining themselves for a time in the air by means of their large pectoral fins. In American waters there are about 20 species, the most common belonging to the genera *Exocœtus*, *Cypsilurus*, and *Parexocœtus*. The pectoral fins, which are very large, are the principal instruments in their flight, serving to sustain the fish temporarily in the air after it has acquired an initial velocity in its rush through the water. It can pass through the air to a considerable distance, sometimes as much as 200 yards, which it does to escape from the attacks of other fishes, or when disturbed by passing vessels. It is most common between the tropics. The best-known species are *Exocœtus volitans*, abundant in the warmer parts of the Atlantic, *Cypsilurus californicus*, on the coast of California, and *Parexocœtus mesogaster*. Some species of flying fish are used for food.

Flying Squirrel. A genus of rodent animals, family *Sciuridæ* (squirrels), to which the skin of the flank, extending between the fore and hind legs, imparts the faculty of supporting themselves for a moment in the air, as with a parachute, and of making very great leaps. The European flying squirrel is a native of the forests in the colder parts of Europe. The American flying squirrel is common from the gulf of Mexico to the southern part of Canada.

Fox. A carnivorous animal, of which there are several species, closely related to the dog. It is chiefly characterized by its sharp muzzle, and its long bushy tail, as well as by its cunning, which has passed into a proverb. The pupil of the eye is elongated, and not circular as in the dog; the ears are triangular in shape and pointed. A very powerful scent is emitted from the fox, in consequence of some glands which are placed near the root of the tail, and which furnish the odorous secretion; this odor is so fetid that even other animals avoid its locality. The fox is an inhabitant of most parts of Europe and America, and extends also into Asia. Its senses are extremely acute, so as alike to inform it of the location of its prey and to warn it of the approach of danger. It usually remains concealed during the day in a burrow, which it has either dug for itself or usurped, and ventures abroad chiefly at night, with stealthy movements, in search of food. Birds, mice, rabbits, or hares constitute its usual prey, but, when pressed by necessity, it will have recourse to other food, as it has a predilection for certain kinds of fruit, such as grapes. To domestic poultry it is terribly destructive. Though slightly made, the fox has great muscular vigor, and bites with much severity. Even when taken at a very early age, it is never properly domesticated; adults, when placed in confinement, show great ferocity, and soon die. It is to its power of endurance and its great speed, as well as to the cunning which dictates various expedients for escape, that the chase of this animal owes its exciting character. Among the most common of its expedients for escape is that of

feigning death, which is done also by several other animals. Numerous species of fox exist in the old and new worlds, of which the most important are the Arctic, or blue fox, and the American, or red fox. The Arctic fox abounds in the Arctic regions, and is remarkable for changing its color with the season, being brown or bluish in summer, and white in winter. The soles of its feet are hairy. The red fox is found throughout North America; it is quite variable in color and marking, and varieties of it are known by different names. The skins of all the species of fox are valuable, and make warm and soft furs, used for muffs, linings, etc.

Frog. One of the *Ranidæ*, or frogs, a family of tailless amphibians common to widely distributed parts of the world. They have smooth skins, and teeth on the upper jaw, but have no ribs. In North America there is but one genus *Rana*, of which there are 17 known species. In temperate regions frogs hibernate in the mud of pools or preferably of running water. The eggs are laid in early spring in masses five or six inches in diameter, which are deposited in roadside ditches or still, shallow water. Each female lays from 600 to 1200 eggs. (For development see **Anura,** also **Bullfrog.**)

Gazelle. An animal belonging to the antelope family; of very graceful shape, and rather smaller in size than the chamois. The color of the gazelle is fawn or dun on the back, which is separated from the white belly by a brown or blackish band. The horns, which are stronger in the male than in the female, are twice bent, in the shape of a lyre, and without sharp edges. The eyes of this animal are beautiful and soft in expression, and its movements are elegant and light. It inhabits the large plains and the Saharan region of northern Africa, as well as Arabia and Syria, living in numerous herds. When taken young, the gazelle, though naturally wild and timid, is readily domesticated, and becomes quite tame.

Geranium. A genus of plants embracing a large number of species unequally distributed throughout the world. The well-known herb, Robert (*Geranium Robertianum*), is a low, spreading weed, a rank-odored plant, common on rocks, where its soft, compound, fern-like leaves, and little pink flowers are very attractive. The plants usually known as geraniums belong to the genus *Pelargonium*, of the same order as the geranium. These plants are prized on account of the colors of the flowers, and the shape and marking of the leaves. Many hybrids have been produced and there is hardly a better known window plant. They are easily propagated by cuttings in light, rich soil and with good drainage.

Giraffe. See **Camelopard.**

Gnu, or **Wildebeest.** A singular African antelope now nearly extinct. Its height is about four feet and it attains a length of nine feet. Both sexes are horned, the horns nearly meeting on the forehead, then bending downward and outward with a sharp upward turn. The muzzle is broad like that of an ox; the neck short and surmounted by a mane of bristly hair; the withers are high, and the tail is long and hairy like that of a horse. Between the fore legs is a pendulous hairy extension of the dewlap like that on the buffalo. The feet and the head resemble those of the buffalo, while the mane, tail, and general form are horse-like, probably suggesting the name "horned horse" by which it is also known.

Goat. A genus of ruminant quadrupeds so closely allied to the sheep that it is not easy exactly to define the distinction, although the common domestic goat and sheep are of widely different appearance. It is frequently mentioned in the books of Moses, and formed a large portion of the flocks of the patriarchs. The uses of the goat are numerous. The flesh is good; that of the kid, or young goat, is, in most countries, esteemed a delicacy. The milk is very rich and nutritious, more easy of digestion than that of the cow, and is often useful to consumptive patients. Some goats yield as much as four quarts of milk daily, although the average quantity is more nearly two. The skin of the goat was early used for clothing, and is now dressed as leather for many uses, particularly for making gloves and the finer kinds of shoes. The hair, which may be advantageously clipped annually, is used for making ropes which are indestructible in water. The horns are used for making knife handles, etc., and the fat is said to be superior to that of the ox for candles. Goats are found wild only in mountainous countries; they all exhibit a great aptitude for scrambling among rocks and bushes, are extremely sure-footed on narrow ledges and pinnacles, and display great strength and agility in leaping. The Rocky Mountain goat is the only American wild goat, although Kennedy's mountain goat of Alaska is by some regarded as a distinct species. Its size is about that of an ordinary sheep, and its general appearance is not unlike that of a sheep of the Merino breed, its long, straight hair hanging down in an abundant white fleece.

Gold. On account of its beautiful color and since it does not become tarnished or corroded in use, gold is considered the most precious of metals and is used as the principal basis of value throughout the civilized world. It has been known from time immemorial, and is found in many parts of the world. It is usually found in the metallic or native state in the form of nuggets or smaller particles, in sand or gravel, or distributed through rocks or veins. Nuggets weighing as much as 1,000 ounces have been found. Native gold usually contains some silver. The metal is also found in combination with tellurium as "telluride ore," and it frequently accompanies copper ores and iron pyrites. The extraction of gold from sands or gravels, called alluvial or placer mining, is accomplished by washing with water in various ways. The heavy gold sinks to the bottom when the material is stirred up with water, and mercury (quicksilver) is usually used to amalgamate the gold and hold it. Solid ores have to be powdered by stamp mills or other devices before the gold can be extracted, and sometimes they must be heated to redness (roasted) to drive off tellurium or

other things. One of the modern methods of extracting gold from ores consists in dissolving out the metal with water containing potassium cyanide. This is known as the "cyanide process." Gold is the heaviest of all the familiar precious metals except platinum. It is more than nineteen times as heavy as water. In malleability it stands first among the metals, being capable of being beaten to a thickness of 1-250,000 of an inch and ductile enough to be drawn into a wire 500 feet long and weighing only one grain. It may be alloyed with other metals to change the color for designs. The best known alloy of gold is that with copper, which is used for gold coins. The chief gold discoveries have been in California, 1848; Australia, 1851; British Columbia, 1858; New Zealand and Nova Scotia, 1861; South Africa, 1868; West Australia, 1870; South Australia, 1886; Alaska and Klondike. Important discoveries of gold were made in Porcupine, Canada, in 1910.

Goose. A genus of web-footed birds, larger than the ducks, having the bill not longer than the head, more high than broad at the base, the upper mandible slightly hooked at the tip; the legs placed farther forward than in ducks, and so better adapted for walking; the neck of moderate length, with sixteen vertebræ, a character which widely distinguishes them from swans. In general, geese spend more of their time on land than any other of the *Anatidæ*, feeding on grass and other herbage, berries, seeds, and other vegetable food. About forty species of geese are known in various parts of the world.

Gorilla. The largest and fiercest of the anthropoid apes, and the one most resembling man in structure and size. The hands and feet are strong and adapted for either arboreal or terrestrial life; it is able to walk erect without being taught, an act which no other ape performs. The skull, however, is of a low type and the long canine teeth indicate a savage nature. The gorilla is as tall as an average man, and the body thick and muscular. A specimen has been killed whose weight was estimated at 500 lbs. The skin is black and covered with black or grizzly hair. Its home is in West Africa near the equator. It is of a sullen disposition and does not thrive in captivity, invariably dying after a few months of confinement.

Guinea Pig, or **Cavy.** A small animal belonging to the family of rodents. It is indigenous to South America, and has been introduced into many parts of Europe and America, where it is domesticated as a pet. It possesses a very low degree of intelligence; in its natural home it is gregarious, and is usually found living on dry lands covered with low brushwood. The color of the guinea pig is variegated, and its tail is quite rudimentary. It is an extremely prolific animal, and begins to breed at the age of ten months, producing many broods a year; each litter usually consists of about eight. The origin of the popular name of this animal is quite unknown; it appears to be very inappropriate, for the animal does not come from Guinea, nor yet is it a pig.

Hartbeest, or **Hartebeest.** A South African antelope at one time very numerous in the region between Natal and Mashonaland, but now very scarce. It is about five feet high at the shoulder with a slender neck and a bushy tail. The head is long and narrow, and tapers to a slender muzzle; the horns are ringed, close together at their origin, and rise from the tip of the head in lyrate form. Some species are grayish brown, others reddish with characteristic markings on the buttocks and face. It is the swiftest of African antelopes, easily outrunning greyhounds. The flesh is highly esteemed as food.

Hippopotamus, or **River Horse.** A genus of animals nearly allied to the pigs, hogs, and peccaries, and belonging to the class *Ungulata*. The group is represented by only two living species, the *Hippopotamus amphibius* and *Hippopotamus liberiensis*, both of Africa. Of these the *Hippopotamus amphibius* is the larger. It is enormously bulky and unwieldly, attaining a height of five feet, a length of as much as twelve feet, and a weight of four tons. The feet are massive, and are terminated by four hoofed toes; the skin is very thick and strong. The hippopotamus feeds entirely upon vegetable substances, such as grasses and shrubs; it dives and swims with great facility.

Horse. A one-toed ungulate mammal of the family *Equidæ*. The horse proper is characterized by the tail being furnished with long hairs from its base; by the long and flowing mane; by the possession of a bare callosity on the inner surface of the hind as well as of the fore legs; and by the head and ears being smaller and the limbs longer than in the ass and other species related to the horse. The native country of the horse seems to have been central Asia. It became early domesticated in Egypt. It is mentioned throughout the Bible. The people of Thessaly were excellent equestrians, and probably first among the Greeks who broke horses in for service in war, whence probably arose the fable that Thessaly was originally inhabited by centaurs. "Solomon had 40,000 stalls of horses for his chariots, and 12,000 horsemen," 1014 B. C. The Greeks and Romans had some covering to secure their horses' hoofs from injury. In the ninth century horses were shod only in time of frost. Shoeing was introduced into England by William I. in 1066. It is believed that the original breed of horses is extinct, and that the half-wild herds existing in many places have descended from animals once in captivity. Thus when the horse was first introduced by the Spaniards in 1537, at Buenos Ayres, there were no wild horses in America. But individuals escaping ran wild, and by 1580 their descendants had spread over the continent as far as the straits of Magellan. Their favorite abode is on the Pampas, where they now exist in untold numbers. There was found in La Plata a now extinct species of horse. More *Equidæ* have been found in the new than in the old world. The horse may have descended from a striped ancestor, stripes still sometimes remaining, especially in duns and mouse-duns. His present colors are brown, gray, or black, sometimes with roundish pale spots. His age is ascertained by examining first which teeth are developed,

and then to what extent they have been worn away by use. They are best tamed by kindness. Like other domestic animals the horse has run into various breeds. The most celebrated is the Arab horse. Great attention is given in America to the breeding of horses, and American horses have won races both in England and on the Continent. The fear that the horse would go out of fashion on account of bicycles and automobiles seems unfounded. A similar fear was expressed when the railway took the place of the stagecoach.

Hyena. A genus of carnivorous animals, containing three species. Two of these, the spotted hyena and the brown hyena, are entirely confined to the African continent, while the third species, the striped hyena, is found in northern Africa, and ranges over all the open country of India to the foot of the Himalayas, and through Persia and Asia Minor. These animals have a villainous appearance, and are covered with coarse bristly hair, short over the greater portion of the body, but produced into a mane along the ridge of the neck. The hind legs are shorter than the fore, giving the body a slope from the withers to the haunches. In size they are somewhat larger than a shepherd's dog. The cheek muscles are greatly developed, and the large carnivorous teeth have great conical crowns, giving to them the power of crushing the thigh bones of animals, and enabling them to procure their favorite morsel, the marrow. As carrion feeders they are useful scavengers. All the species are nocturnal in their habits.

Insects. A class of air-breathing invertebrate animals, in which the body is divided into a variable number of segments, which usually become modified to form three distinct regions, known as the head, the thorax, and the abdomen. The total number of segments never exceeds twenty. Of these, five, and probably six, become completely united to form the head. On the front of the head between the eyes, or in front of them, is a pair of jointed organs called *antennæ*. The mouth parts consist of an upper lip or *labrum*, an under lip or *labium*, and between them two pairs of jaws opening sidewise. The upper jaws are called *mandibles*, the lower curved pair are called the *maxillæ*. There may be also inside the mouth an organ resembling a tongue. There is generally a pair of compound eyes on the sides of the head, and sometimes simple eyes, or *ocelli*, also. The thorax always consists of three segments, which are termed respectively the pro-thorax, the meso-thorax, and the meta-thorax. Each of these carries a pair of jointed legs, and the possession of these six legs is characteristic of the whole class of insects. In the adult state there are two (sometimes one) pairs of wings which are attached to the meta-thorax or meso-thorax or to both. The remaining segments constitute the abdomen; they have no appendages except in the final segment, which in the female is sometimes prolonged to form an ovipositor. The organs of the mouth in insects are of two principal types, viz., *masticatory* (beetles, dragon flies, ants, etc.), and suctorial (butterflies, moths, fleas, gnats, etc.). The digestive apparatus, or alimentary canal, usually consists of an esophagus, a crop, a gizzard, a stomach, a small intestine, a large intestine, and a rectum, together with organs playing the part of salivary glands, liver, and kidneys. There is no definite and regular course of circulation in insects. The heart is represented by a contractile tube, situated on the back, and termed the *dorsal vessel*. Respiration is effected by means of branching air tubes, or *tracheæ*, which ramify through the entire body, and open on the exterior by lateral apertures, known as *stigmata*, or *spiracles*. The nervous system consists of a ganglion above the mouth known as the brain, and a chain of ganglia placed on the ventral interior, and connected by a series of double cords. The sexes of insects are in different individuals, and most are oviparous. Most insects in the course of their lives pass through a series of changes, which constitute the *metamorphosis*, before attaining maturity.

Jaguar. A carnivorous mammal, belonging to the cat family. In size it ranks next to the tiger among the cats of like color. The body is massive, the head large and strong, the tail relatively short. The ground color is golden yellow. On the back and sides are hollow patches of black inclosing spots of the ground color. On the head, legs, and belly the spots are of solid black. This animal is one of the most formidable beasts of prey found in America, being of an extremely fierce nature. It inhabits North and South America, extending from the southern regions of the United States, through Mexico, Central America, and Brazil, as far south as Paraguay. Wooded banks of rivers are its favorite haunts, and it is said to frequent the reedy margins of lakes, seeming to have a great predilection for water. It preys chiefly upon weaker mammals, and is said to catch fish; occasionally it kills horses and cattle, and even men. The jaguar is a noisy animal, roaring much at night, especially on the approach of bad weather.

Kangaroo. A family of pouch-bearing animals. They are the most highly developed members of the order, and are peculiarly suited for the conditions of life in Australia, Tasmania, New Guinea, and some of the adjacent islands. The family comprises no fewer than forty species and of these *Macropus giganteus* may be taken as a type. This species was formerly plentiful, and roamed over all the plains; but it is now fast retiring before the colonist. The fore limbs are small; the hind limbs very large and thick; the head small, with rather long ears, and a long, dusky-brown muzzle; the body long, with the fur short but thick, and of a gray-brown tint. Full grown specimens are about four feet high and attain a weight of 200 pounds. The female carries her young in a pouch on the under side of the belly. When moving quickly the hind limbs alone are brought into action, and by means of these the animal bounds along in great leaps of from fifteen to twenty feet, the body being carried in a nearly horizontal position, and the tail extended to balance it. The fore limbs are chiefly used in handling, and with these the female lifts her young, and places them in the pouch. The kangaroos are vegetable feeders, delighting in grasses, leaves, and herbs.

Lark. The common name of birds comprising the family *Alaudidæ*. The skylark, or laverock, of Europe, the most harmonious of this musical tribe, commences its song early in the spring, continues it during the whole summer, and is one of those few birds that chant while on the wing. When it first rises from the earth, its notes are feeble and interrupted; as it ascends, however, they gradually swell to their full tone, and long after it is lost to the sight it still continues to charm the ear with its melody. It mounts almost perpendicularly, but descends in an oblique direction, unless threatened with danger, when it drops like a stone. In America the lark family is represented by twelve species, of which the horned lark, or shore lark, is best known. It is a shore bird somewhat resembling the plover both in appearance and habits. The meadow lark of North America is not a true lark, but belongs to the same family as the blackbirds. (See **Meadow Lark.**)

Lemon. A tree of the genus *Citrus*, which also includes the orange, lime, citron, etc. The lemon is a native of northern India, and is extensively cultivated for its fruit, the pulp of which abounds in citric acid, and is much used in the manufacture of cooling and effervescing drinks. The peel, or rind, is covered with glands containing oil, which is used as an aromatic; when dried and preserved, it forms an article of commerce, and is used for flavoring. The produce of the lemon groves of the Mediterranean is chiefly marketed in northern Europe and America. Lemons are now extensively cultivated in California.

Leopard. The leopard, *Felis pardus*, is one of the largest of the cats, being exceeded in size only by the lions and tigers. The color is usually some shade of buff, irregularly marked with spots of black. The species is a native both of Africa and Asia. The body of this fierce and rapacious animal is about four feet long. From the great flexibility of the limbs and spine, it can take surprising leaps, swim, crawl, and ascend trees.

Lilac. A genus of plants belonging to the natural order *Oleaceæ* (which includes the ash, jessamine, olive, etc.). The lilacs are natives of the East; they are shrubs or small trees; the flowers are characterized by a four-cleft corolla, by two stamens, and by a two-valved fruit. Several species are cultivated for ornamental purposes, the common lilac being one of the most extensively cultivated shrubs in Europe.

Lily. A popular name applied to plants of several genera belonging to the order *Liliaceæ*, but especially to the individuals constituting the genus *Lilium*. The true lilies are herbaceous, with scaly bulbous roots and conspicuous flowers, on account of which they are great favorites with the horticulturist, and are extensively cultivated. The tiger lily, with its showy yellow flowers, is a native of warm climates, and is peculiar in producing bulbs in the axils of the leaves and capable of independent growth. The white lily and the orange lily are also familiar under cultivation. The bulbs are rich in starch, and in some districts those of certain species are used as food.

Lion. The most majestic of carnivorous quadrupeds. It is, when mature, of a nearly uniform tawny or yellowish color, paler on the under parts, the young alone exhibiting markings like those common in the *Felidæ*. The male has usually a great shaggy and flowing mane, and the tail, which is quite long, terminates in a tuft of hair. The whole frame is extremely muscular, and the fore parts, in particular, are remarkably powerful, giving, with the large head, bright, flashing eye, and copious mane, a noble appearance to the animal, which, with its strength, has led to its being called the "king of beasts". A lion of the largest size measures about nine feet six inches from the nose to the tip of the tail. The lioness is smaller, has no mane, and is of a lighter color on the under parts. The strength of the lion is such that he can carry off a man as a cat carries a rat. The lion is chiefly an inhabitant of Africa, although it is found also in some of the wilds of Asia, particularly in certain parts of Arabia, Persia, and India. It was anciently much more common in Asia, and was found in some parts of Europe, particularly in Macedonia and Thrace, according to Herodotus and other authors. The lion is not, in general, an inhabitant of deep forests, but rather of open plains in which the shelter of occasional bushes and thickets may be found. He is easily tamed, at least when taken young and when abundantly supplied with food. Lions were made to contribute to the barbarous sports of the ancient Romans; a combat of lions was an attractive spectacle, and vast numbers were imported into Rome, chiefly from Africa, for the supply of the amphitheater. Pompey exhibited 600 at once. The mane of the lion and the tuft at the end of the tail are not fully developed until he is six or seven years old. There are several varieties of the lion, slightly differing from each other in form and color, but particularly in the development of the mane. The largest lions of the south of Africa are remarkable for the size of the head and the great black mane.

Llama, or Lama. A South American mammal of the camel family used as a beast of burden in the Andes mountains. It has a height of about three feet at the shoulder and resembles a small camel, except that it lacks a hump and carries its head erect. It will carry a load of 100 pounds at the rate of twelve to fifteen miles a day, and, being sure footed, is the principal carrier of burdens on the narrow mountainous trails of the Peruvian Andes. The long hair or wool is used for making coarse fabrics.

Lobster. A familiar invertebrate animal, belonging to the group *Crustacea*, and inhabiting the sea. Lobsters are found in great numbers about many European shores, and the greater part of those taken to English markets are supplied from Norway; they are also quite numerous on the coasts of North America. The body of the lobster is composed of two principal divisions, popularly termed head and tail: the former, however, which is technically called the *cephalothorax*, is constituted (as the name implies) by both head and thorax; the tail is the abdomen. The body carries twenty pairs of appendages,

GAZELLE
GNU OR WILDEBEEST
LLAMA
MUNGOOSE
ORANG-UTAN
KANGAROO
ZEBRA
PLATYPUS
HARTEBEEST
AFRICAN RHINOCEROS
HYENA

consisting of feelers, jaws, claws, legs, etc. The nervous system consists of a chain of ganglia placed along the under surface. The stomach and the intestines form a long and straight canal. Lobsters are extremely combative, and fight furiously, the vanquished party sometimes leaving one of its limbs in its opponent's grasp.

Lynx. The lynxes are short-tailed, tree-climbing wild cats found in various parts of the world. In North America two species are known, the bay lynx or bob cat, and the Canada lynx. The former is of a reddish gray color, sometimes spotted, and varying greatly in the rufous shades. It is found in nearly all wild regions of the United States. The Canada lynx is found principally in southern and western Canada as far north as the sixtieth parallel. The body is about thirty-two inches long, the tail four or five inches, and the height at the shoulder about eighteen inches. It may be distinguished from the bay lynx by its lighter gray color, and huge hairy paws, and by a slender tuft of stiff hairs on the tip of each ear. It feeds upon small mammals and birds, which it catches after the manner of the cat family. Although it has a reputation for ferocity, it is said to lack courage and seldom voluntarily attacks man.

Macaw. A genus of beautiful birds of the parrot tribe. The macaws are magnificent birds, distinguished by having their cheeks destitute of feathers, and their tails long and wedge-shaped. They are all natives of the tropical regions of South America. The largest and most splendid in regard to color is the great scarlet or red and blue macaw. The great green macaw and the blue and yellow macaw are somewhat smaller.

Magnolia. A genus of trees and shrubs, named from Pierre Magnol, a French botanist of the seventeenth century. The species, which chiefly inhabit North America, northern India, China, Japan, and other parts of Asia, are trees much admired on account of the elegance of their flowers and foliage, and are in great request for gardens. In their native countries some of them attain great height, and have flowers ten inches across. In America the magnolias are best known in the gulf states, but some species are hardy along the Appalachian mountains, and one, *Magnolia acuminata*, as far north as southern Canada.

Magpie. A bird belonging to the crow family. There are several species, two of which belong to America. The common European magpie is about eighteen inches in length; the plumage is black and white, the black glossed with green and purple; the bill is stout, and the tail is very long. The magpies continue in pairs throughout the year, and prey on a variety of food, chiefly animal. They are determined robbers of other birds' nests, destroying the eggs and young birds. In captivity they are celebrated for their crafty instincts, their power of imitating words, and their propensity to purloin and secrete glittering articles. The American magpie, *Pica pica hudsonica*, is a beautiful bird, about 18 inches long, purple black with large patches of white on the breast, rump, and top of the wings. The tail is long and pointed. It feeds largely upon meat. It is found principally in the Rocky Mountain region.

Mahogany. This tree is a native of the West Indies and of tropical America. It is a tree of considerable magnitude, with compound leaves of several pairs of leaflets, and yellowish white flowers. Mahogany is applied to many uses. It is a fine wood, of close texture, of a reddish color shaded with brown, and is capable of taking a fine polish. It varies much in value according to the color and markings. The mahogany tree is found most commonly on the coasts of Honduras and Campeachy, and also in the islands of Cuba and Hayti. It was formerly plentiful in Jamaica. The wood obtained from Honduras and Campeachy is often termed bay wood; that from Cuba and Hayti (which is of finer quality) is known in the market as Spanish mahogany. There are one or two other varieties of mahogany, produced by trees belonging to the same natural order, and natives of the East Indies.

Manatee. The manatee or sea cow is an aquatic mammal of the genus *Trichechus*, order *Sirenia*. Three species are known, one of which is found in West Africa, and the others in America. They frequent rivers from Florida to the Amazon and also those of Cuba, usually choosing the quiet reaches of the streams above tide water. Their food is water grasses and other aquatic plants. Their anterior limbs are flat and not adapted for walking, hence they never come upon land. The tail is flat and broad and adapted for swimming. They are large, awkward animals, attaining a length of eight to ten feet as a rule, but sometimes growing to thirteen feet. The skin is of a grayish color, sparsely covered with hairs. Their flesh is excellent, and they furnish a soft, clear oil which does not become rancid.

Mandrill. A species of baboon which is distinguished by the short or rudimentary tail, by the elongated, dog-like muzzle, which is brilliantly blue and scarlet, and by its yellow chin beard. Mandrills inhabit western Africa, where they associate in large troops.

Mangrove. A genus of plants consisting of trees or shrubs which grow in tropical countries along the muddy beaches of low coasts, where they form impenetrable barriers for long distances. They throw out numerous roots from the lower part of the stem, and also send down long, slender roots from the branches, like the Indian banyan tree. The seeds germinate in the seed vessel, the root growing downward until it fixes itself in the mud. The wood is dark red, hard and durable, and the bark is used for tanning.

Manna. The sweet, concrete juice which is obtained by incisions made in the stem of a species of ash, *Fraxinus ornus*, a native of Sicily, Calabria, and other parts of the south of Europe. The manna of commerce is collected in Sicily, where the manna ash is cultivated for the purpose in regular plantations. The best manna is in oblong pieces or flakes of a whitish or pale yellow color, light, friable, and somewhat transparent. It has a slight peculiar odor, and a sweetish taste mixed with a slight degree of

bitterness, and is employed as a gentle laxative for children or persons of weak habit. It is, however, generally used as an adjunct to other more active medicines. Other sweetish secretions exuded by some other plants growing in warm and dry climates, as the *Eucalyptus mannifera* of Australia, the *Tamarix mannifera* or *gallica* of Arabia and Syria, are considered to be kinds of manna. Small quantities of manna, known under the name of *Briançon manna*, are obtained from the common larch. In Scripture we are told that a substance called manna was miraculously furnished as food for the Israelites in their journey through the wilderness of Arabia. Some persons identify it with the saccharine substance yielded by the *Tamarix mannifera*.

Maple. A name for trees of the genus *Acer*, natural order *Sapindaceæ*, peculiar to the northern and temperate parts of the globe. About one hundred species are known, distributed through Europe, North America, and different parts of Asia. They are small or large trees, with a sweetish sap, usually lobed leaves, and small greenish flowers.

Meadow Lark. A bird of the family *Icteridæ*, related to the blackbirds and orioles. It is about the size of a robin, the upper parts being black, brown, or buff; the under parts yellow; the neck with a scarf of jet black; the sides with black spots arranged in rows, and the outer tail feathers white. They frequent meadows, preferring short thick grass, living much upon the ground. The nest is built in a tuft of grass, and usually contains from four to six whitish eggs spotted with brown. The meadow lark lives mostly upon insects, and is one of the most valuable birds upon the farm. (See **Lark.**)

Mistletoe. An American and European plant growing parasitically on various trees, and celebrated on account of the religious purposes to which it was consecrated by the ancient Celtic nations of Europe, being held in great veneration by the Druids, particularly when it was found growing on the oak. It is a small shrub, with sessile, obovate, entire, somewhat leathery leaves, and small, yellowish-green flowers, the whole forming a pendent bush, covered in winter with small white berries, which contain a glutinous substance. It is common enough on certain species of trees, such as apple and pear trees, hawthorn, maple, lime, and other similar trees, but is very seldom found on the oak. Its roots penetrate into the substance of the tree on which it grows, and latterly it kills the branch supporting it. Traces of the old superstitious regard for the mistletoe still remain in Germany and England, as kissing under it at Christmas.

Mocking Bird. A genus of the family *Troglodytidæ*, or wrens, exclusively American in its distribution, but ranging widely over the southern and rarely over the northern portions of that continent. These birds are remarkable for their power of song. The best known species is *Mimus polyglottos*, which has marvelous power of voice, and is able to imitate almost any species of animal, as well as noises produced artificially. Its own song is loud, full, and exceedingly varied. In plumage it is decidedly somber, being of a general ashy-gray hue, paler beneath; but, though the mocking bird cannot vie with other American birds in brilliancy of plumage, its sweet and varied notes and its faculty of imitation render it a prime favorite.

Monkey. The popular name of a large group of animals, including all of the order *Primates* except man. The name is frequently used to comprehend the members of the following families and sub-families of the order, viz., the *Simiidæ* (Anthropoid Apes and Gibbons), the *Cercopithecidæ* (Old World Monkeys), the *Cebidæ* (American Monkeys), and the *Callithricidæ* (Marmosets). In a restricted sense, however, it is only applicable to certain members of some of the above families and sub-families, and cannot be correctly applied to the anthropoid apes. The characteristics of the different species of monkeys are so varied that it is impossible to frame a general definition of them that would be applicable to all, and the limits of space preclude us from entering into a description of each species. The *Cercopithecidæ* include the old world monkeys and baboons; they are widely distributed over Africa and Asia. The family *Cebidæ* comprises all the American monkeys, which differ from those of the old world in having an additional molar tooth, or grinder, in each jaw, and the nostrils widely separated, while they have neither cheek pouches nor callosities, and their thumbs are never completely opposable. Some have a prehensile tail, which is as useful to them as an additional hand in their arboreal haunts. The members of this family are strictly confined to the forest regions of tropical America, from southern Mexico to northern Chili. The last family, the *Callithricidæ*, comprises the marmosets, which are distributed from southern Mexico to southern Brazil. The habitats of all monkeys are chiefly forests, for which their structure is especially adapted, enabling them to climb trees with ease, and to leap from branch to branch with extraordinary agility. Here they are masters of the situation, the only foe they dread being the serpent, which alone can reach them in the arboreal retreats. Their food consists chiefly of fruits and other vegetable substances; but, in addition to these, birds and their eggs and insects are by no means unacceptable to them.

Mosses. A large group of flowerless plants of diminutive size, which constitute the class *Musci*, or *Muscineæ*. Mosses are among the most extensively diffused of all plants, and are both terrestrial and aquatic in habits. They consist of a leafy stem, the leaves being often closely packed or overlapping one another. The fructification of mosses is somewhat complicated, and may be compared to that of ferns in all essential points. A capsule is first produced, and borne at the top of a long foot stalk which springs from a tuft of leaves. It is covered at first by a hood, termed the *calyptra*, but this afterward falls off, and the capsule is then seen to be closed by an *operculum* or lid, which eventually bursts away to allow the escape of the contained spores. The mouth of the capsule, when the operculum has fallen

off, is seen to be surrounded by a row of minute teeth which constitute the *peristome*. The development of the spore gives rise to a branching filament, on several points of which buds appear, which become leafy stems. Some of these produce true reproductive organs, the male organs being termed *antheridia*, and the female organs *archegonia;* these may be borne by the same plant, or by different plants. Several thousand species of mosses are known, and many of them are extremely beautiful, especially under the microscope.

Moth. The popular name of a numerous and beautiful division of lepidopterous insects, readily distinguished from butterflies by their antennæ tapering to a point instead of terminating in a knob, by their wings being horizontal when resting, and by their being seldom seen on the wing except in the evening or at night (though some moths fly by day); hence the terms crepuscular and nocturnal lepidoptera applied to them. Among the more notable of the moths are the "feather or plume moths," the "death's-head moth," the "clothes moths," and the "silk moth."

Mother-of-Pearl, or Nacre. The hard, silvery, brilliant, internal or nacreous layer of several kinds of shells, particularly of the oyster family, often variegated with changing purple and azure colors. It is destitute of coloring matter, but is composed of a series of minute and slightly imbricated layers or ridges which have the power of decomposing the rays of light, thus producing beautiful iridescent hues. The large oysters of the tropical seas produce the best nacre; but shells suitable for certain manufacturing purposes are obtained in fresh waters, particularly in the Mississippi and its tributaries. Mother-of-pearl is extensively used in the arts, particularly in inlaid work, and in the manufacture of handles for knives, buttons, toys, snuffboxes, etc.

Mountain Goat. See **Goat.**

Mountain Sheep. See **Sheep.**

Mouse. The name given to certain species of small mammals, belonging to the order *Rodentia*, or gnawing animals. The mice, along with the rats, form the very extensive genus *Mus*, and, with other allies, the family *Muridæ*. The British species of mice are the common house mouse, which is too familiar to need any description; the harvest mouse, the smallest and at the same time one of the prettiest of British mammals, which in the summer constructs a curious nest high up in the straws of the standing corn, retiring in the winter into burrows, in which it hibernates; and the long-tailed field mouse, which frequents fields and gardens.

Mulberry. A fruit tree of the genus *Morus* akin to nettles. The black or common mulberry (*Morus nigra*) is the species most commonly cultivated as a fruit tree. The fruit is used as a dessert, and is also preserved in the form of a syrup. The juice of the berries mixed with that of apples forms a beverage of a deep port wine color.

Mule. A hybrid animal between the horse and the ass, differing in size, strength, and beauty, according to the predominance of its parental species; those between a male ass and a mare, are far superior to the hinny, the progeny of a she ass with a horse. In mountainous countries mules are highly serviceable, no other beast of burden being so sure-footed, or so capable of enduring fatigue; but in beauty of form they fall very short of that noble quadruped, the horse, the mule having a large, clumsy head, long erect ears, a short mane, and a thin tail.

Mungoose. A species of ichneumon, otherwise known as the "gray" or "Indian" ichneumon. Being easily domesticated, it is kept in many houses in Hindustan, to rid them of reptiles and other vermin, as rats, mice, etc. It has been said that it neutralizes the poison of snakes, which it fearlessly attacks, by eating, during its contests with them, the snake-root; but its immunity is really due to the extreme celerity of its movements. It is of a reddish-gray color, and somewhat larger than a rat.

Musk Deer. A genus of deer, forming the type of the sub-family *Moschinæ*, which is essentially distinct from the family of the *Cervidæ*, or true deer. The typical species of the family is found chiefly in the elevated tablelands of central Asia, and particularly of Tibet. These animals attain the size of a young roe deer, and the upper jaw bears prominent canine teeth. The males alone yield the musk, which is secreted by an abdominal gland of about the size of a hen's egg. The Tibet musk is most in repute, that known as Russian or Siberian being inferior in quality. Besides its familiar use as a scent, musk is employed medicinally as an antispasmodic.

Musk Ox. An animal intermediate between the ox and the sheep, resembling in general appearance a large goat-like sheep. Its body is covered with a coat of tufted hair, brownish in color and of great length. The hair about the neck and shoulders is so thick as to give the animal a "humped" appearance; on the rest of the body it is very long, smooth, and flowing, while interspersed among its fibers is a layer of lighter colored wool. The musk ox is active and agile, and climbs mountainous places with ease and dexterity. The horns, broad at the base and covering the forehead and crown, curve downward between the eye and the ear, and then upward and slightly backward. The ears are short, the head large and broad, the muzzle blunted. The average weight of the musk ox is from 400 to 600 pounds. The food consists of grass, lichens, etc. The musk ox inhabits the arctic regions of America north of the sixty-fourth degree of latitude. In spite of its name, both the live animal and its flesh are free from the odor or taste of musk. The beef is excellent and has been an important source of food to arctic explorers.

Nightingale. A group of birds belonging to the genus *Daulius*, inhabiting Europe, Asia, and North Africa. One of these is a summer visitant to the southern and eastern counties of England, arriving about the middle of April. It occurs rarely as far north as Mid-Yorkshire. The plumage of this delightful songster is of a somber hue, being on the upper surface of a

reddish brown, redder on the head and rump; the tail a lighter tint; the throat, lower part of the breast, and abdomen, grayish brown. The favorite haunts of this bird are copses and hedgerows, and its food consists of insects of various descriptions. The nest, which is either on the ground or a low bush, is composed of dry leaves, lined with grass, roots, and hair. The eggs are four or five in number, and of a uniform olive brown, tinged with grayish blue.

Opossum. A family of mammals, belonging to the order of pouch-bearers, which range throughout the wooded districts of America, from the southern boundary of Texas to the La Plata river where they are most numerous, while one species is found in North America, from Florida to the Hudson river, and west to the Missouri. They are rat-like in form, and the largest species is about the size of the common cat; they have a long tail, which is almost destitute of hair, and is very useful from its prehensile nature, enabling the animal not only to hang by it, but also to climb and descend trees. They are sly and intelligent, and live chiefly in trees, hiding in the daytime, and at night roaming abroad in search of their food, which consists of fruit, insects, small reptiles, birds' eggs, etc. Some species have no marsupium, or pouch, or it is very slightly developed; in these particular species the young, on leaving the nipples, are carried on their mother's back, retaining their position by entwining their tails around hers.

Orange. The name given to certain plants of the genus *Citrus*. The common or sweet orange is in universal request for its fruit. It is an evergreen tree, with oblong leaves and white flowers. It is extensively cultivated in southern Europe, Asia, and, in fact, in every part of the world where the climate is suitable. In the United States it is grown extensively in Florida, Louisiana, and California. There are numerous varieties of the common orange, the most important of which are the Chinese or Mandarin orange, the navel and russet oranges, and the blood orange, which is remarkable for the color of the pulp. The Seville or bitter orange is another species, having a bitter fruit of different shape, but of not less importance than the common orange. Its flowers yield the distilled water (orange-flower water), so much used in medicine, and a volatile oil called "essence of eeroli", used in the preparation of eau de cologne. The rind is much used for making marmalade, and in the young state is one of the principal flavoring ingredients of the liqueur curaçoa. Orange trees are extremely fruitful, a single tree producing as many as 20,000 oranges. The importance of these fruits is due to the free acids contained in the pulp, and the volatile oil secreted by the glands which cover the rind. The orange is specially cultivated in the Azores, Spain, Portugal, and the Mediterranean regions.

Orang-Utan, or "Jungle Man," also known as the "wild man of the wood." A large ape with brick-red hair, brown skin, and small ears, now confined to the swampy forests of Sumatra and Borneo. "The largest specimen on record stood 4 feet 6 inches in height from heel to head, measured 42 inches around the chest, and between the finger tips stretched 8 feet." (W. T. Hornaday.) The weight of a full grown male orang may reach 250 pounds. The legs are very short, the arms disproportionately long, reaching to the ankle when the animal is placed in an erect position. The males have a longish beard, and they sometimes develop warty protuberances, called cheek callosities, on each side of the face. The resemblance to man in appearance is greatest in the females and in young animals. In its native home it lives in the tree tops, and seldom descends to the ground except for water. Instead of leaping from tree to tree like the monkey, they swing from one branch to another with great accuracy. In its wild state the orang makes a nest of leafy branches laid crosswise in a forked tree. It sleeps lying flat on its back on this nest, grasping an overhead branch with both feet and hands for security.

Oriole. A family of birds which inhabit southern Asia, the Malay islands, Africa, and Australia, while one species, the golden oriole, is a summer visitant to central Europe, and, during the period of migration, is occasionally observed in England. The male of this species is of great beauty, having a brilliant yellow body and black wings and tail. The female is much plainer, being of a greenish hue, streaked with dusky lines. It is about the size of the common thrush. The name *oriole* is also applied to several American birds of the genus *Icterus*, of which the Baltimore oriole, a bird ranging from Canada to Mexico, is a well-known example. It has the head, throat, wings, and upper back black; the lower back and all the under parts are bright orange, deepening into vermilion on the breast.

Ostrich. A family of birds, belonging to the order *Ratitæ*, having a raft-like sternum (breast bone), and consequently not possessing the power of flight. The true ostriches belong to a single genus, *Struthio*. Formerly they roamed over nearly all the dry regions of Africa, with the exception of Libya and the Sahara; but they are now very rare except in the eastern and southern parts. In habit they are gregarious, usually ranging in small companies. They are polygamous, each male accompanying three or four females, all of which deposit their eggs in a single large nest scooped out in the sand. All the hens sit and relieve each other by turns, the male also taking his turn by night and assisting in the incubation of the eggs. The *Rhea americana*, or South American ostrich, is smaller than the African ostrich, has no tail, and is of a drab color. Its feet have three toes instead of two, as is the case with the true ostriches. The feathers have very little commercial value. The Rhea is found in Patagonia and the region northward as far as Brazil. Its habits are similar to those of its African relatives.

Owl. The popular name applied to the families *Strigidæ* and *Bubonidæ*, of the order *Raptores*, or birds of prey. The owl is easily recognized. The head is extremely large; the eyes huge and directed forward; the bill short and stout; the apertures of the ears very large;

the legs feathered; the toes four in number, the outer one capable of being directed backward. The plumage is full and remarkably soft, the feathers of the face being so arranged as to form two discs around the eyes. The owls are cosmopolitan in their distribution, ranging over the whole of the globe from the highest northern latitudes, and are even found in the remotest oceanic islands. They feed on small mammals, birds, fishes, and insects, swallowing the hair, bones, feathers, and scales, which they afterward disgorge in the shape of "pellets." Their flight is buoyant and noiseless. They place their nests on the ground, among rocks, in hollow trees, and in buildings, while some resort to the old nests of other birds. They lay from two to five roundish white eggs.

Oyster. A well-known edible shellfish. The oyster, particularly when eaten raw, is easy of digestion, and remarkably nutritious. The principal breeding time of the common oyster is in the spring, when their spawn is usually cast. The young oyster is at first a free-swimming organism which after a short time develops a shell and attaches itself to stones or other hard objects upon the sea bottom. Very commonly they adhere to adult shells, and thus are formed the large masses termed *oyster banks*. In about a year and a half they attain a size fit for the table.

Palms. A large and important order of plants, which are chiefly trees, often of great height. They have simple (rarely branched) trunks, marked with scars, which indicate the attachment of former leaves. The leaves are usually either feather-shaped or fan-shaped, arranged in a crown at the summit of the stem, and often of gigantic size. The flowers are commonly perfect or polygamous, and small, but, when taken collectively, their bright clusters form a striking object. The palms are mostly natives of the tropics, and form one of the most striking characteristics of tropical vegetation. The only European species is the fan palm. The products of the palms are various. The fruits of some are edible, as the cocoanut palm and the date palm, and form an important item of food in the countries where they grow. Many supply oils, wax, starchy matter, and sugar, from which an intoxicating beverage is obtained by fermentation and distillation. The palm of the Bible appears to be the date palm. The cocoanut palm is one of the most important of the family. Betel nut is the produce of a palm of the genus *Areca*; sago is also obtained from the stem of a palm. The Palmyra palm of the East Indies is chiefly important for its timber, which is very hard, heavy, and of a black color.

Panther. A carnivorous animal measuring about six feet and a half from nose to tail, which is itself about three feet long. It differs from the leopard chiefly by its superior size and deeper color. The manner in which it seizes its prey, lurking near the sides of woods, etc., and darting forward with a sudden spring, resembles that of the tiger. The puma, or cougar, is sometimes called the American panther. See **Puma.**

Parrot. The name applied in a general sense to all the members of the order *Psittaci*, which comprises the parrots proper, the cockatoos, parroquets, macaws, lories, nestors, etc. The true parrots have the upper mandible toothed, and longer than it is high, and have a short and rounded tail. These birds combine with the beauty of their plumage a nature of great docility, and have the faculty of imitating the human voice in a degree not possessed by other birds. They are found chiefly in Africa, from which we get the gray parrot, which is the favorite; South America, which is particularly rich in species, furnishes the well-known green parrot; and North America is the home of a single species, the Carolina parrakeet. The parrots are forest birds, and are adepts at climbing, using for that purpose both the feet and the bill. Their food consists of seeds and fruits.

Partridge. A well-known bird of the grouse family. The common partridge is the most plentiful of all game birds in Britain, and occurs in nearly all parts of Europe, in North Africa, and in some parts of western Asia. The wings and tail are short, the tarsi as well as the toes naked, and the tarsi not spurred. The greater part of the plumage is ash-gray finely varied with brown and black. They feed on grain and other seeds, insects and their larvæ and pupæ, and are chiefly found in cultivated grounds. There are also the red-legged, French, or Guernsey partridge, which belongs to a different genus and which may be found in considerable numbers in different parts of England, the Greek partridge, the African partridge, the Arabian partridge, and the Indian partridge. The name partridge is applied in the United States to several North American species of the grouse family, as to the ruffed grouse and to quails.

Passenger Pigeon. The American wild pigeon, *Ectopistes migratorius*, at one time very abundant in the Mississippi valley and in the states eastward, but now very scarce or possibly extinct. In the early days of the United States these pigeons were so numerous that at times the flocks covered the entire visible heavens for hours at a time. As late as 1860 they were still so plentiful that, when migrating in the spring or autumn, flocks were visible almost constantly at all hours of the day. When roosting at night their weight broke down large branches and even small trees; advantage was taken of this gregarious habit to kill them, when sleeping, in great numbers. In 1911 they were so nearly extinct that the American Ornithologists' Union made an organized effort to discover and save the remnant then living, and rewards aggregating over $2000 were offered for the discovery of undisturbed nestlings. The passenger pigeon is 16 inches long, with a ruddy breast, blue-gray back, and a pointed tail. Its nest is always built of twigs in shrubs or trees, and contains one or two white eggs one and a half inches long. The mourning dove, which might be mistaken for the wild pigeon, is 12 inches long, brownish on the back, and has a black spot on each side of the neck. It nests on or near the ground, frequently using a brush-heap or low-hanging branch as the support. The nest usually contains two white roundish eggs each an inch long.

Passion Flower. A large genus of twining plants belonging to the natural order *Passifloraceæ*. They are all twining plants, often scrambling over trees to a considerable length, and in many cases are most beautiful objects on account of their large, rich, or gaily-colored flowers, which are often succeeded by orange-colored edible fruits, for which in part they are chiefly valued in the countries where they grow wild. *Passiflora laurifolia* produces the water lemon of the West Indies, and *passiflora* [illegible] bears the sweet calabash. The name is applied more especially to *passiflora caerulea*, which is commonly cultivated in England out of doors, and is the one to which the genus owes its name.

Peach. A stone fruit native to China. It has been cultivated from the earliest times, reaching Europe by the way of Persia, hence its name, *Prunus persica*. The tree is small and much-branched, about fifteen to twenty feet high. It is nearly as hardy as the apple tree, owing to its early blooming habit, its successful commercial culture is limited to comparatively few localities, as, in America, the eastern and southern shores of the Great Lakes, New Jersey, Delaware, and Maryland, northern Georgia and Alabama, parts of Illinois, Missouri, Kansas, and eastern Texas, and all of California. Peaches are propagated from the seed, the trees bearing about the third year. Under the most favorable conditions the tree seldom reaches thirty years, commercial orchards usually lasting about ten. The fruit is usually classified as clingstone and freestone. The fruit is a drupe, varying much in size and color of flesh and downy skin. It is used as a dessert, for canning, and in the manufacture of peach brandy.

Peacock. The common name of a genus of beautiful birds, including only the common peacock and the Javanese peacock. The name properly belongs to the male but it is popularly applied to the species in general, though the female is, for distinction's sake, called a peahen. Like other domesticated birds, the common peacock exhibits several varieties. The ordinary length of this splendid bird, from the tip of the bill to that of the full-grown tail-expanded tail, is about four feet. The female is rather less. Her train is not only very short, but destitute of those brilliant hues and striking beauties which adorn the male; her crest, too, is less developed, and her whole plumage partakes of a cinereous hue. When pleased, the peacock erects his tail, unfolds his feathers, and frequently turns around, as if to catch the sunbeams in every direction, accompanying this movement with a hollow murmuring. At other times his cry is very disagreeable, and often repeated, especially before rain. Every year he sheds his plumes, and courts the most obscure retreats until the returning spring renews his luster. The Javanese peacock resembles the common kind, but has a larger crest.

Pear. An orchard fruit grown widely throughout all temperate regions. The countries of largest production are France and the United States, where the pear ranks fourth in importance among orchard fruits. The best districts in the United States are the northeastern states from New England to the Great Lakes, and in California and parts of Washington and Oregon. Left to themselves the trees sometimes reach a height of sixty feet. The size and quality of the fruit is increased, however, by dwarfing, which is done by grafting on quince stock. The Chinese pear, of little importance itself, has given two hybrids, the LeConte and the Kieffer, which have proved successful in the South. Pear trees thrive best on heavy clay loam, bearing in five to seven years. They are grown from the seed. An important commercial variety is called the Bartlett pear. The Seckel is a prominent eastern variety of exceptionally good quality, but of small size.

Peccary. An American animal of the swine family and related to the wild boar of Europe. It is found from the Red river southward through Mexico, Central and South America as far as Patagonia. Both jaws are fitted with long tusks, and when enraged it fights with great courage and ferocity. Its food consists of nuts, seeds, roots, and small animals. The peccary is provided with a musk gland which gives the flesh a strong flavor; but if this is removed as soon as the animal is dead, the meat is said to be palatable. The collared peccary is of a grayish-black color and has a narrow band of white around the neck. The white-lipped peccary is larger than the collared and has white hair on the upper lip.

Pelican. The popular name applied to a family of birds, characterized by possessing a long, straight, broad, and much-depressed bill, the upper mandible flat and terminating in a very strong hook, and the lower mandible formed by two long branches, flexible and united at the tip. From these branches is suspended a pouch of naked skin, of considerable elasticity, and capable of holding a large number of fish. In this pouch these birds stow away the results of their fishing excursions, after having satisfied the immediate cravings of their stomachs. The pelicans are large, web-footed, ungainly-looking birds from four to six feet long, with an expanse of wing of about eight feet. In their habits they are gregarious, and frequent the banks of rivers and lakes or the seacoast.

Peony. A genus of plants very generally cultivated in gardens for the sake of their large showy flowers. The species are mostly herbaceous, having perennial tuberous roots and large deeply-lobed leaves, although a few are half-shrubby. The flowers are solitary, and of a variety of colors, crimson, purplish, pink, yellow, and white. The roots and seeds of all the species are emetic and cathartic in moderate doses. The common peony of cottage gardens was formerly in great repute as a medicine.

Pepper. A name applied to various plants having pungent, acrid, and aromatic properties. The most important is the black pepper, a native of the East Indies, and now extensively cultivated in the tropics for the fruit, which is used for various purposes, but chiefly as a spice and a condiment. It is a climbing shrub, with opposite leathery leaves, and spikes of hermaphrodite flowers. The fruit, which is about the size of a pea, is gathered in an unripe state and

dried, constituting the "black pepper" of commerce. The term "white pepper" is applied to the ripe fruit of the same plant after it is deprived of the outer fleshy portion. The dried fruiting spikes of a species of *Piper longum* constitute "long pepper" used for culinary purposes and for pickling. Most of these plants owe their active properties to the presence of an acrid resin, and of a crystalline principle called piperine. Cayenne pepper is the produce of capsicum. Jamaica pepper is obtained from a species of *Eugenia* belonging to the myrtle family.

Petroleum. A combustible fluid which is found in sedimentary rocks in many parts of the earth. The prevailing opinion among geologists is that it was formed by the destructive distillation of organic matter during and subsequent to the consolidation of the sediments of which the rock was formed. Petroleum varies greatly in color and consistence, being sometimes thin and pale, at other times thick and dark-colored. The substances which mineralogists have distinguished by the names asphaltum, maltha, petroleum, and naphtha are hydrocarbons of different densities. Abundant supplies of petroleum are obtained from wells and springs in Pennsylvania, New York, Texas, California, and Canada, and the demand for it to serve as an illuminating agent, and for the lubrication of machinery, has created an important branch of commerce. On fractional distillation petroleum yields several important products, among which are paraffin, lubricating oils, kerosene, naphtha, gasoline, and benzine.

Pheasant. A family of birds comprising peafowl, true pheasants, jungle fowl, turkeys, and Guinea fowl. The true pheasants, of which there are about fifteen species, whose home is Asia, are among the most gorgeous of the feathered tribe. No pheasant is indigenous to Europe, the British species being an introduction from Asia Minor, and supposed to have been imported into England by the Romans. At the present day, however, very few of this original breed exist in that country, for it has been crossed with the Chinese ring-necked pheasant to such a degree that pure-bred birds are rare. The pheasant chiefly frequents woods for the purpose of roosting, being in the daytime found in hedge bottoms and thickets searching for its food, which consists of grain, seeds, green shoots, and insects. It is polygamous, and very pugnacious in its own territory, not permitting intrusion from the males of its race. The female deposits her eggs, from six to ten in number, in a slight hollow, scantily lined with dry leaves; but, being a very timid bird, and easily made to desert her post, the eggs are in most cases removed from the nest, and the young hatched out under domestic fowls. It is questionable, if this were not done, if the pheasant would not become extinct in England. Among the most beautiful of the pheasant family are the golden pheasant and Reeves's pheasant, both inhabitants of central Asia.

Pigeon. The common name of a group of birds, forming the order *Columbæ*. The pigeons or doves as a group have the upper mandible arched toward its apex, and of horny consistence; a second curve exists at its base, where there is a cartilaginous plate or piece through which the nostrils pass. The crop is of large size. The pigeons are generally strong on the wing. They are mostly arboreal in habit, perching upon trees, and building their nests in elevated situations. Both sexes incubate. These birds generally pair for life, the loss or death of a mate being in many cases apparently mourned and grieved over, and the survivor frequently refusing to be consoled by another mate. The song consists of the well-known plaintive cooing. The pigeons are distributed in every quarter of the globe, but attain the greatest luxuriance of plumage in warm and tropical regions. The pigeon family is divided into various groups. The true pigeons are represented by the stockdove, from which, it was once supposed, most of the beautiful varieties of the Columbæ, which in a state of domestication are dependent upon man, derived their origin; but it is now believed the rock dove is the parent stock. The wild pigeon was at one time very abundant in North America, but is now believed to be extinct. The house pigeons, tumblers, fantails, pouters, carriers, and jacobins are the chief varieties of the rock pigeon, and have been employed by Darwin to illustrate many of the points involved in his theory of "descent by natural selection". Other species of pigeons are the fruit pigeons of India, the Eastern Archipelago, and Australia, and the ground pigeons, the largest of the group, including the crowned pigeon of the Eastern Archipelago. (See **Passenger Pigeon.**)

Pine. The popular name of trees of the genus *Pinus*, of the order *Coniferæ*. The pines are distinguished by having persistent linear, needle-like leaves, usually in clusters of two to five in the axils of membraneous scales. The cones also afford an important ready means of distinction and classification. The Scotch pine, *Pinus sylvestris*, is a tall, straight, hardy tree, from sixty to 100 feet high; it is a native of most parts of Europe, flowering in May and June, and having many varieties. The leaves are rigid, in pairs, somewhat waved and twisted; the lower branches are somewhat pendent; the bark is of a reddish tinge, sometimes rough and furrowed. The leaves are distinguishable from those of all other pines in which they occur in pairs by their glaucous hue, especially when young. The Scotch pine almost always occurs in masses. It is considered full grown and fit to be cut down for timber in fifty or sixty years; but in the north of Scotland, where pine forests grew to perfection in former times, the tree continued to increase in bulk for three or four centuries. The tree is most abundant in the north of Europe. There are extensive forests of it in Russia, Poland, Sweden, Norway, Germany, the Alps, the Pyrenees, and the Vosges. In Scotland it grows at the height of 2,700 feet on the Grampians. The Corsican pine grows to a height of from eighty to 100 feet, and in the island of Corsica it is said to reach an altitude of 140 to 150 feet. The pinaster, or cluster pine, is indigenous to the south of Europe, to the

west of Asia, the Himalayas, and, it seems, even to China. It is a large, handsome, pyramidal tree, varying from forty to sixty feet in height. Its cones point upward, in star-like clusters, whence the name of pinaster or star pine. In France, especially between Bayonne and Bordeaux, it covers immense tracts of barren sand, in which it has been planted to prevent the sand from drifting. The stone pine is a lofty tree in the south of Europe, where it is a native. Its spreading head forms a kind of parasol; the trunk is fifty or sixty feet high, and clear of branches. In Britain the stone pine seldom exceeds the size of a large bush, although specimens have reached a height of thirty and forty feet. The Cembran pine is a native of Switzerland and Siberia. The red Canadian pine, *Pinus resinosa*, inhabits the whole of Canada from the Atlantic to the Pacific, and is also found in the northern and eastern parts of the United States. The trunk rises to the height of seventy or eighty feet, is about two feet in diameter at the base, and is chiefly remarkable for its uniform size for two-thirds of its length. The wood is yellowish, compact, fine-grained, resinous, and durable. The yellow pine, *Pinus mitis*, rises to the height of fifty or sixty feet, and is fifteen or eighteen inches in diameter at the base. The cones are small, oval, and armed with fine spines. The timber is largely used in shipbuilding and for house timber. Other American pines are the Jersey pine, the trunk of which is too small to be of any utility in the arts; the pitch pine, which is most abundant along the Atlantic coast, and the wood of which, when the tree grows in a dry, gravelly soil, is compact, heavy, and contains a large proportion of resin; the long-leaved pine, *Pinus australis*, which abounds in the lower part of the Carolinas, Georgia, and Florida, furnishing resin, tar, pitch, and turpentine, and timber which is hardly inferior to the white oak in naval architecture; the white pine, *Pinus strobus*, which was at one time the principal pine of the region adjacent to the Great Lakes; and Lambert's pine, which grows between the fortieth and forty-third parallels of latitude, and within about 100 miles of the Pacific. It is of gigantic size, the trunk rising from 150 to upward of 300 feet, and being from seven to nearly twenty feet in diameter.

Pineapple. A tropical and sub-tropical plant of increasing commercial importance, which grows a single fragrant and palatable fruit usually from four to six inches in diameter and six to ten inches high. The plant is usually from two to four feet in height. It is extensively cultivated in the West Indies and Florida, and propagated by slips from the parent plant. Plants are set in rows three feet apart and about two feet distant in the row. In Florida they are usually grown under lath sheds to protect them from frost.

Pink. A genus of plants of which about seventy species are known, all, with perhaps one or two exceptions, natives of the northern and temperate parts of the European continent. Their roots are annual and perennial; the stems herbaceous and jointed; the leaves opposite and entire, and the flowers terminal, aggregate, or solitary, and always beautiful. The clove pink or carnation, and the garden pink, of which there are many varieties, are familiar species.

Platypus, or Duckbill. An Australian animal of the order *Monotremata*, intermediate between mammals and birds. It has webbed feet and a flat bill like a duck; the body is about a foot long and covered with soft brown fur, intermingled with longer hairs; the tail is broad, flat, hairy above and naked below. The platypus is a nocturnal animal, frequenting quiet pools in streams and therefore not easily found. It digs deep burrows in the banks in which it builds a nest and lays two ovoid eggs, each less than an inch long. The young are at first blind and hairless like young mice. The food of the platypus is mostly animal and consists of water insects and other invertebrates.

Plum. A stone fruit, widely grown in all temperate climates, and ranking third in importance among orchard products in the United States. The three principal types of plums are the European plums, Japanese, and native plums. The European plums thrive in the regions about the Great Lakes and northern states, and on the Pacific slope where the prune industry has reached its greatest development. The Japanese variety was introduced about 1870, and flourishes much farther south than the European plum. The native plum is inferior to either, though more hardy. The fruit is distinguished from the peach, its near relative, by its smooth skin and unwrinkled stone. Firm, sweet-fleshed varieties of plums that can be successfully cured are called prunes. They are extensively grown on the Pacific slope where very favorable conditions exist for drying them. California produces about five and a half million bushels of plums and prunes yearly.

Polar Bear. The polar bear, *Thalarctos maritimus*, constitutes an entire genus. It is a tall creature with thin sides, long legs, and flat, wide, hairy paws. It stands over four feet high and has a length of over seven feet. Its color is pure white at all times of the year. The home of the polar bear is the ice packs and the barren islands of the Arctic zone, where it wanders at will, living upon fish, seals, walruses, and the scanty vegetable matter of the arctic regions. It is a great swimmer and diver, and remains for hours at a time, evidently with great pleasure, in the icy waters of the northern seas.

Polecat. A name common to several species of the weasel family, but properly applied to the European marten, *Putorius fœtidus*. This animal is about seventeen inches long, and the tail six inches. The color is dark brown. It is a nocturnal animal, sleeping during the day and searching for its prey at night. It is especially destructive to poultry, rabbits, and game, as pheasants, so that in Britain it is being rapidly exterminated by gamekeepers, farmers, and others. Frogs, toads, newts, and fish are often stored as food by this voracious animal. It has glands secreting a fetid liquor, somewhat like that of the American skunk, which it ejects when irritated or alarmed. The name of "Foumart" is also applied to the polecat; its fur, which is imported in large quantities from northern

Europe, is known as that of the "Fitch." Its hairs form a superior kind of artists' brushes. In America the skunk is sometimes called a polecat.

Poppy. The common name for plants of the genus *Papāver*. The species of poppy are herbaceous plants, all bearing large, brilliant, but fugacious flowers. The white poppy yields the well-known opium of commerce. Most of the species are natives of Europe, and four are truly natives of Britain. They often occur as weeds in fields and waste places, and are frequently also cultivated in gardens for ornament. The seeds of the white poppy yield a fixed harmless oil employed for culinary purposes; the oil cake is used for feeding cattle. The roots of the poppy are annual and perennial. The calyx is composed of two leaves, and the corolla of four petals; the stamens are numerous, and the capsule is one-celled, with several longitudinal partitions, and contains a multitude of seeds.

Porcupine. A name of certain rodent quadrupeds, the best-known European species of which belong to the genus *Hystrix*. The body is covered, especially on the back, with the so-called quills, or dense solid spine-like structures, intermixed with bristles and stiff hairs. The muzzle is generally short and pointed, the ears short and rounded. The anterior feet possess four and the hinder feet five toes, all provided with strong thick nails. The common or crested porcupine, *Hystrix cristāta*, found in southern Europe and in northern Africa, is the best-known species. When fully grown it measures nearly two feet in length, and some of its spines exceed one foot. Its general color is a grizzled dusky black. The spines in their usual position lie nearly flat, with their points directed backward; but when the animal is excited they are capable of being raised. The quills are loosely inserted in the skin, and may, on being violently shaken, become detached. In America two species of arboreal porcupines are found, both belonging to the genus *Erethizon*. They inhabit the northeastern states and Canada.

Porgy. A fish of the family *Sparidæ*, with an oblong body, scaly cheeks, and one dorsal fin, found off the coasts of the United States. It is one of the most important food fishes, and attains a length of eighteen inches and a weight of four pounds.

Porpoise. A species of marine fish-like mammal, belonging to the same family as the dolphin, and to the order *Cetacea*. It is an inhabitant of northern seas, and is familiar on our own shores. It is usually from four to five feet in length, though frequently more. In color it varies, but is mostly of a jet-black tint on the upper surface, merging into pink, mottled gray, or white beneath. The porpoise is compelled continually to seek the surface of the water for breathing purposes; it is then observed rolling over, as it were, and is heard discharging air from the crescent-shaped blowhole on the crown of the head, at the same time taking in a fresh supply at the mouth. Porpoises are frequently observed in great numbers in pursuit of shoals of herring, mackerel, and other small fish, among which, being of an exceedingly voracious nature, they commit sad havoc.

Prairie Dog. The name given to two species of small rodent animals of the squirrel family, found in America, on the plains east of the Rocky mountains from the Canadian border to the Red river and Rio Grande, and on the western slope in Colorado and Utah. They much resemble their allies, the marmots, in appearance, and have well-developed claws on all the toes of the fore feet. The best known species is about one foot in length, and has a tail of about four inches. On the upper surface it is reddish-brown variegated with gray. These animals live together in great societies on those portions of the prairies where their favorite food, the buffalo grass, grows luxuriantly. Here they excavate burrows in the ground in contiguity to each other, and, when the little creatures are out, quite a busy scene is presented. The name *prairie dog* is given to the animal on account of a resemblance which is supposed to exist between its cry and the bark of a small dog.

Precious Stones are those which, because of their beauty, hardness, and rarity, are prized for use in ornamentation, especially in jewelry. The diamond, ruby, sapphire, and emerald are the only stones which are, strictly speaking, entitled to be called "precious" in this sense; but the opal, on account of its beauty, is often classed with the precious stones, as is also the pearl, which is really not a stone, but a secretion of a shellfish.

Agate. A semipellucid, uncrystallized variety of quartz, presenting various tints in the same specimen. Its colors are delicately arranged in stripes or bands, or blended in clouds.

Alexandrite. A variety of chrysoberyl found in the mica slate of the Ural mountains. It is of a rich garnet color by transmitted light; by daylight of a dark moss green. It is the only stone that so changes. The finest specimens of alexandrite are nearly as valuable as diamonds.

Almandine. A common maroon-red variety of garnet.

Amethyst. A variety of crystallized quartz, of a purple or bluish violet color, of different shades. It is much used as a jeweler's stone. In value it is about the same as the garnet.

Aquamarine. A transparent, sea-green variety of beryl, used as a gem.

Aventurine. A variety of translucent quartz spangled throughout with scales of yellow mica. Also a variety of feldspar.

Beryl. A very hard mineral of much beauty when transparent. It occurs in hexagonal prisms, commonly of a green or bluish green color, but also yellow, pink, and white. It is a silicate of aluminum and glucinum. Beryls are very rich in colors. Their value is about four dollars per carat.

Bloodstone or *Heliotrope.* A green siliceous stone sprinkled with red jasper, whence the name.

Cameo. A figure cut in stone or shell that is composed of different colored layers. The value depends on the artistic merit of the engraved figure.

Carbuncle. A beautiful gem of a deep red color (with a mixture of scarlet), found in the East Indies. When held up to the sun, it loses its deep tinge, and becomes of the color of a burning coal. The carbuncle of the ancients is believed to have been a garnet. The name is now given also to the ruby sapphire and the red spinel. The ordinary carbuncle is a garnet cut *en cabochon*, and is worth about one dollar a carat.

Carnelian. A variety of chalcedony, of a clear, deep red, flesh-red, or reddish white color. It is moderately hard, capable of a good polish, and often used for seals. It is now used but little.

Cat's-eye. A variety of quartz or chalcedony exhibiting opalescent reflections from within, like the eye of a cat. The name is given to other gems affording like effects, especially the chrysoberyl. A fine specimen about three-eighths of an inch across would be worth from two to three hundred dollars.

Chalcedony. A cryptocrystalline, translucent variety of quartz, having usually a whitish color, and a luster nearly like wax.

Chrysolite. A mineral, composed of silica, magnesia, and iron, of a yellow to green color. It is little used.

Chrysoprase. An apple-green variety of chalcedony. Its color is due to nickel contained in its composition.

Dendrite. A stone or mineral in which are branching figures, resembling shrubs or trees, produced by a foreign mineral, usually by an oxide of manganese, as in the moss agate.

Diamond. A precious stone or gem excelling in brilliancy and beautiful play of prismatic colors, and remarkable for extreme hardness. It is found in many hues—green, rose, straw, yellow, etc.; but the straw-colored ones are the most common. The diamond is a native carbon occurring in isometric crystals, often octahedrons, with rounded edges. It is the hardest substance known. Diamonds are said to be of the *first* water when very transparent, and of the *second* and *third* water as the transparency decreases.

Diopside. A crystallized variety of pyroxene (a silicate of lime and magnesia), of a clear, grayish green color; also called *mussite.*

Emerald. A precious stone of a rich green color; it is the most valuable variety of beryl. See Beryl.

Epidote. A mineral, commonly of a yellowish green color, occurring granular, massive, columnar, and in crystals. It is a silicate of alumina, lime, and oxide of iron, or manganese.

Essonite. Cinnamon stone. A variety of garnet. It is not much used.

Fire Opal. See Opal.

Flint. A massive, somewhat impure variety of quartz, in color usually of a gray to brown or nearly black, breaking with a conchoidal fracture and a sharp edge.

Fluorite. Calcium fluoride, a mineral of many different colors, white, yellow, purple, red, etc., often very beautiful. When crystallized it is commonly in cubes with perfect octahedral cleavage. Some varieties are used for ornamental vessels. Also called *fluorspar,* or simply *fluor.* The colored varieties are often called *false ruby, false emerald, false topaz, false sapphire,* and *false amethyst.* For jewelry purposes the chief value of the stone is the expense of cutting and mounting.

Fluorspar. Same as Fluorite.

Garnet. A mineral having many varieties differing in color and in their constituents, but with the same general chemical formula. The commonest color is red; the luster is vitreous, or glassy; and the hardness is greater than that of quartz, about half as hard as the diamond.

The common crystal forms are the dodecahedron and trapezohedron. Besides the red varieties there are also white, green, yellow, brown, and black ones.

The garnet is a silicate with various bases such as alumina-lime (grossularite essonite or cinnamonstone), alumina-magnesia (pyrope), alumina-manganese (spessartite), and chromium-lime (ouvarovite, color emerald green.) The transparent red varieties are used as gems. The garnet was the carbuncle of the ancients. Garnet is a very common mineral in gneiss and mica slate.

The finest specimens of red garnets come from Arizona and a single carat stone is worth about two dollars. A green variety that comes from Russia is worth about half as much as the diamond.

Golden Beryl. See Beryl.

Heliotrope or *Bloodstone.* A green siliceous stone sprinkled with jasper, as if with blood, whence the name.

Hematite. An important ore of iron, the sesquioxide, so called because of its red color when in the form of powder. It occurs in splendent rhombohedral crystals, and in massive and earthy forms, the last being called red ochre. It is now seldom used in jewelry.

Hyacinth. A red variety of zircon, sometimes used as a gem. It resembles closely a dark Spanish topaz, and is worth a little more than the garnet.

Idocrase. A mineral occurring in tetragonal crystals and also massive, of a brown to green color, rarely sulphur yellow or blue. It is a silicate of alumina and lime, with some iron and magnesia. It is common at Mt. Vesuvius. It is little used.

Indicolite. A variety of tourmaline of an indigo-blue color.

Iolite. A silicate of alumina, iron, and magnesia, having a bright blue color and a vitreous or glassy luster. It is remarkable for its dichroism, and is also called *dichroite.*

Jacinth. Same as Hyacinth.

Jade. A stone commonly of a pale to dark green color, but sometimes whitish. It is hard and very tough, capable of a fine polish, and is used for ornamental purposes and for implements, especially in Eastern countries and among many primitive peoples.

Jasper. An opaque, impure variety of quartz, of red, yellow, and other dull colors, breaking with a smooth surface.

Kyanite. A mineral occurring in thin-bladed crystals and crystalline aggregates, of a sky-blue color. It is a silicate of aluminum. It is little used for jewelry.

Labradorite. A kind of feldspar, commonly showing a beautiful play of bluish-gray colors, and, hence, much used for ornamental purposes. The finest specimens come from Labrador.

Lapis-lazuli or *Lazuli.* A mineral of a fine azure-blue color, usually occurring in small rounded masses. It is essentially a silicate of alumina, lime, and soda, with some sodium sulphide. It is often marked by yellow spots or veins of sulphide of iron, and is much valued for ornamental work.

Moonstone. A nearly pellucid variety of feldspar, showing pearly or opaline reflections from within. The best specimens come from Ceylon. Their value is not much more than the expense of cutting.

Nephrite. A hard, compact mineral, of a dark green color, formerly worn as remedy for diseases of the kidneys, whence its name *kidneystone.* Amphibole.

Obsidian. A kind of glass produced by volcanoes. It is usually of a black color and opaque, except in thin splinters.

Olivine. A common name of the yellowish green mineral chrysolite, especially of the variety occurring in eruptive rocks. See Chrysolite.

Onyx. Chalcedony in parallel layers of different shades of color. It is used for making cameos, the figure being cut in one layer with the next layer as a background (see Cameo). It is stained black and used to make mourning jewelry.

Opal. A mineral consisting, like quartz, of silica, but inferior to quartz in hardness and specific gravity. The precious opal shows a peculiar play of colors of delicate tints and it is highly esteemed as a gem. One kind, with a varied play of color in a reddish ground, is called *harlequin opal.* The *fire opal* (which comes from Mexico) has colors like the red and yellow of flame. This is not the cheap variety commonly called "Mexican opal." A spherical opal about three-eighths of an inch in diameter, or an oval flat opal about half an inch long, would be worth about sixty dollars. A "Mexican opal" of the same size would be worth about fifteen dollars.

Pearl. A shelly concretion, usually rounded, having a brilliant luster, with varying tints, formed in the mantle, or between the mantle and shell, of certain bivalve mollusks (especially in the pearl oysters and river mussels) and sometimes in certain univalves. Its substance is the same as nacre, or mother-of-pearl. Pearls which are round, or nearly round, and of fine luster, are highly prized as jewels. They are sold by carat grains, instead of carats.

Pyrope. A variety of garnet of a poppy-red or blood-red color, frequently with a tint of orange. It is used as a gem.

Rhodonite. Manganese spar, or silicate of manganese, a mineral occurring crystallized and in rose-red masses. It is almost entirely used for ornamental purposes, in slabs, blocks, etc.

Rock Crystal or *Mountain Crystal.* Any transparent crystal of quartz, particularly of limpid or colorless quartz. A sphere of rock crystal of absolutely perfect clearness, about five inches in diameter, is worth at least twenty thousand dollars.

Rose Quartz. A variety of quartz which is pinkish red.

Rubellite. A variety of tourmaline varying in color from a pale rose red to a deep ruby, and containing lithium. It is a little more valuable than the garnet.

Ruby. A precious stone of a carmine-red color, sometimes verging to violet, or intermediate between carmine and hyacinth red. It is a crystallized variety of corundum. The ruby from Siam is of a dark color and is called ox-blood ruby. It has about the same value as the diamond. The ruby from Burmah, called the pigeon-blood ruby, is of a lighter color and several times more valuable than the ox-blood ruby. A fine pigeon-blood ruby of two carats would be worth upwards of six thousand dollars.

Rutile. A mineral, usually of a reddish-brown color and brilliant, metallic, adamantine luster, occurring in tetragonal crystals.

Sapphire. A variety of native corundum or aluminum sesquioxide. As the name of a gem the term is restricted to the transparent varieties of blue, pink, yellow, and other colors. The best specimens of the blue variety are nearly as valuable as the diamond. The sapphire is next to the diamond in hardness.

Sard. A variety of carnelian, of a reddish-yellow or brownish color.

SPARROW HAWK
TURKEY BUZZARD
PHEASANT
PELICAN
FLAMINGO
MEADOW LARK
BITTERN
WOODCOCK
AMERICAN MAGPIE
CARDINAL GROSBEAK
BUSTARD
QUAIL
PASSENGER PIGEON

Sardonyx. A variety of onyx consisting of sard and white chalcedony in alternate layers. See Onyx.

Spinel. A mineral occurring in octahedrons of great hardness and various colors, as red, green, blue, brown, and black, the red variety being the gem *spinel ruby.* It consists essentially of alumina and magnesia, but commonly contains iron and sometimes also chromium. The fine specimens of spinel ruby are worth rather more than half as much as the diamond.

Sunstone. Aventurine feldspar; aventurine.

Topaz. A mineral occurring in rhombic prisms, generally yellowish and pellucid, also colorless, and of greenish, bluish, or brownish shades. It sometimes occurs massive and opaque. It is fluosilicate of aluminum, and is used as a gem. It is but little more valuable than the garnet, except occasionally unusual fine specimens.

Tourmaline. A mineral occurring in three-sided prisms. Black tourmaline is the most common variety, but there are also other varieties, as the blue (*indicolite*), red (*rubellite*); also green, brown and white. The red and green varieties, when transparent, are valued as jewels. The finest ones come from Maine, and are worth four or five times as much as garnets.

Turquoise. A hydrous phosphate of alumina containing a little copper. It has a blue, or bluish-green color, and usually occurs in kidney-shaped masses with a nodular surface, like that of a bunch of grapes. The fine specimens are worth nearly half as much as diamonds.

Uralian Emerald. A precious stone of a rich green color, a variety of beryl.

Verd antique. A mottled-green, serpentine marble. Also a green porphyry, which is called *Oriental verd antique.*

Zircon. A mineral occurring in tetragonal crystals, usually of a brown or gray color. It consists of silicon, iron, and zirconium, and is harder than the garnet. The transparent varieties are used as gems. The red variety is called *Hyacinth*; a colorless, pale yellow, or smoky-brown variety from Ceylon is called *jargon.*

Prickly Pear, otherwise called Indian fig, is a fleshy and succulent plant, destitute of leaves, covered with clusters of spines, and consisting of flattened joints inserted upon each other. The fruit is purplish in color, covered with fine prickles, and edible. The flower is large and yellow. It is a native of the sub-tropical and warm temperate parts of America, whence it has been introduced into Europe, Mauritius, Arabia, Syria, and China. It is easily propagated, and in some countries is used as a hedge-plant. It attains a height of seven or eight feet.

Primrose. A genus of beautiful low plants of the order *Primulaceæ.* Some are among the earliest flowers in spring, as the common primrose, the oxlip, and cowslip; several Japanese and other varieties are cultivated in gardens as ornamental plants. Their roots are perennial, the leaves almost always radical, and the flowers are supported on a naked stem, usually disposed in a sort of umbel. The varieties of the common primrose which have arisen from cultivation are very numerous.

Puma, or **Cougar.** A carnivorous animal, *Felis concolor,* peculiar to America, where it ranks next to the jaguar in importance as a destructive or dangerous creature. It is known as the American lion, probably from its resemblance in build and color to the lioness; but it is considerably less in size, and lacks a mane. Its length is from seven to eight feet from nose to tip of tail; its height is about two feet. The geographical range of the puma is very extensive, being found in the Adirondacks and Florida, and along the Rocky mountain and Andes systems from British Columbia to Patagonia. It is of a cowardly nature, and is not regarded with fear by man. Unlike most of the larger members of the cat family, it is remarkably silent; but it sometimes screams like a terrified child, especially when on a marauding expedition. See **Panther.**

Python. A genus and family of serpents allied to the family of boas. They are not venomous, but kill their prey by compression. The pythons belong exclusively to the old world, and are of enormous size, sometimes attaining a length of over 20 feet. They are found in India and in the islands of the Eastern Archipelago, in Africa and in Australia. A rudimentary pelvis and traces of hinder limbs exist in the pythons, these structures terminating externally in a kind of hooked claw. The head exceeds the neck in thickness, and the mouth is extremely large. Aided by their prehensile tails and rudimentary hinder limbs, the pythons suspend themselves from the branches of trees and lie in wait near water for animals which come to drink. The genus python contains various species, the best known of which is the reticulated python of the Malay peninsula, Sumatra, and Borneo, common in menageries.

Quail. A name applied to several members of the grouse family, which is found widely distributed in both the eastern and western hemispheres. The best known American species is the Virginia quail, which is found from Maine to Florida, and as far west as Oklahoma and South Dakota. It is about ten inches long. The back is rufous, with black or dark brown markings; the forehead and breast are black, the throat and belly white. The female has a buff throat. The nest is placed on the ground and contains from ten to eighteen white eggs. The flesh of the quail is highly esteemed as a table delicacy. Other American species are the California mountain quail and the valley quail, both of the Pacific coast of the United States. Both of these birds are plumed, that of the mountain quail drooping, and of the valley quail erect. The European quail belongs to the genus *Coturnix,* and is found in most parts of the old world.

Raccoon. A small family of plantigrade carnivorous mammals, bear-like in appearance and of small size. The raccoons are peculiar to America, where they range from British Columbia and Canada to Arizona. The common raccoon is a pretty animal, about the size of a cat, but much stouter; it has a long brown or grizzled coat, a ringed and bushy tail, and a turned-up nose. Its legs are short, and are armed with strong claws, useful for digging or climbing. In its attitudes it is somewhat monkey-like, and usually sits upon its haunches when feeding, holding its food in its fore paws. It has a curious habit, too, of washing articles given to it, and of soaking any food in water before eating it. Its skin is highly valued as a fur, and is consequently much sought after in North America, where the animal is widely distributed.

Redwood. The name of various sorts of wood of a red color, as the wood of the redwood of Jamaica; of Andaman wood; of the redwood of the Bahamas; and of a coniferous tree of California, the redwood of the timber trade.

The redwood of California is found only in that state, and in but a comparatively contracted area even there. The available redwood is now confined to about 318 miles of coast. The lumber is now becoming much in demand for decorative purposes. Its color is a light salmon when first cut, which afterwards turns to a deep red.

Reptiles. A class of vertebrate animals, which comprises the tortoises, crocodiles, snakes, lizards, etc. Reptiles are more closely related to birds than any other group of animals; and in some recent classifications birds and reptiles together are made to constitute the great division *Sauropsida* of the sub-kingdom *vertebrata*. Reptiles agree with birds and differ from all other vertebrates in the following characters: The skull articulates with the spinal column by a single condyle; the lower jaw articulates with the skull by the intervention of a peculiar bone, termed the *os quadratum*, or quadrate bone, and each half of the lower jaw consists of several pieces; at no period of their existence are branchial or water-breathing respiratory organs developed. The heart in reptiles consists of three chambers—two auricles and a ventricle, the latter being divided into two portions only by a partition which is generally incomplete, and allows the arterial and venous blood to mix, so that the blood is never so perfectly aërated as in the higher animals. The blood is consequently much colder than that of birds and all the more highly organized animals, where the oxygen obtains a freer access to its particles. In the crocodiles the heart has a complete septum, but there is an intermixture of the venous and arterial blood outside the heart. In consequence of this organization of the circulatory system, the whole character of reptiles differs from that of the higher animals. The cavity of the thorax, or chest, in reptiles is not shut off from the abdomen by a complete muscular partition or diaphragm, though traces of it are found in crocodiles. The lungs are usually less cellular than in birds and mammals, but are often of large size, extending into the abdominal cavity. In snakes there is usually only one active lung, the other being rudimentary or completely atrophied. The rectum opens in a common cavity, or *cloaca*, which receives both excrementitious matters and the products of the generative organs. Reptiles are often provided with an exo-skeleton, or hardened skin, consisting of horny plates or scales. The strong and conspicuous outer shell of the body of tortoises and turtles is formed by this exo-skeleton uniting with the true endo-skeleton. Ribs are always present, but differ much in form. Teeth are generally present, but are not sunk in distinct sockets, except in crocodiles. They are perpetually renewed as fast as they wear out. The tortoises and turtles, however, are toothless, but have jaws sheathed with horn like the beak of a bird. The jaws have sharp cutting edges for cutting the food into pieces small enough for swallowing. The young of reptiles are produced from eggs, mostly hatched after being laid, but in some cases the eggs are hatched within the body.

Rhinoceros. The name of a family of mammals, represented by five living species, characteristic of Africa to the south of the Sahara, India, Borneo, and Java. They have large unwieldy bodies, short thick legs, terminating in large pads, with hoof-bearing toes; large elongated heads, with a long horn or horns springing from the snout in existing forms; small eyes and ears; and short tails. Their hide is extremely thick, but is not bullet-proof, as is popularly supposed. The Asiatic species differ from the African in some dental characters, but resemble the latter in other respects. Two species belong to Africa, both possessing two horns. Of these, the white rhinoceros is the larger, attaining a length of over twelve feet and a height of nearly six feet; but the black or common rhinoceros is the best known species. The Asiatic species are three in number, distinguished by the possession of incisors, or front teeth, which are entirely absent in the African ones, and the hide has much the appearance of armor plates. They are also smaller in size; two of the species possess single horns, and one a double horn. The Indian rhinoceros, a one-horned species, is the one usually seen in menageries in this country. It leads a tranquil, indolent life, wallowing on the marshy borders of lakes and rivers. Owing to the keenness of its smell and hearing, the rhinoceros can not be easily attacked; but, when brought to bay, it charges with great fury and impetuosity.

Rocky Mountain Sheep. See **Sheep.**

Rose. A large genus of plants found chiefly in temperate regions. They are usually erect thorny shrubs, with compound leaves, and flowers of all shades of white, pink, or yellow. The calyx consists of five sepals, united in the lower part to form a fleshy tube, which encloses the fruits. There are normally five petals, but under cultivation the number is often much increased at the expense of the stamens, which are indefinite in number. The rose is one of the most beautiful and fragrant of flowers and has been held in high estimation for centuries.

Sable. A carnivorous mammal, nearly allied to the common marten and pine marten, found chiefly in Siberia and Kamtchatka, and hunted for its fur. Its length, exclusive of the tail, is about eighteen inches. Its fur, which is extremely lustrous, and hence of the very highest value, is generally brown, grayish-yellow on the throat, with small grayish-yellow spots scattered on the sides of the neck. It is densest during winter, and owing to the mode of attachment of the hairs to the skin it may be pressed or smoothed in any direction. Sable fur has been highly prized from very early times. The skins readily bring from $30 to $50, and exceptionally fine pelts are sometimes sold as high as $200.

Sago. A starchy product obtained from the trunk of several species of a genus of palms. The one from which the finest sago is prepared forms immense forests on nearly all the Moluccas, each stem yielding from 100 to 800 pounds of sago. The tree is cut down at maturity, the medullary part extracted and reduced to powder like sawdust. The filaments are next separated

by washing, and the meal laid to dry. For exportation the finest sago meal is mixed with water, and then rubbed into small grains of the size and form of coriander seeds. The Malays have a process for refining sago, and giving it a fine pearly luster, the method of which is not known to Europeans; but there are strong reasons to believe that heat is employed, because the starch is partially transformed into gum. The sago so cured is in the highest estimation in all the European markets. Sago forms a light, wholesome, nutritious food, and may be used to advantage in all cases where a farinaceous diet is required. It is also largely used in the manufacture of soluble cocoas, and for adulterating the common sorts of arrowroot.

Salmon. A well-known fish, forming the type of the family *Salmonidæ*. The salmon inhabits both salt and fresh waters, and ranks prominent among the food fishes of the United States and other countries. The Atlantic salmon attains a length of from three to four feet, and an average weight of from twelve to thirty pounds, but these limits of size and weight are frequently exceeded. It usually continues in the shallows of its native stream for two years after hatching, and during this period it attains a length of eight inches. In this stage it is called a *parr*. When the season of its migration arrives, generally between March and June, the fins have become darker and the fish has assumed a silvery hue. It is now known as a *smolt*. The smolts now congregate into shoals and proceed leisurely seaward. On reaching the estuary they remain in its brackish water for a short time and then make for the open sea. Leaving its native river as a fish, weighing it may be not more than two ounces, the smolt, after an absence varying from a few months to two years, returns to fresh water as a *grilse*, weighing four or five pounds. In the grilse stage the fish is capable of depositing eggs. After spawning in the fresh water the grilse again seeks the sea in the autumn, and when its second stay in the ocean is over it returns after a few months' absence as the adult salmon, weighing from eight to ten pounds. The salmon returns as a rule to the river in which it passed its earlier existence. The fertility of the fish is enormous. Salmon are caught by the rod, and by means of nets. For purposes of commercial supply they are taken in nets of special construction and of various forms, the fishings being regulated by law not only as to their seasons and times, but also as to the forms and dispositions of the machines for the capture of the fishes. There are important fisheries in some European and North American rivers. In Europe the fish is found between the latitudes of 45° and 75°, in North America in corresponding latitudes. The flesh of the salmon when fresh is of a bright orange color, and is of highest flavor when taken from the sea-feeding fish. In the waters of northwestern America are several salmon belonging to a distinct genus, including the quinnat or king-salmon, blue-back salmon or red-fish, silver salmon, dog salmon, and humpbacked salmon. The quinnat has an average weight of twenty-two pounds, but sometimes reaches 100 pounds. Both it and the blue-back salmon are caught in immense numbers in the Columbia, Sacramento, and Frazer (especially in spring), and are preserved by canning.

Salt, Common. A substance in common use as a seasoner and preserver of food from the earliest ages. It exists in immense quantities dissolved in sea water, also in the waters of salt springs, and in solid deposits, sometimes on the surface, sometimes at greater or less depths, in almost every geological series. Rock salt, that is, salt in the crystalline or solid form, is found in great abundance in England. It is also found in abundance in nearly every country of Europe. The supply in other continents is equally great. The basin of the Indus and other parts of India possess extensive salt plains. In China deep salt wells abound. The Sahara and central and southern Africa afford inexhaustible supplies. Most of the South American republics, the West Indies, and the United States also have large natural supplies. Salt manufactured from sea water is produced extensively along the Mediterranean and Atlantic seaboards of Europe as well as in America. It is chiefly made by natural drying in shallow reservoirs, but also by boiling. Salt from sea water is usually known as *bay salt*. Most salt, however, is produced from rock salt or from brine springs, the latter being due to the melting of rock salt by water. The salt mines of Wieliczka in Galicia were worked in the twelfth century, and are the most celebrated in the world. The chief manufacturing centers in England are in Cheshire and Worcestershire. The salt deposits of the United States extend widely through the geological strata. The most important salt yielding states are Michigan and New York, whose deposits are of remarkable richness. The wells, which are in the vicinity of Saginaw bay, seem inexhaustible in supply. Some are over 1,900 feet in depth. In New York the salt deposit occurs in the Salina formation, at a depth ranging from 600 to more than 2,000 feet. The rock-salt bed in places is 250 feet thick and is known to underlie a district 200 miles long with a probable average width of 25 to 30 miles. In Louisiana, on Petit Anse and Avery islands, is an immense deposit of rock salt of unusual purity. On Virgin river, Nevada, there is a bed of rock salt, extending as a bluff along the river for over twenty-five miles: more than sixty per cent of the cliff is salt of great purity.

Scorpion. Scorpions have an elongated body, suddenly terminated by a long slender tail formed of six joints, the last of which terminates in an arcuated and very acute sting, which effuses a venomous liquid. This sting gives rise to excruciating pain, but is usually unattended either with redness or swelling, except in the glands of the armpit or groin. It is very seldom, if ever, fatal to man. The animal has four pairs of limbs borne by the thorax or chest segments; the maxillary palpi (organs of touch belonging to the maxillæ or lesser jaws) are largely developed, and constitute a formidable pair of nipping claws. With these claws they seize their insect prey,

which is afterward killed by the sting. The eyes, which are of the simple kind, number six, eight, or twelve. The female scorpions are said to exhibit great care for their young; they carry them on their backs for several days after being hatched, while they tend them carefully for about a month, when they are able to shift for themselves. Scorpions generally live in dark places, and under stones. They are natives of warm countries in both hemispheres. About 20 species are found in southern United States.

Seal. The name given to the species of the family *Phocidæ*. The true seals are earless; and this, in addition to the fact that the construction of their limbs does not permit of their using those organs on land, at once distinguishes them from the allied family of eared seals, or sea lions. The fore limbs are short, and are so attached as to leave little free but the hand; in the hind limbs the thigh bones are very short, the leg bones relatively long and directed backward in a line with the spine, and closely attached by membrane to the inconspicuous tail as far as the heel, a construction which prevents the leg being thrown forward. The head is very round, and the eyes are large and expressive. In swimming they seldom use their fore feet, while the eared seals use them as powerful sweeps. In their distribution the species are pretty equally divided between the northern and the southern hemispheres, inhabiting temperate and cold regions. The Alaskan fur seal belongs to the allied family of eared seals and is of great commercial importance. Seals are hunted on account of the oil they yield, for the sake of which great numbers are slaughtered. To the inhabitants of the polar regions they afford food, clothing, and fire.

Sequoia. A genus of conifers, related to the cypresses and growing almost, or quite, exclusively in California. The genus consists of two species, *Sequoia sempervirens*, the ordinary redwood (q. v.), and *Sequoia gigantea*, the famous "big trees" of California. One specimen in Calaveras county, Cal., has a height of 325 feet, and a girth six feet from the ground of forty-five feet. The Mariposa grove, sixteen miles south of the Yosemite valley, contains upward of 100 trees over forty feet in circumference, one over ninety-three feet at the ground, and sixty-four feet at eleven feet higher. Some of these trees indicate an age of over 2,000 years. This grove is government property. The sequoia has been successfully introduced into England, where some of them have already attained a good height.

Shad. A name of several fishes, of the family *Clupeidæ* or herrings, and including two American species, the common or American shad, and the Alabama shad. The common shad inhabits the sea near the mouths of large rivers, and in the spring ascends them for the purpose of depositing its spawn. The form of the shad is the same as that of the other herrings, but it is of larger size, and in some places receives the name of "herring king." Its color is a dark blue above, with brown and greenish lusters, the sides being silvery white. Mature specimens have a length of twenty-four to thirty inches, and a weight of three to four pounds. The Alabama shad is smaller than the common species, and weighs on an average about two pounds. Both American species of shad are highly esteemed for food, and are consumed in great quantities in the fresh state. They are found all along the coast from New England to the gulf of Mexico, and have been successfully introduced on the Pacific coast. By some authorities the common and Alabama shad are regarded as a single species.

Shark. The general name for a group of cartilaginous fishes, celebrated for the size and voracity of many of the species. The form of the body is elongated, and the tail thick and fleshy. The mouth is large, and armed with several rows of compressed, sharp-edged, and sometimes serrated teeth. The skin is usually very rough, covered with a multitude of little osseous tubercles or placoid scales. They are the most formidable and voracious of all fishes, pursue other marine animals, and seem to care little whether their prey be living or dead. They often follow vessels for the sake of picking up any offal which may be thrown overboard, and man himself often becomes a victim to their rapacity. The basking shark is by far the largest species, sometimes attaining the length of forty-five feet, but it has none of the ferocity of the others. The white shark is one of the most formidable and voracious of these fishes. It is rare on the British coasts, but common in many of the warmer seas, reaching a length of over thirty feet. The hammer-headed sharks which are chiefly found in tropical seas are very voracious, and often attack man. They are noteworthy for the remarkable shape of their head, which resembles somewhat a double-headed hammer, the eyes being at the extremities. Other forms are the blue shark, fox shark, or thresher, and the mackerel shark.

Sheep. The common name of the genus *Ovis*, belonging to the hollow-horned ruminant family. Naturalists are by no means agreed as to what was the original breed of this invaluable animal, which is in modern farming almost equally important for furnishing the farm with a dressing of manure, and the community at large with mutton, clothing, and other necessaries of life. The breeds of sheep are grouped as short-wooled, medium-wooled, and long-wooled. The Spanish Merinos are typical of the first class, the Southdown and Shropshire of the second, and the Leicester and Cotswold of the last. Wild sheep are found in both Asia and North America and are easily recognized from the fact that they are the only wild animals having circling horns. Central Asian species are the Argalia, Marco Polo's sheep, and the Siar sheep. In America six species are known, the most famous being the Bighorn or Rocky Mountain sheep. In color it is gray-brown, with a large whitish patch near the tail. The horns of a full grown specimen have a length of forty inches and a spread of seventeen inches. The height of the shoulders is about forty inches, and its length, including tail, about five feet. They inhabit the wildest and most inaccessible parts of the Rocky Mountain system, and are larger

than the largest varieties of domestic breeds. The horns of the male are of great dimensions, arising a short way above the eyes, and occupying almost the entire space between the ears, but without touching each other at their bases. The hair in this species resembles that of a deer, and is short, dry, and flexible in its autumn growth, but becomes coarse, dry, and brittle as the winter advances.

Silkworm. A term applied to the larvæ, or caterpillars, of several species of moths. The common silkworm moth, *Bombyx mori*, is the most important of the silk-producing moths, and is a native of China, where it has been cultivated from a remote period. The mature insect is of a cream color with two or three faint brownish lines across the fore wings. The caterpillar (*silkworm*) when first hatched is black or dark gray, becoming lighter each time it sheds its skin and cream colored after the last molt. It feeds upon the white mulberry, and will also eat the black mulberry, the Osage orange, and lettuce, but the silk produced by larvæ fed on the latter is of an inferior quality. The *silk* is produced in a pair of specially-constructed vessels which contain a gelatinous substance, and become much enlarged at the time when the animal is about to spin. These silk organs unite at the mouth to form a common duct termed the *spinneret;* through this tube the semi-fluid substance is ejected, and on coming in contact with the air hardens into the soft fiber which is so largely used in commerce. The caterpillar employs the silk in constructing a cocoon in which it assumes the pupa state. The pupa is usually killed by heating gently in an oven, because the natural exit of the moth is injurious to the silk. The Japanese oak-feeding silk-moth produces a green cocoon, the silk of which is much used for embroidery. Another species inhabits northern China and is also an oak-feeder. Its cocoon is large and grayish-brown in color. *Philosamia cynthia*, the Ailanthus silkworm of China and north Asia, manufactures a gray cocoon, from which the Chinese manufacture a silk recognized by its soft texture. From the cocoon of the Indian or "*tussur* moth," the natives manufacture the tussur silk fabric. There are several other varieties of silk-producing moths, but they are less notable and commercially unimportant.

Silver. A brilliant white metal which was known to the ancients. It melts at a heat estimated at about 1900° F. When melted, it absorbs oxygen, and just before solidifying it evolves it with effervescence, causing spirting and projection of the metal. It is the best known conductor of electricity and heat, is extremely malleable and ductile, and has great tenacity; it is not oxidized at ordinary temperatures, and is unaffected by any atmospheric agent, except sulphur compounds which are sometimes present. It is found native or combined with other elements, the principal ores being compounds of sulphur, arsenic, chlorine, antimony, or tellurium. The method of extraction from the ore depends upon the nature of the compound used. It is sometimes produced on a large scale by fusing its ore with a lead compound, and then cupelling, or by amalgamation with mercury. Silver is found in different parts of the earth; but it is most abundant along the Rocky Mountain-Andes system of the Americas. The silver mines of Mexico, Peru, and the United States far exceed in value the whole of the European and Asiatic mines. Extensive deposits of silver also occur at Cobalt in the province of Ontario, Canada.

Snail. A term popularly applied to the family *Helicidæ* of gastropod mollusks, but particularly to land air-breathing and freshwater gastropods of that family. In certain species of land snails, as the slugs, the shell is rudimentary or absent. The others have a spiral shell which the land snail can close at will by means of a limy disk called an *operculum.* The part of the snail protruding from the shell is the *foot,* upon the forward end of which is the *head,* bearing one or two pairs of *tentacles* or *feelers,* which are retractile. The eyes are either at the base of the tentacles or, as in the land snail, on the ends of the upper pair. The mouth has a hard, horny upper jaw and lip for biting, and contains a long rasp-like tongue, the *radula,* for tearing or rasping food. Snails lay round semi-transparent eggs, which are either deposited on the surface of the ground or buried beneath it. The large garden snail is abundant in Europe. This species, together with some of the smaller species, has been naturalized in the most remote colonies. *Helix pomatia* is the well-known edible snail, or Roman snail. It was considered a great luxury by the ancient Romans, and in the Mediterranean region is still valued as an article of food, being fed in some parts in large numbers in places specially constructed for the purpose.

Sparrow. A name popularly applied to several species of birds of the Finch family inhabiting nearly all parts of the world. The house or English sparrow is perhaps the best known species. It inhabits the British islands and other parts of Europe, from which it has been introduced into America, where it is now regarded as a pest. Their amazing fecundity, their strong attachment to their young, their familiarity, not to say impudence, and their voracity are familiar to all. They often do great injury in cornfields and gardens. Many of the native American sparrows are fine singers, and they are of great use in destroying insects and the seeds of harmful plants.

Sparrow Hawk. The common name of several hawks, one of which, about twelve inches in length, is well known in Britain. The male is colored dark brown on the top of the head, and on the upper aspect of the body and wings. The under parts are of a reddish-brown color, marked with narrow bands of darker tint. The female bird is of a duller brown hue on the back and the head, and her plumage is diversified by numerous white spots. It is a bold, active bird, very destructive to pigeons and small birds. The American sparrow-hawk, *Falco sparverius,* is the smallest of American hawks. It has a dull blue cap, a white throat, with a black streak under each eye, and its back is a reddish-brown. It feeds principally upon grasshoppers and other

insects, but occasionally kills birds and mice. It usually nests in hollow trees. Unlike its European relative, it is a beneficial inhabitant of a farm.

Spider. The common name of insect-like animals, constituting the order *Araneida*, of the class *Arachnida*. The head and the chest are united to form one segment known as a cephalothorax; no wings are developed; breathing is effected by means of pulmonary or lung sacs. The abdomen is unsegmented, and joined to the cephalothorax by a short narrow stalk; at the end of the abdomen are organs for spinning silk. The spider's web is usually intended to entangle prey (chiefly insects); but spiders also spin webs to make their abodes, and for other purposes. The legs number four pairs, and no antennæ are developed. Their mandibles are terminated by a movable hook, flexed inferiorly, underneath which, and near its extremity, is a little opening that allows a passage to a venomous fluid contained in a gland of the preceeding joint. After wounding their prey with their hooked mandibles they inject this poison into the wound, which suddenly destroys the victim. The common garden or orb spider, with its geometrical web, is a very familiar species. To this family also belong the trap-door spiders, which excavate a nest in the ground, and fit to the aperture a curious little door or lid. The tarantulas are dark colored, hairy spiders living in tropical or sub-tropical countries. Some species of these are the largest spiders known, often reaching a length of five or six inches. Their sting is believed to be very poisonous.

Sponge. A group of low, many-celled, water animals forming the branch *Porifera*. The body is penetrated by numerous channels, some of which are inlet tubes, others outlet tubes, and a third set connecting the two. The outside of the sponge is covered with a thin, leathery membrane, the *ectoderm*; the pores are lined with a softer membrane, the *endoderm*, and between these is a third membrane, the *mesoderm*, which is strengthened by fibrous, limy, or glassy material. In the connecting tubes are chambers lined with ciliated cells. The water enters through the inlet tubes, passes through the connecting tubes, and is expelled through the outlet tubes. In passing through the chambers lined with ciliated cells, the cells capture and digest minute vegetable and animal organisms in the water, and by movement of the cilia create currents which keep the water moving through the sponge. The bath sponge of commerce is the siliceous skeleton of a sponge. Sponges are of almost universal occurrence and are almost exclusively marine, being generally found attached to the under side of projecting rocks, or clinging to the roofs of submarine caverns. The sponges of commerce are mostly obtained from the Grecian Archipelago, Florida, and the Bahamas.

Spruce. The name given to several species of trees of the genus *Picea*. The Norway spruce is *Picea excelsa*, which yields the valuable timber known under the name of white or Christiania deal. It is a native of a great part of northern Europe, and is a noble tree of conical habit of growth, reaching sometimes the height of 150 feet. The white spruce is *Picea alba*, the black spruce is *Picea nigra*, both natives of North America. The latter attains the height of seventy or eighty feet, with a diameter of from fifteen to twenty inches. Its timber is of great value on account of its strength, lightness, and elasticity, and is often employed for the yards of ships and the sides of ladders. From the young shoots is extracted the *essence of spruce*, a decoction used in making spruce beer. Douglas's spruce or fir, the *Picea Douglasii* of northwestern America, reaches a height of 300 feet and a diameter of twelve feet in its native forests. The timber is heavy and strong, and is very valuable for building purposes.

Squirrel. A rodent mammal with a bushy, hairy tail. In America the squirrel family is divided into three groups—the marmots, the flying squirrels, and the true squirrels. The marmots include the woodchucks and prairie dogs (q. v.). The flying squirrel is a nocturnal animal with a body about five inches long, and a flat tail of about four inches covered, like the body, with short, fine, silky hair. It has a thin flap of skin attached between the fore and hind legs. This it uses like a parachute, leaping from a tree and sailing downward to another. The true squirrels are divided into the tree squirrels, the rock squirrels, and the ground squirrels, according to their mode of living. The tree squirrels are mostly arboreal, living either in hollow trees or building spherical nests on the branches. The gray squirrel is typical of this group. As the name indicates, it is grayish, or iron-grayish, on the back, and the tail is fringed with white. From tip of nose to tip of tail its length is eighteen inches. The black squirrel is considered a variety of the gray and is similar in size and habits. In some parts of the United States the black variety is more numerous than the gray. The fox squirrels are larger than the grays, having a length of twenty-three to twenty-five inches. The body is iron gray and the tail fringed with brown. In the southern fox squirrel the tail is fringed with black and the nose and ears are white. The red squirrel is reddish-brown on the back and white on the belly. It is smaller than those described and a destroyer of bird eggs and young. The rock squirrels live in rocks, stone piles, and fence corners. The chipmunk is the type of this group. It has cheek pouches, and uses them to gather and store up grain and nuts for the winter. The ground squirrels burrow in the earth and store their food in their burrows. They live mostly on grain, and from this fact are known as spermophiles, or "seed lovers". They are most numerous west of the Mississippi. Nearly all the squirrels are eaten as food, and the skins of some species have some commercial importance as fur.

Starfishes. A term in its widest application embracing all the echinoderms comprised in the orders *Ophiuroidea* and *Asteroidea*, but more commonly restricted to the members of the latter order, of which the common genus *Asterias* may be taken as the type. The starfishes proper are covered with a tough leathery skin beset with prickles, and have the form of a star, with

five or more rays radiating from a central disc. In the middle of the under surface of the disc is situated the mouth, opening into a digestive system which sends prolongations into each ray. If the prickly skin be removed it will be seen to be supported by a series of plates beautifully jointed together. On the under surface of each ray the plates exhibit a series of perforations, through which, in the living state, the ambulacra or tubular feet can be protruded so as to effect locomotion. Starfishes are found in almost all tropical, European, and American seas, and some species are found as far north as Greenland.

Stork. A family of birds, whose members are chiefly confined to the old world. The true storks are contained in the genus *Ciconia*, and range over Europe, Asia, and Africa. In form they resemble the herons, but are more robust, and have larger bills and shorter toes, which are partly webbed. They inhabit the vicinity of marshes and rivers, where they find an abundant supply of food, consisting of frogs, lizards, fishes, and even young birds. They are migratory birds, arriving from the South at their breeding haunts in the early spring, and departing again in autumn. The white stork, which is common in many countries of Europe, constructs a large nest, most frequently on the chimney of a cottage, to which it is thought to bring good luck. In plumage it is white, with black wings.

Sugar Cane. A plant from which a great part of the sugar of commerce is obtained. It is nowhere found in a wild state, but it is probably a native of tropical Asia. It grows to the height of seven or eight feet or more, and has broad ribbed leaves, and smooth shining stems. It is now cultivated in all the warm parts of the globe, such as the West Indies, Brazil, Java, Louisiana, etc., but varies in growth according to the situation, the season, or the weather. The plant is propagated by cuttings, and a plantation lasts from six to ten years. The juice of the cane is very palatable and nutritious.

Swallow. Any one of the numerous passerine birds of the family *Hirundinidæ*. In the United States the best known species are the barn swallow, the cliff, eaves, or chimney swallow, the white bellied or tree swallow, and the bank swallow. The species usually described by naturalists as the type of the family is *Hirundo rustica*, a well-known European visitor whose arrival from Africa (usually about the middle of April) is eagerly looked for as a sign of approaching summer. Swallows usually arrive in pairs—a male and a female—though several pairs often form a small flight; but if a single bird is seen to arrive, there is a strong presumption that it has lost its mate. They return with unfailing regularity to their old haunts, and in May commence building their nests, which are in shape somewhat like a flattened cup, divided perpendicularly; they are made of clay, mud, and straw, lined with horsehair or feathers, and the eggs, which are from four to six in number, are white, spotted with purplish-red.

Swan. A genus of swimming birds, distinguished as a group by the bill being of equal length with the head, and broad throughout its length; by the *cere* being soft; by the front toes being strongly webbed, while the hinder toe is not webbed, and has no lobe or underskin. The species which inhabit or visit Britain are the mute or tame swan, the whooper, whistling, or wild swan, and Bewick's swan. The mute or tame swan, so named from having little or no voice, is the only species which is permanently resident in Britain. The nest is constructed of reeds and grasses, and is generally situated near the edge of the water on some islet. The young ("cygnets") when hatched are of a light bluish-gray color. The food consists of vegetable matters, smaller fishes, worms, etc., and fish-spawn. The wild swan and Bewick's swan pass the winter in Great Britain, flying northward in the spring. The first is a native of Iceland, eastern Lapland, and northern Russia; the second has its home farther east. They have their representatives in North America in the trumpeter swan, and the North American whistling swan, *Olor columbianus*. South America produces one very distinct species, the beautiful black-necked swan. The black swan of Australia, like the white swan, is frequently kept as an ornament in parks or pleasure grounds.

Tea. A small tree, reaching the height sometimes of thirty feet, whose leaves when properly handled become the tea of commerce. To increase the leaf production, the tree is pruned to the form of a much branching shrub from two to four feet high. It is propagated from seed sown in the fall in shaded seed beds, and after a year is transferred to the field. The first crop is ready to pick in the third year, and the full crop is established about five years after planting. The plant is cut back about the seventh year to induce the growth of young shoots, which produce better leaves, and by repeating this pruning at intervals the plant is made to produce for many years. Japan, including Formosa, produces the most tea; China ranks second in production, and India and Ceylon third. Some tea is now grown in South Carolina. The difference between green and black tea is due to a difference in the process of manufacture. The leaves are wilted and allowed to ferment before they are subjected to a firing process in the manufacture of black tea. In making green tea the leaves are roasted in pans for five minutes as soon as gathered, and then rolled in the hands and subjected to further drying. The tea is an evergreen tree. Formerly nearly all the work of manufacturing tea was done by hand; but in more recent times the use of machinery has greatly increased, avoiding personal contact and reducing expense.

Thrush. A group of interesting perching birds of the family *Turdidæ*, including many of our most familiar birds and sweetest songsters. In America the robin, *Merula migratoria*, and the bluebird, *Sialia sialis*, are among the earliest birds of spring, and build their nests in orchards or near the habitations of men. Of the true thrushes (genus *Turdus*) the veery or Wilson's thrush, the hermit thrush, and the wood thrush are famous for the sweetness and brilliancy of their songs. They are all cinnamon-brown upon

the upper parts with brown spots upon the breasts or sides, and are all inhabitants of groves and woodlands. Among the thrushes of the old world are the song thrush or mavis of the Scotch, the fieldfare, the song ouzel, and many others. The name thrush is also inaccurately given to birds of other families that are fine singers.

Tiger. The largest and most dangerous of the *Felidæ*, exceeding the lion slightly in size, and far surpassing him in destructiveness. It is purely Asiatic in its habitat, but is not by any means confined to the hot plains of India, though there it reaches its highest development, both of size and coloration. According to Fayrer, the full-grown male Indian tiger is from nine to twelve and the tigress from eight to ten feet from the nose to the tip of the tail, and from thirty-six to forty-two inches high at the shoulder. The ground color of the skin is rufous or tawny yellow, shaded with white on the ventral surface. This is varied with vertical black stripes or elongated ovals and brindlings. On the face and posterior surface of the ears the white markings are peculiarly well developed. The depth of the ground color and the intensity of the black markings vary according to the age and condition of the animal. In old tigers the ground becomes more tawny, of a lighter shade, and the black markings better defined. The ground coloring is more dusky in young animals. Though possessed of immense strength and ferocity, the tiger rarely attacks armed men, unless provoked, though often carrying off women and children. When pressed by hunger or enfeebled by age and incapable of dealing with larger prey, like buffaloes, the tiger prowls around villages, and, having once tasted human flesh, becomes a confirmed man eater. In a government report it is stated that "one tigress caused the desertion of thirteen villages, and 250 square miles of country were thrown out of cultivation." The jaguar is sometimes called the American tiger.

Toad. See **Anura.** The popular name of any species of the family *Bufonidæ*, which is almost universally distributed, being found in all parts of the world, except Madagascar, Papuasia, and some of the smaller islands of the Pacific. The common American species, *Bufo americanus*, or *lentiginosus*, is more active than the European species, moving principally by leaping. The body is swollen and heavy looking, covered with a warty skin, head large, flat, and toothless, with a rounded, blunt muzzle. There is a swelling above the eyes covered with pores, and the parotids are of medium size and more or less reniform in shape. From these and from the skin it secretes a fluid that is extremely irritating and acts as a protection from its enemies; when handled or irritated, these animals can eject a watery fluid from the vent. But neither the secretion from the parotids nor the ejected fluid is harmful to man, and there is little doubt that its effects on the lower animals have been much exaggerated. The toad has four fingers and five partially webbed toes. Toads are mostly terrestrial, hiding in damp, dark places during the day, and crawling with the head near the ground; but some members of this family are aquatic, burrowing, or even arboreal. They are extremely tenacious of life, and can exist a long time without food.

Tobacco. A plant of the *Solanaceæ* or nightshade family, to which belong the potato and the tomato. It grows from four to six feet high, with broad leaves and purple blossoms. The meaning of the name is unknown. The generic word nicotine is from Jean Nicot, who introduced it into France. The United States is the greatest tobacco raising country in the world. Virginia, Ohio, and Tennessee are the greatest tobacco raising states. Cuba produces the best cigar tobacco, though most Havana cigars are made in Florida by Cubans from the raw material imported from the island. The United States annually produces over eight billion cigars, over seven billion cigarettes, five hundred million pounds of manufactured tobacco, and over twenty-four million pounds of snuff. The total farm value of the tobacco crop of the United States is upward of ninety-one million dollars. The use of tobacco is now common in every country on the globe; both sexes smoke in China, Persia, India, and the Philippines.

Tomato. A common garden vegetable, native to South America. It was formerly called the love apple, and was considered poisonous. It is now widely cultivated in the temperate regions. In gardens the plants are sometimes supported by stakes to keep the fruit off the ground, but in field culture they are left unsupported. They are used largely for canning in this country. An acre of tomatoes will yield five to twenty tons of fruit, and a ton of fruit will produce almost four hundred three-pound cans. Over eight million cases of twenty-four cans each are packed annually. Maryland and New Jersey produce about one-half of the entire crop. The popular tomatoes are the large, smooth, red kind. The fruit varies in color from dark red to yellow, and in size from a currant to the globular form two to four inches in diameter.

Turkey Vulture, or Turkey Buzzard. A large bird of the vulture family, common in tropical and sub-tropical America and occasionally seen in the middle and New England states. It is of a dark brown color, with the wing covers lighter brown or grayish. The head and the neck of the male are naked and conspicuously red, with whitish specks; the head of the female has a scanty growth of short gray-brown feathers. Full grown birds have a length of thirty inches and a spread of wing of six feet. They are graceful birds on the wing, soaring in great circles to enormous heights. They feed on carrion, and for this reason are carefully protected in warm countries where they are allowed to come into the market places and act as scavengers. When in danger, they disgorge the foul-smelling contents of their crops upon the intruder, an act that affords effective protection. They do not build a nest, but lay their eggs on the ground, on the top of a stump, or on any convenient spot. The nestlings are yellowish-white.

Turtle. The popular name for any species of the order *Chelonia*, which comprises three sub-orders, land tortoises, fresh water terrapins, and sea turtles. The body is inclosed in an exo-skeleton or shell consisting of an upper convex part, the *carapace*, and a lower, flatter portion called the *plastron*. The jaws are encased in horn and have a sharp-cutting edge. The tortoises and terrapins are land and fresh water animals, and turtles are marine. The turtles have limbs modified for swimming; the tortoises have toes furnished with claws. Turtles sometimes live at a great distance from land, to which they periodically return to deposit their soft-shelled eggs (from 100 to 250 in number) in the sand. They are found in all the inter-tropical seas, and sometimes travel into the temperate zones. The flesh and eggs of all the species are edible, though the Indian turtles are less valuable in this respect than those of the Atlantic. The most highly valued of the family is the green turtle (*Chelone mydas*), from which turtle soup is made. It attains a large size, sometimes from six to seven feet long, with a weight of 700 to 800 pounds. The popular name has no reference to the color of the carapace, which is dark olive, passing into dingy white, but to the green fat so highly prized by epicures. The edible turtle of the East Indies is also highly prized.

Victoria Regia. See **Water Lily.**

Walrus. A marine carnivorous mammal, closely related to seals and sea lions. It is known by its enormous down-turned tusks, or canine teeth, projecting from the upper jaw. They sometimes reach a length of eighteen to twenty-four inches beyond the sockets. Walruses have a thick clumsy body, deepest at the shoulders, and their feet, which are adapted for swimming, are also furrowed so as to hold on to smooth surfaces. They reach a length of twelve feet and a weight of 2,000 pounds. There are two living species, one found in the Atlantic and one in the Pacific. The Atlantic form is still found, according to Wm. T. Hornaday, in Smith Sound and north of Franz-Josef Land, but formerly extended farther south. The Pacific form is more northern, being rarely found on the mainland. They feed largely on clams and other mollusks, which they dig from the sea bottom with their tusks. They visit islands and ice floes, and congregate in considerable numbers during the breeding period. They are hunted for their hides, oil, and flesh.

Wasp. The wasps belong to the *Hymenoptera*, the highest order of insects, and include two superfamilies, the *Sphecina* or digger wasps, and the *Vespina* or true wasps. These well-known insects show some variation in form: sometimes the thorax and the abdomen are connected by a slender thread; in other forms these parts of the body merge into one another. The social wasps, like the hornet, or yellow jacket, are the best known. They build nests of paper attached to bushes, trees, roofs, and eaves of buildings. The paper is manufactured from wood fiber obtained from posts and unpainted boards. This is chewed in the jaws and united into sheets, often of considerable extent. The nests are often top-shaped or balloon-shaped, with horizontal layers of cells inside resembling honeycomb, all inclosed in a spherical paper envelope with a hole at the bottom for entrance and exit. These nests are sometimes eighteen inches long and more than a foot in diameter. The wasps that build these nests attack intruders savagely and their sting is extremely painful. The colonies include three forms, males, females, and workers. The males and workers die on the arrival of cold weather, but the females live over the winter in sheltered places, and start a new colony in the spring. The workers only have stings. The solitary wasps form another division of these insects which includes miners, mud daubers, and carpenters. The mason wasps, or mud daubers, are the most familiar, as their mud nests are commonly seen on beams and walls. The carpenters cut tubular nests in wood and divide them by mud partitions. The miners dig tunnels in the earth. Wasps are endowed with a considerable degree of intelligence.

Water Lily, also called **Pond Lily,** is a name applied to plants of the genus *Nymphæa*. They are all aquatic perennial herbs with mostly roundish, peltate, or heart-shaped leaves which float on the surface of the water. Both leaves and flowers grow from rootstalks imbedded in the mud of ponds or sluggish streams, the petioles and flower stalks sometimes attaining a length of several feet. The American species are the *Nymphæa odorata*, with sweet scented flowers from three to four inches in diameter, mostly white, but sometimes pinkish or even deep pink, the pinkish variety being most common in the Lake Champlain region and eastward, and *Nymphæa tuberosa*, with larger flowers four to nine inches in diameter, which are nearly scentless. This species is most abundant in the region of the Great Lakes. *Nymphæa cærulea* is a blue Egyptian species cultivated in aquaria. The flowers are sweet scented. The so-called yellow pond lily belongs to the genus *Nuphar*. It is often associated with the *Nymphæa*. *Victoria regia* is the name given in honor of Queen Victoria to the most magnificent genus of the order *Nymphæaceæ*. There is only one species recognized by botanists, a native of the Amazonian region of South America, where it was first observed by the unfortunate botanical traveler Hænke, in 1801, and said to have been met with by the French naturalist D'Orbigny, in 1827, but not described until it was found by Pöppig in the Amazon in 1832. This noble water lily has floating leaves of a bright green above, and a deep purple or violet on the lower surface, measuring as much as five and one-half feet in diameter, with a uniformly turned-up margin of about three inches, thus resembling huge shallow trays. The flowers, which are proportionately large—some measuring fourteen inches in diameter—are of all shades from white to pink, and are delightfully fragrant.

Whale. The popular name of the larger cetaceans, particularly of all those belonging to the families *Balænidæ* and *Physeteridæ*. In the *Balænidæ* the head is of enormous size, but

is entirely destitute of teeth, instead of which the palate is furnished with an apparatus of *baleen*, or whalebone, for the purpose of straining out of the water the small crustaceans, which form the food of these whales. The fibrous structure of baleen, or whalebone, its elasticity, and its heaviness are well known. The plates of it in the mouth of a whale are very numerous, several hundreds being on each side of the mouth, and they are very closely placed together, so that the mouth is filled with them. The sulphur bottom whale of the Pacific ocean is the largest of the *Balænidæ*, sometimes reaching a length of ninety-five feet. The baleen of such a whale weighs about 800 pounds. The head of whales usually occupies from a fourth to a third of the whole length. The lower surface of the true skin extends into a thick layer of blubber, an open network of fibers, in which fat is held. The blubber is from one foot to two feet in thickness, the whole mass in a large whale sometimes weighing more than thirty tons. The most important species is that known as the right whale or Greenland whale. It inhabits the seas of the northern parts of the world, and abounds chiefly in the arctic regions. It commonly attains a size of sixty or seventy feet in length. Although smaller than the sulphur bottom whale it furnishes large quantities of baleen and oil. A single specimen has yielded as much as 3,500 pounds of whalebone. The main physical characteristics of the whale are its distorted jaws, with upward directed nostrils, its great bulk, and rudimentary limbs. The huge bulk of the creature is driven forward by the flexible caudal fin, and while the body is rigid in front it exhibits great mobility behind. The blowholes are placed on the top of the head, and the animal can respire only when these are above water. The larger whales travel at the rate of about four miles an hour, but when pursuing their prey or goaded by pain they rush through the water at a much greater pace. They are aided in this by the broad and powerful tail, which is their chief organ of locomotion. Instead of being vertical, as in the fishes, this is horizontal, and the larger species can command immense driving power. The tail is also used as an offensive and defensive weapon. The blubber, the great object of the whalers, is at once dense and elastic, and, while it preserves the animal heat, it also serves to reduce the mighty bulk of the whale and to bring it nearer to the specific gravity of the element in which it spends its existence. It might be thought that the whale, with its vast bulk, would need sea creatures of a high organization to nourish it; but this is not so. Its chief food consists of minute mollusks and crustaceans, and with these its immense pasture grounds in the north seas abound.

Whippoorwill. A bird widely known on account of its oft-repeated cry of *whippoorwill*. It is not often seen, although it is abundant in damp woods of eastern United States. It usually rests on the ground during the day and is active at twilight and early nightfall, sending forth its cry, and also coursing low over the grass in search of insects. It is about ten inches long and of plain colors, being grayish, much variegated with black and buff. Its bill is very short, its mouth large and provided with a tuft of long bristles. It builds no nest, but deposits its eggs on leaves or a slight depression in the ground. To the same family belong the chuck-will's-widow and the nighthawk.

Willow. A group of woody-stemmed plants of the order *Salicaceæ*, to which the poplars also belong. Willows vary in size from those of the Alps, which are an inch or two high, to trees of from fifty to eighty feet. They are found in most countries, with the exception of Australia, and grow rapidly. They have many and large roots, which grow a long distance through moist soil, and bind it with a network of fibers, thus preventing the banks of streams from being worn away. The bark is tough and bitter. The wood is used in houses, vessels, farm tools, casks, etc., as fuel and for charcoal. The twigs and young shoots are used in making baskets and light furniture. There are some sixty North American willows, ten of which are not found elsewhere. The most important of all kinds is the white willow, common throughout Asia, Europe, and America. It sometimes reaches the height of eighty feet. It is very useful on the prairies, as it is a fast grower, and also protects other trees from the wind. Other kinds are the purple, black, brittle, varnished, and bay willows. The weeping willow, a native of Asia and North Africa, has been introduced into America. It is a large tree, and one of the first to leaf out in the spring.

Wistaria. A genus of leguminous plants having pinnate leaves and flowers, in terminal recemes, the pod leathery. Some species are among the most magnificent ornamental climbers. *Wistaria frutescens*, a native of Virginia, Illinois, and other parts of North America of similar climate, found chiefly in marshy grounds, attains the length of thirty feet, and has beautiful recemes of fragrant bluish-purple flowers. The Chinese wistaria is a cultivated species with showy blue flowers, much used as a climber over arbors and the walls of houses. It is taller than *Wistaria frutescens*.

Witch-hazel. A North American shrub, *Hamamelis virginiana*, attaining the height of 15 to 25 feet. It blossoms late in autumn, the flowers being in yellow showy clusters, the fruit not maturing until the following year. An extract prepared from the flowering twigs is much esteemed as a lotion.

Wolf. The name applied to several species of carnivorous animals, belonging to the dog family. The common gray or timber wolf is about five feet in length including the tail, which is fifteen inches long, and is about twenty-six inches in height at the shoulder. The muzzle much resembles that of a sheep dog; the ears are upright and pointed, and the eyes are set obliquely. The coat is subject to variation in tint, depending much upon the country the animal inhabits. Perhaps the most usual tint is a yellowish-gray; but it is sometimes almost black. The prairie wolf or coyote is similar in form and color to the gray wolf, but is about one-third smaller. It is a cowardly animal, a killer of poultry, pigs, lambs, rabbits, and small

mammals. Its home is the Rocky Mountain region from the city of Mexico to northern Canada. In Europe the wolf is found in Lapland, Norway, Sweden, Russia, Poland, Hungary, some districts of Germany, France, Italy, Spain, and Greece. The wolf of India is considered a distinct species, and has a dingy, reddish-white fur.

Woodchuck. A hairy-tailed rodent, *Arctomys monax*, allied to the squirrels and also known as the American marmot. It inhabits North America from the Atlantic seaboard to Nebraska and from Hudson bay to South Carolina. A full-grown specimen is about 18 inches long, exclusive of the tail, and weighs from 10 to 15 pounds. The head is broad and flat, the legs short, and the body thick and "chunky". The prevailing color is a grizzly, reddish-gray, although individuals are frequently nearly black, while others show a tendency to albinism. The fur has no commercial value. The woodchucks dig holes, preferably in gravelly hillsides in which they live and in which the young are born. The bottom of the burrow is usually below the frost line and may extend from 15 to 20 feet underground, sometimes having several connecting passages. In summer they frequent meadows and cultivated fields when they do much damage to the crops upon which they feed and become very fat. At the approach of winter they retire to their burrows, preferring those in the woods, where they remain in a comatose state until spring. During hibernation the fêeble activities of the body are probably supported by the slow oxidation of the fat stored in summer, as they emerge in the spring lean and emaciated. In eastern New York the hibernation extends from October 15 to January, although weather conditions may prolong the period several weeks. The young are from four to six in number and are probably born in April. Although eatable, the flesh has a strong flavor and is not regarded as of much value. On account of its depredations on growing crops, the woodchuck is considered a nuisance by farmers who wage constant war upon it with dog and gun.

Woodcock. A famous game bird belonging to the snipe family, and found in northern parts of both the old and new worlds. The American woodcock is about ten and a half inches long, variegated in black, brown, gray, and rusty colors. The bill is very long and flexible at the end, and it is thrust into the soft ground, in search of earthworms. The presence of woodcocks can often be detected by a cluster of these holes. The European bird is larger. It is a winter resident in England, breeding in summer in North Scotland.

Woodpecker. The popular name of birds of the family *Picidæ*. Woodpeckers have a slender body, powerful beak, and protrusile tongue, which is sharp, barbed, and pointed, and covered with a glutinous secretion derived from glands in the throat. The tail is stiff and serves as a support when the birds are clinging to the branches or stems of trees. Woodpeckers are very widely distributed, but abound chiefly in warm climates. They are solitary in habit, and live naturally in the depths of forests; but as they have become accustomed to man, they are now numerous in cultivated fields. Fruits, seeds, and insects constitute their food; in pursuit of the latter they exhibit wonderful dexterity, climbing with astonishing quickness on the trunks and branches of trees, and when, by tapping with their bills, a rotten place has been discovered, they dig vigorously in search of the grubs or larvæ beneath the bark. They cut deep holes in the rotten trunks of trees, in which the glossy white eggs are laid. Woodpeckers do much good by destroying the larvæ of tree-boring insects.

Wren. A genus of birds having a slender, slightly curved, and pointed bill; the wings very short and rounded; the tail short, and carried erect; the legs slender, and rather long. Their plumage is generally dull. They live on or near the ground, seeking for insects and worms among low brushes, and in other similar situations. The common or European wren is found in all parts of Europe, in Morocco and Algeria, in Asia Minor and northern Persia. The common wren is more abundant in the north than in the central and southern parts of Europe. It frequents gardens, hedges, and thickets. Its flight is not long sustained; it merely flits from bush to bush, or from one stone to another, with very rapid motion of the wings. It sometimes ascends trees, nearly in the manner of creepers. The North American species of wren are numerous; but many of them are ranked under different genera. The house wren is larger than the European wren, being about five inches long. It is abundant in the eastern parts of the United States. It is less shy than the European wren, and often builds its nest near houses, and in boxes prepared for it. The nests are made to fill the boxes; to effect this a large mass of heterogeneous materials is sometimes collected. The song of the house wren is very sweet. The male is a very bold, pugnacious bird, readily attacking birds far larger than itself, as the bluebird and swallows, and taking possession of the boxes which they have appropriated for their nests. It even attacks cats when they approach its nest.

Yak. A ruminant mammal related to cattle and sometimes known as the grunting ox of Tartary. It inhabits the highest and coldest regions of central Asia pasturing near the snow line which it follows, descending to lower levels in winter and reascending to the highest mountain meadows in summer. The yak is about the size of the domestic ox which it somewhat resembles in form. The head is short, the eyes soft and expressive, the horns tapering, spreading, and curved backward. The body is covered with long, silky hair which hangs down like the wool of a sheep. Between the horns is a mass of thick curly hair, and over the shoulders is a large bunch of long, fine hair, resembling a hump, and giving the animal the appearance of a buffalo or zebu. The tail is covered with long hair, like the tail of a horse, and descends nearly to the ground. The prevailing color of the hair is black. The voice is a short grunt like that of a pig, from which the animal probably derives its popular

name. The domesticated yak is of much importance to the Tibetans, forming a large part of their wealth. The milk is rich and yields a high per cent of butter which is an important article of domestic commerce. From it are also made curds which are widely eaten both fresh and cured. The meat resembles beef and is palatable and nutritious. The hair is spun into ropes or woven into cloth for tent coverings; the finer fur of the hump is used for clothing. The skins, tanned with the fur on, are used for caps, outer winter garments, rugs and blankets.

Yam. A plant belonging to the genus *Dioscorea*, characterized by herbaceous twining stems, seeds with membranous wings, and fleshy, tuberous roots. The yams are natives of the tropics and are largely cultivated for food both in the East and West Indies. The roots are starchy or sweet and used as food like the sweet potato. In some species the roots attain great size. The winged yam, *Dioscorea alata*, has roots that attain the weight of 25 pounds. The best known American species is the common West Indian yam, *Dioscorea sativa*, which has heart shaped leaves and bears bulbous tubers in the axils of the leaves. This is grown in some of the southern United States. The yam is prepared for eating by boiling or roasting, and is much esteemed as food in the countries where it is grown.

Zamia. A name applied to a genus of plants belonging to the order *Cycadaceæ* which grows exclusively in warm or tropical regions. The order is characterized by unbranched palm-like or corm-like trunks with a terminal bud and palm-like foliage. In habit they resemble the tree ferns, the pinnate leaves forming a terminal crown and unrolling in vernation like those of a fern. The ovules are naked and borne on a scale or transformed leaf. In the structure of the stem they resemble the conifers, the woody bundles being arranged in concentric circles loosely connected by cellular tissue. The central cylinder of the trunk contains much starch from which a kind of sago or arrowroot is made. The cycads, therefore, combine characteristics of three natural orders of plants, the Conifers, Palms, and Ferns. They appeared in great numbers in the Mesozoic era, forming prominent features of the Triassic and Jurassic forests. In an evolutionary sense, they are regarded as transition forms connecting the acrogens of the Carboniferous with the gymnosperms of later geologic periods. The cycads best known to Americans are *Cycas revoluta* or the Japanese sago palm of the conservatories, and *Zamia integrifolia* or the coontie of Florida. The latter has a root-like or rhizome-like subterranean stem terminated by a bud and a crown of pinnate leaves. From the starchy rhizome a kind of flour known as "Florida arrowroot" is prepared.

Zebra. A name sometimes given to all the striped *Equidæ*, all of which are natives of Africa; but also, in a more restricted use, designating a single species, the "true" zebra (*Equus* or *Asinus zebra*), a native of the mountainous districts of South Africa. In the whole group the characters resemble those of the ass more than of the horse. The zebra is about twelve hands high at the shoulder. It is of a light, graceful form, with slender limbs and narrow hoofs; the head light, the ears rather long and open; the ground color white or slightly tinged with yellow; the head, neck, body, and legs striped with black—the neck and body transversely, but not regularly, the head with bands in various directions, the legs with irregular cross stripes. The "true" zebra is now nearly extinct. The other species of zebra now living are Burchell's zebra of South Africa, and Grévy's zebra inhabiting the hilly country north of the Victoria Nyanza. The latter species is more slender than the true zebra, and the black markings narrower and closer together. The habits of the zebra are similar to those of wild horses and asses.

Zebu. A species of cattle found in southern Asia, eastern Africa and adjacent islands known scientifically as *Bos indicus*. Different breeds of these cattle vary greatly in size, some being as large as our largest oxen and others no larger than a Newfoundland dog. The prevailing color is a rusty gray or mouse color but this is not constant, buff, red and black being also found. The ears are pendulous and the horns usually short or wanting. There is a conspicuous dewlap, and a prominent fatty hump over the shoulders. The flesh makes excellent beef, the fatty hump being regarded as a great delicacy. These cattle are gentle and docile and are used as beasts of burden. In India the white bulls are considered sacred by the Brahmins and allowed to graze, without interference, in gardens and cultivated fields as they will.

Zeuglodon. (Yoke tooth). A fossil whale-like Cetacean found in the strata of the Eocene series. The living animal was probably 70 or more feet long and shaped somewhat like the whale of the present day. It differed from all existing whales in having two kinds of teeth, the incisors being conical, and the back teeth or molars having serrated triangular crowns and being inserted in the jaw by two roots. In appearance the tooth suggests two teeth united by their crowns. This peculiarity has given rise to the generic name (Gr. *Zeugle*, a yoke; and *odous*, a tooth). The fossil remains of this whale occur in great numbers in the "Jackson Beds" of southern United States. According to Dana, some of the larger vertebræ were a foot and a half long and a foot in diameter. In Alabama they were formerly so abundant as to have been built up into stone walls or burned to rid the fields of them.

CANADIAN PARLIAMENT BUILDING, OTTAWA

MISCELLANY

April Fool's Day. The modern custom of sending one upon a bootless errand on the first day of April is of uncertain origin. It is possible, however, that it may be a relic of some old heathen festival. The custom, whatever its origin, of playing little tricks on this day, whereby ridicule may be fixed upon unguarded individuals, appears to be general throughout Europe, and is now of almost universal scope.

Army and Navy, American. Speedily following the declaration of war against Germany, Apr. 6, 1917, great changes were made not only in the size but also in the organization of the military and naval forces of the nation.

Growth of the Army. On Apr. 1, 1917, the Regular Army consisted of 5,571 officers and 121,797 enlisted men, a total armed strength of 127,368. On Jan. 1, 1918, the Regular Army consisted of 10,250 officers and 475,000 enlisted men; the National Guard of 10,031 officers and 400,900 men; the New National Army contained 480,000 men, and the Reserve of 84,575 officers and 72,750 enlisted men. Thus there was an increase of 1,406,138 men in nine months. During the ensuing year the registration of available man power was extended to include all men between the ages of 18 and 45, inclusive. The final registrations approximated 23,709,000 men. Additional calls for men were made from this class so that upon the cessation of hostilities, November 11, 1918, the total strength of the army was 3,664,000 men, of whom 2,045,000 had been embarked overseas. Of this latter number 1,121,000 were transported during May, June, July, and August. On the date of the armistice the American army in France numbered 1,950,000 men, as compared to 2,559,000 French and 1,718,000 British. On August 7, 1918, the distinguishing appellations Regular Army, National Guard, and National Army were discontinued and all the military forces of the nation were consolidated into the United States Army.

Organization of the Army. For overseas service the army organization has been completely changed. Among the most striking are the changes in the size of the company and the regiment. At full strength an infantry regiment will contain 103 officers and 3,652 men as follows:

OVERSEAS REGIMENT—OFFICERS AND MEN	
1 Headquarters and Headquarters Company,	303
3 Battalions of 4 Rifle Companies Each,	3,078
1 Supply Company,	140
1 Machine Gun Company,	178
1 Medical Detachment,	56
Total,	3,755

A Rifle Company consists of 250 men and 6 officers, organized in 4 platoons. A Machine Gun Company contains 172 men and 6 officers, organized in 3 platoons.

The Infantry Division. In the new organization the ratio of artillery and machine gun strength to infantry is greatly increased, being in the proportion of three artillery regiments to four of infantry instead of three to nine as formerly. The components are as follows:

INFANTRY DIVISION—OFFICERS AND MEN	
1 Division Headquarters,	164
1 Machine Gun Battalion of 4 Companies,	768
2 Infantry Brigades, each composed of 2 Infantry Regiments and 1 Machine Gun Battalion of 3 Companies,	16,420
1 Field Artillery Brigade composed of 3 Field Artillery Regiments and 1 Trench-mortar Battery,	5,068
1 Field Signal Battalion,	262
1 Regiment of Engineers,	1,666
1 Train Headquarters and Military Police,	337
1 Ammunition Train,	962
1 Supply Train,	472
1 Engineer Train,	84
1 Sanitary Train composed of 4 Field Hospital Companies and 4 Ambulance Companies,	949
Total,	27,152

Commissioned Officers hold their rank under a commission issued by the president of the United States. The lowest in rank is the Second Lieutenant, then the First Lieutenant, and the Captain, who are the three company officers. Next in rank are the Major, the Lieutenant-Colonel, and the Colonel, who are the regimental officers. Above the Colonel is the Brigadier-General, who commands a brigade; above the Brigadier-General is the Major-General, then Lieutenant-General, and General. The grades of Lieutenant-General and General have been revived. Hitherto there have been only four Generals — Washington, Grant, Sherman, and Sheridan, but in October, 1917, Pershing and Bliss were advanced to that grade.

Non-Commissioned Officers. In each company about one-fourth of the privates may be given the rating "first class," which indicates that they are capable and trustworthy. From this group of first-class privates the Corporals or squad leaders are usually chosen, receiving their appointments from the commanding officer of the regiment on the recommendation of the commanding officer of the company. Next in rank above the Corporal is the Sergeant, of which there are ordinarily 9 to 11 in a company. The First, or "top," Sergeant keeps the company records, forms the company into ranks, and transmits orders from the company commander.

Pay of Soldiers. A Private receives $30 to $55 a month, and a First Class Private $35 to $60; Corporal $44.40 to $59.20; Sergeant $54 to $72; First Sergeant $63.60 to $84.80. Clothing, food, transportation, and medical attention are supplied. There is increased pay for those who have special qualifications or trades. A Quartermaster Sergeant or Master Signal Electrician receives $88.40 to $118.40. Aviators rank as Master Sergeants and receive increased pay for flying. A Band Leader ranks as Warrant Officer, starts with $125, and receives the same allowances as a Second Lieutenant. Pay also increases 10% for each 5 years of service during the first 20 years.

Pay of Officers. Besides allowances for quarters, heat, and light, and also extra compensation of about $50 a month during 1920–1922, commissioned officers receive the following sums yearly: Second Lieutenant, $1700; First Lieuten-

ant, $2000; Captain, $2400; Major, $3000; Lieutenant-Colonel, $3500; Colonel, $4000; Brigadier-General, $6000; Major-General, $8000; Lieutenant-General, $9000; General, $10,000; with provision for an increase every five years for all ranks below Brigadier-General.

Army Training Camps. Sixteen cantonments for the National Army, each essentially an organized city in itself, and seventeen similar camps for the National Guard were established during the first year, together with many officers' training camps, aviation training camps, and other schools of military instruction.

NATIONAL ARMY CANTONMENTS	NATIONAL GUARD CAMPS
Camp Custer—Battle Creek, Mich.	Camp Beauregard—Alexandria, La.
Camp Devens—Ayer, Mass.	Camp Bowie—Fort Worth, Tex.
Camp Dix—Wrightstown, N. J.	Camp Cody—Deming, N. M.
Camp Dodge—Des Moines, Iowa.	Camp Doniphan—Fort Sill, Okla.
Camp Funston—Ft. Riley, Kans.	Camp Fremont—Palo Alto, Cal.
Camp Gordon—Atlanta, Ga.	Camp Greene—Charlotte, N. C.
Camp Grant—Rockford, Ill.	Camp Hancock—Augusta, Ga.
Camp Jackson—Columbia, S. C.	Camp Kearny—Linda Vista, Cal.
Camp Lee—Petersburg, Va.	Camp Logan—Houston, Tex.
Camp Lewis—American Lake, Wash.	Camp McArthur—Waco, Tex.
Camp Meade—Annapolis Junc., Md.	Camp McClellan—Anniston, Ala.
Camp Pike—Little Rock, Ark.	Camp Mills—Mineola, N. Y.
Camp Sherman—Chillicothe, Ohio.	Camp Sevier—Greenville, S. C.
Camp Travis—San Antonio, Tex.	Camp Shelby—Hattiesburg, Miss.
Camp Upton—Yaphank, N. Y.	Camp Sheridan—Montgomery, Ala.
Camp Zachary Taylor—Louisville, Ky.	Camp Wadsworth—Spartanburg, S. C.
	Camp Wheeler—Macon, Ga.

Navy, growth of. Participation in the great world war, 1917–1918, witnessed an enormous expansion in the country's naval power. Through voluntary enlistment the number of officers and men in the various divisions of the service rose from less than 70,000 to more than 435,000. Naval appropriations and credits made and pending during the first year totaled $3,000,000,000, or practically equal to the nation's entire expenditure for the navy from 1794 to 1916.

Departments of the Navy. In addition to the various units comprising the regular navy, there are also the Naval Reserve Force, the Marine Corps, or "Soldiers of the Sea," the Marine Corps Reserve, the Naval Militia, and the Coast Guard.

Pay of Seamen. The pay of an Apprenticed Seaman is $33 per month. This is usually raised to $48 before the recruit is sent to sea. When advanced to grade of Seaman the rate is $54. A Seaman may become a Third Class Petty Officer at $60, and, finally a Petty Officer at $126, per month. In the Artificer class, the pay ranges from $33 to $126 per month, and for Yeomen, Musicians, Hospital Corps, and Commissary, from $33 to $126. All transportation is paid, and food and complete outfits furnished, with full pay during sickness.

Comparative Rank of Officers. The relative rank of commissioned officers in the Army and Navy is shown below. The pay of naval officers is the same as that of Army officers of corresponding rank.

ARMY	NAVY
General	Admiral
Lieutenant-General	Vice-Admiral
Major-General	Rear-Admiral
Brigadier-General	Commodore
Colonel	Captain
Lieutenant-Colonel	Commander
Major	Lieutenant-Commander
Captain	Lieutenant
1st Lieutenant	Lieutenant Junior Grade
2nd Lieutenant	Ensign.

Navy Yards and Naval Stations. There are ten regularly established navy yards located as follows: Boston, Mass., Charleston, S. C., Mare Island, Cal., Brooklyn, N. Y., Norfolk, Va., Pensacola, Fla., Philadelphia, Pa., Portsmouth, N. H., Puget Sound, Wash., and Washington, D. C. The five naval stations are located at Key West, Fla., Narragansett Bay, R. I., New London, Conn., New Orleans, La., and Port Royal, S. C. There is a torpedo station at Newport, R. I., a submarine base at New London, Conn., and naval aviation stations at Bay Shore, L. I., and Pensacola, Fla.

Armies of the World, 1921*

COUNTRY	ARMY	COUNTRY	ARMY
Abyssinia	100,000	Hungary	27,000
Afghanistan	98,000	India, British	330,000
Algeria	20,000	Indo-China, Fr.	25,500
Ang.-Egy. Sudan	17,000	Italy	250,000
Argentina	20,000	Japan	600,000
Armenia	18,000	Jugoslavia	200,000
Australia	4,000	Lithuania	50,000
Austria	30,000	Madagascar	9,000
Azerbaijan	50,000	Mexico	100,000
Belgian Congo	16,000	Morocco	72,000
Belgium	105,000	Nepal	30,000
Bolivia	4,200	Netherlands	270,000
Brazil	33,000	New Zealand	30,000
Bulgaria	20,000	Nicaragua	2,000
Canada	5,000	Norway	118,000
Chile	23,000	Paraguay	2,600
China	1,500,000	Persia	43,000
Colombia	6,000	Peru	11,000
Costa Rica	1,000	Philippines	14,000
Cuba	16,600	Poland	600,000
Czechoslovakia	150,000	Portugal	30,000
Denmark	78,000	Rumania	160,000
D'ch E. Indies	42,000	Russian Rep.	600,000
Ecuador	5,400	Salvador	16,000
Egypt	17,000	Santo Dom'go	1,150
Eritrea	9,000	Serbia	150,000
Esthonia	15,000	Siam	21,000
Finland	37,000	Spain	216,600
France	818,000	Sweden	86,500
Georg. Rep. of	50,000	Switzerland	140,000
German Rep.	100,000	Tunis	17,000
Great Britain	300,000	Turkey	135,000
Greece	200,000	Ukrainia	60,000
Guatemala	85,000	United States	150,000
Haiti	2,800	Uruguay	10,400
Honduras	46,000	Venezuela	9,600

*Or latest available approximations and estimates.

Barber's Pole. Anciently the functions of barber and surgeon were united in one person. The barber-surgeon was formerly known by his

pole at the door. The pole was used by the barber-surgeon for the patient to grasp in bloodletting, a fillet or bandage being used for tying his arm. When the pole was not in use, the tape was tied to it and twisted round it, and thus both were hung up as a sign. At length, instead of the hanging of the actual pole used in the operation, a pole was painted with stripes around it, in imitation of the real pole and its bandages; hence the *barber's pole.*

Bells, Weight of.

	Pounds
Kremlin, Moscow,	440,000
Kioto,	165,000
Pekin,	130,000
St. Ivan's, Moscow,	127,800
Novgorod,	62,000
Sacred Heart, Paris,	55,000
Sens,	43,000
Vienna,	40,200
Olmütz, Moravia,	40,000
Rouen,	40,000
St. Paul's,	38,000
Erfurt,	30,800
Westminster, "Big Ben,"	30,300
Notre Dame, Paris,	28,600
Montreal,	28,500
Cologne,	25,000
City Hall, N. Y.,	22,500
St. Peter's,	18,600

Black Friday. (1) December 6, 1745, the day on which the news arrived in England that the Pretender had landed. (2) May 11, 1866, the culmination of the commercial panic in London, when Overend, Gurney & Co. stopped payment. (3) Particularly September 24, 1869, in Wall Street, New York, when a group of speculators forced the price of gold to 162½, creating a serious crisis. (4) A similar panic occurred September 18, 1873.

Black Hole. An appellation familiarly given to a dungeon or dark cell in a prison, and which is associated in the public mind with a horrible catastrophe in the history of British India; viz, the cruel confinement of a party of English in an apartment called the "Black Hole of Calcutta," on the night of the 18th of June, 1756. The garrison of the fort connected with the English factory at Calcutta having been captured by the Nabob Suraja Dowlah, he caused the prisoners, one hundred and forty-six in number, to be confined in an apartment twenty feet square. This cell had only two small windows, obstructed by a veranda, and after a night of excruciating agony from pressure, heat, thirst, and want of air, there were in the morning only twenty-three survivors.

Black Maria. Everybody knows that the Black Maria is the vehicle used to convey prisoners and disorderly persons to a police station or prison. Probably few are aware how its name originated. During the old colonial days, Maria Lee, a negress, kept a sailors' boarding house in Boston. She was a woman of gigantic stature and prodigious strength, and was of great assistance to the authorities in keeping the peace, as the entire lawless element of that locality stood in awe of her. Whenever an unusually troublesome person was to be taken to the station house, the services of Black Maria were likely to be required. It is said that she took at one time, and without assistance, three riotous sailors to the lock-up. So frequently was her help required that the expression, "Send for Black Maria," came to mean "take the disorderly person to jail."

Blarney Stone. This relic of the ancient castle of Blarney, in Ireland, is a triangular stone suspended from the north angle of the castle about twenty feet from the top, and bearing the inscription: "Cormack MacCarthy fortis me fieri fecit, A. D., 1446" (Built in 1446 A. D., by Cormack MacCarthy). According to a tradition of the country the castle was besieged by the English under Carew, Earl of Totness, who, having concluded an armistice with the commander of the castle on condition of its surrender, waited long for the fulfillment of the terms, but was put off from day to day, with soft speeches instead, until he became the jest of Elizabeth's ministers and the dupe of the Lord of Blarney. From that day "kissing the Blarney Stone" has been synonymous with flattery and smooth, deceitful words.

Bloody Shirt. The origin of this phrase was given by Roscoe Conkling, in a speech made in New York, September 17, 1880. Referring to the "bloody shirt," he said: "It is a relief to remember that this phrase, with the thing it means, is no invention of our politics. It dates back to Scotland, three centuries ago. After a massacre in Glenfruin, not so savage as that which has stained our annals, two hundred and twenty widows rode on white palfreys to Stirling Tower, bearing each on a spear her husband's bloody shirt. The appeal waked Scotland's slumbering sword, and outlawry and the block made the name of Glenfruin terrible to victorious Clan Alpine, even to the third and fourth generation."

Blue Stocking means, figuratively, a female pedant. In 1400, a society of ladies and gentlemen was formed at Venice, distinguished by the color of their stockings, and addicted to literary pursuits. Similar societies sprang up throughout Europe generally. In England, they did not become extinct till 1840, when the Countess of Cork, who, as Miss Moncton, was the last of the clique, died.

Bohemian. A term of mild reproach bestowed on persons of unconventional habits. But a "Bohemian," in the real sense of the word, is a person, man or woman, who does not go into "society;" who is happy-go-lucky, unconventional, now "flush," now "short" of money; who, having money, spends it freely, enjoying it, and having none, hopes for it in the future; who makes the best of everything, and takes life as it comes. Your true Bohemian is a philosopher, and in spite of his unconventionality he is at least as apt to be respectable as a leader in conventional society.

Boycott. The word "boycott" originated in this way: Lord Erne, an Irish land-owner, had for his agent, Captain Boycott, Lough Mask, Connemara, who treated the tenants with such severity that they petitioned for his removal. As Lord Erne ignored their complaints, they and their sympathizers retaliated in the autumn of 1880, by refusing to work for Boycott and preventing any one else from doing so. The agent would have been ruined had not certain Ulster men, protected by an armed force, come to his relief and husbanded the crops. Boycott, meaning "a combination that refuses to hold any relations, either public or private, business

or social, with any person or persons, on account of political or other differences," was first used by the Irish Land Leaguers, and the word thence passed into popular use.

Bridges. The earliest bridges were no doubt trunks of trees. The arch seems to have been unknown amongst most of the nations of antiquity. Even the Greeks had not sufficient acquaintance with it to apply it to bridge building. The Romans were the first to employ the principle of the arch in this direction, and after the construction of such a work as the great arched sewer at Rome, the *Cloaca Maxima*, a bridge over the Tiber would be of comparatively easy execution. One of the finest examples of the Roman bridge was the bridge built by Augustus over the Nera at Narni, the vestiges of which still remain. It consisted of four arches, the longest of 142 feet span. The most celebrated bridges of ancient Rome were not generally, however, distinguished by the extraordinary size of their arches, nor by the lightness of their piers, but by their excellence and durability. The span of their arches seldom exceeded seventy or eighty feet, and they were mostly semicircular, or nearly so. The Romans built bridges wherever their conquests extended, and in Britain there are still a number of bridges dating from Roman times. One of the most ancient post-Roman bridges in England is the Gothic triangular bridge at Croyland, in Lincolnshire, said to have been built in 860, having three archways meeting in a common center at their apex, and three roadways. The longest old bridge in England was that over the Trent at Burton, in Staffordshire, built in the Twelfth Century, of squared freestone, and recently pulled down. It consisted of thirty-six arches, and was 1,545 feet long. Old London bridge was commenced in 1176, and finished in 1209. It had houses on each side like a regular street till 1756–58. In 1831, it was altogether removed, the new bridge, which had been begun in 1824, having then been finished. The art of bridge-building made no progress after the destruction of the Roman Empire till the Eighteenth Century, when the French architects began to introduce improvements, and the constructions of Perronet (Nogent-sur-Seine; Neuilly; Louis XVI. bridge at Paris) are masterpieces. Within the last half century or so the use of steam and iron, the immense developments of all mechanical contrivances, and the great demand for railway bridges and viaducts have given a great stimulus to invention in this department. Stone bridges consist of an arch or series of arches, and in building them the properties of the arch, the nature of the materials, and many other matters have to be carefully considered. It has been found that in the construction of an arch the slipping of the stones upon one another is prevented by their mutual pressure and the friction of their surfaces; the use of cement is thus subordinate to the principle of construction in contributing to the strength and maintenance of the fabric. The masonry or rock which receives the lateral thrust of an arch is called the *abutment*, the perpendicular supports are the *piers*. The width of an arch is its *span;* the greatest span in any stone bridge is about 250 feet. A one-span bridge has, of course, no piers. In constructing a bridge across a deep stream it is desirable to have the smallest possible number of points of support. Piers in the waterway are not only expensive to form, but obstruct the navigation of the river, and by the very extent of resisting surface they expose the structure to shocks and the wearing action of the water. In building an arch, a timber framework is used called the *center*, or *centering*. The *centering* has to keep the stones or *voussoirs* in position till they are keyed in, that is, all fixed in their places by the insertion of the keystone. The first iron bridges were erected from about 1777 to 1790. The same general principles apply to the construction of iron as of stone bridges, but the greater cohesion and adaptability of the material give more liberty to the architect, and much greater width of span is possible. At first, iron bridges were erected in the form of arches, and the material employed was cast iron; but the arch has now been generally superseded by the beam or *girder*, with its numerous modifications; and wrought iron or steel is likewise found to be much better adapted for resisting a great tensile strain than cast metal. Numerous modifications exist of the beam or girder, as the *lattice-girder*, *bow-string-girder*, etc.; but of these none is more interesting than the *tubular* or hollow girder, first rendered famous from its employment by Robert Stephenson in the construction of the railway bridge across the Menai Strait, and connecting Anglesey with the mainland of North Wales. This is known as the Britannia Tubular Bridge. The tubes are of a rectangular form, and constructed of riveted plates of wrought iron, with rows of rectangular tubes or cells for the floor and roof respectively. The bridge consists of two of these enormous tubes or hollow beams laid side by side, one for the up and the other for the down traffic of the railway, and extending each to about a quarter of a mile in length. Other tubular bridges of importance are the Conway Bridge, over the River Conway, an erection identical in principle with the Britannia Bridge, but on a smaller scale; the Brotherton Bridge over the river Aire; the tubular railway bridge across the Damietta branch of the Nile, which has this peculiarity, that the roadway is carried *above* instead of *through* the tubes; and the Victoria Bridge over the St. Lawrence, Canada. In many respects this structure was even more remarkable than the Britannia Bridge, being supported by twenty-four piers, and nearly two miles in length, or about five and a half times that of the bridge across the Menai Strait. The bridge over the Firth of Forth, at Queensferry, a notable structure, has two chief spans of 1,710 feet, two others of 680 feet, fifteen of 168 feet, and seven small arches, and will give a clear headway for navigation purposes of 150 feet above high-water of spring-tides. The great spans consist of a cantilever at either end, 680 feet long, and a central girder of 350 feet. A girder railway bridge across the Firth of Tay at Dundee was opened in 1887, being the second built at the same place, after the first had given way in a great storm. It is two miles seventy-three yards long, has eighty-five spans, is seventy-seven feet high and carries two lines of rails.

Both bridges were built to carry the lines of the North British Railway. The Crumlin Railway Viaduct, South Wales, having lattice-girders supported on open-work piers is more remarkable for height than length, being 200 feet high. Suspension bridges, being entirely independent of central supports, do not interfere with the river, and may be erected where it is impracticable to build bridges of any other kind. The entire weight of a suspension bridge rests upon the piers at either end from which it is suspended, all the weight being below the points of support. Such bridges always swing a little, giving a vibratory movement which imparts a peculiar sensation to the passenger. The modes of constructing these bridges are various. The roadway is suspended either from chains or from wire-ropes, the ends of which require to be *anchored*, that is attached to the solid rock or masses of masonry or iron. One of the earlier of the great suspension bridges is that constructed by Telford over the Menai Strait near the Britannia Tubular Bridge, finished in 1825; the opening between the points of suspension is 580 feet. The Hammersmith Chain-bridge, the Union Suspension bridge near Berwick, and the suspension bridge over the Avon at Clifton are other British examples. On the European Continent, the Fribourg Suspension bridge in Switzerland, span 870 feet, erected 1834, is a celebrated work; as is that over the Danube connecting Buda with Pesth. In America the lower suspension bridge over the Niagara, two miles below the falls, now replaced by a steel arch bridge, was 821 feet long; it had two roadways connected together but fifteen feet apart, the lower serving for ordinary traffic, the upper carrying three lines of rails, 245 feet above the river. Another bridge, close to the falls, has a span of 1,268 feet. The Cincinnati bridge over the Ohio has a length of 2,720 feet. A suspension bridge of great magnitude, connecting the city of New York with Brooklyn, was opened in 1883. The central or main span is 1,595½ feet from tower to tower, and the land spans between the towers and the anchorages 930 feet each; the approach on the New York side is 2,492 feet long, and that on the Brooklyn side, 1,901 feet; total length of bridge 5,989 feet. The height of the platform at the center is 135 feet above high water, and at the ends 119 feet. The roadway is eighty-five feet broad, and is divided into five sections, the two outside for vehicles, the two inner for trolley-cars, the middle one, twelve feet above the rest, for foot-passengers. Cost over $15,000,000. Though the oldest bridges on record were built of wood, like the Sublician Bridge at Rome, or that thrown by Cæsar across the Rhine, it is only in certain places and for certain purposes that wood is much used at present. In modern times Germany has been the school for wooden bridges. Perhaps the most celebrated of all wooden bridges was that which spanned the Rhine at Schaffhausen in Switzerland. This was 364 feet in length and eighteen feet broad. It was designed and executed by Ulric Grubenman, a village carpenter, in 1758, and was destroyed by the French, in 1799. In the United States we have some fine examples, the Trenton Bridge over the Delaware, erected in 1804; the bridge over the Susquehanna, etc.

Some of the most notable developments in the art of bridge construction are to be found in North America, where an enormous railway system, traversing a country of great rivers and ravines, has given an exceptional stimulus to the art. The main characteristics of American bridges are simplicity and boldness of design, the reduction of the number of members to a minimum by the use of open trusses composed of simple systems rather than the plate, tubular, or closely-latticed girders of European engineers, thus offering less resistance to wind pressure.

NOTABLE BRIDGES

Albany (over the Hudson). Iron; length of draw, 400 feet.
Arcueuil Aqueduct. Stone; length, 1,279 feet; semi-circular arch.
Barentin Viaduct. Stone; length, 1,545 feet; semi-circular arch.
Biscari Aqueduct. Stone; length, 1,222 feet; ogival.
Bombay (Madras). Length, 3,730 feet.
Boyne. Wrought iron; length, 1,760 feet; lattice.
Brighton Viaduct. Brick; length, 960 feet; semi-circular arch.
Britannia. Wrought iron; length, 1,488 feet; tubular.
Brooklyn (East River). Length, 5,989 feet; suspension.
Carpentras Aqueduct. Stone; length, 1,687 feet; semi-circular arch.
Chaumont Viaduct. Length, 1,968 feet; semi-circular arch.
Cincinnati and Covington (over the Ohio). Built, 1867; reconstructed, 1897; length, 2,720 feet; suspension.
Cleveland Viaduct. Length, 3,211 feet; width, 64 feet; contains a drawbridge 332 feet in length, 46 feet wide, and 68 feet above the ordinary water mark.
Clifton, now known as the Upper Arch (over Niagara River). Length, 1,268 feet.
Congleton Viaduct. Stone; length, 2,870 feet; arch, segment.
Crumlin Viaduct. Iron; length, 1,050 feet; truss-gird.
Danube (near Stadlan, Austria). Iron; length, 2,520 feet.
Dee Viaduct. Stone; length, 1,388 feet; semi-circular arch.
Dinting Vale Viaduct. Timber; length, 1,452 feet; arch, segment.
Dubuque (over Mississippi). Iron; length, 1,758 feet.
Florence (over the Arno). Built 1569; marble; length, 322 feet; elliptical arch.
Forth Bridge. Over the Firth of Forth, Scotland; cantilever; iron and steel; length, nearly two miles, including approaches. Opened March 4, 1890.
Franzdorf Viaduct. Stone; length, 1,916 feet; semi-circular arch.
Godavery Irrigation Aqueduct. Stone; length, 2,356 feet; arch, segment.
Goeltzschthal Viaduct. Stone; length, 1,900 feet; elliptical arch.
Harlem River Aqueduct (High Bridge). Stone; length, 1,450 feet; semi-circular arch.
Hell Gate Bridge. Largest steel-arch bridge in the world. Length, 17,000 feet.
Indre Viaduct. Stone; length, 2,463 feet; semi-circular arch.
Kinzua Viaduct (R. R.). On Bradford branch of New York, Lake Erie, and Western R. R., near Bradford, Pa., iron; height, 301 feet; length 2,052 feet.
Lisbon Aqueduct. Stone; length, 3,805 feet; ogival.
London Bridge. The present stone bridge is 920 feet long, 56 feet wide and 55 feet high, with a central span of 150 feet.
Louisville, Ky. (over the Ohio). Length, 5,310 feet.
Maintenon Aqueduct. Stone; length, 16,367 feet; semi-circular arch.
Minneapolis Suspension Bridge. Completed, 1876; length, with approaches, one mile.
Montpellier Aqueduct. Stone; length, 3,214 feet; semi-circular arch.

New Tay Bridge. Across the Firth of Tay near Dundee, Scotland, a steel truss bridge, 10,780 feet long.
Niagara Cantilever. Steel bridge over the Niagara River; length, 910 feet.
Niagara Suspension. (Now replaced by steel and known as the Lower Arch.) Total length, about 2,220 feet; width of span, 821 feet; height above river, 245 feet.
Nogent-sur-Marne Viaduct. Stone; length, 2,722 feet; semi-circular arch.
Omaha (over the Missouri). Length, 2,800 feet.
Pavia. Stone; length, 620 feet; ogival.
Poughkeepsie. Iron; cantilever; length, 6,767 feet.
Quebec Cantilever. Across the St. Lawrence, built 1900-15, 3,240 feet long, containing, at date of completion, the largest cantilever span in the world.
Quincy (over the Mississippi). Iron; length, 3,200 feet.
Rochester (new). Cast iron; length, 498 feet; arch, segment.
Rockville Bridge. Near Harrisburg, Pa., is the largest four-track stone railway bridge in the world. Length, 3,810 feet. It contains forty-eight 70-foot stone arches, and cost $1,000,000.
St. Anne's. Wrought iron; length, 1,350 feet; tubular.
St. Charles (Mo.). Iron; length, 6,536 feet.
St. Louis (across the Mississippi). Minnesota and North Western R. R.; iron; 1,825 feet long; draw span 412 feet long, the latter being one of the largest and heaviest in the world.
Trenton (Delaware). Timber; length, 960 ft. frame truss.
Tunkhannock Viaduct. Largest concrete bridge in the world. Length, 2,375 feet.
Victoria (St. Lawrence). Wrought iron; length, 9,437 feet; tubular; built, 1854; replaced by truss bridge, 1897.
Washington Bridge (across Harlem River valley, N. Y.); two steel arches of 510 feet span; roadway, 80 feet wide; length, 2,375 feet; height above the Harlem River, 133 feet.
Williamsburg. Across East River, connecting Manhattan and Brooklyn. Total length, 7,275 feet; main span, 1,600 feet; width, 118 feet; height above mean high water, 135 feet; cost $12,000,000, exclusive of real estate.

British Lion. This term symbolizes the spirit of pugnacity of the British nation, as opposed to "John Bull," which symbolizes the substantiality, obstinacy, and solidity of the British nation, with all its prejudices and national peculiarities. To rouse John Bull is to tread on his corns; to rouse the British Lion is to blow the war-trumpet in his ears.

Brother Jonathan is a collective personification of the people of the United States. When General Washington, after being appointed commander of the army of the Revolutionary War, came to Massachusetts to organize it and make preparations for the defense of the country, he found a great want of ammunition and other means necessary to meet the powerful foe he had to contend with, and great difficulty to obtain them. If attacked in such condition, the cause at once might be hopeless. On one occasion, at that anxious period, a consultation of the officers and others was had, when it seemed no way could be devised to make such preparation as was necessary. His Excellency, Jonathan Trumbull, the elder, was then governor of the State of Connecticut, on whose judgment and aid the General placed the greatest reliance, and remarked: "We must consult 'Brother Jonathan' on the subject." He did so, and the governor was successful in supplying many of the wants of the army. When difficulties afterwards arose, and the army was spread over the country, it became a byword, "We must consult Brother Jonathan."

Burial is applied to the prevalent method among civilized nations of disposing of the dead by hiding them in the earth. The general tendency of mankind has been to bury the dead out of sight of the living; and various as the methods of accomplishing this end have been, they have resolved themselves into three great classifications: (1) The simple closing up of the body in wood or stone. (2) The burning of the body and the entombing of the ashes. (3) The embalming of the body. Some of the grandest buildings in the world have been tombs; such are the pyramids, the castle of St. Angelo, the tomb of Cecilia Metella, and many temples scattered over Hindustan. Thus, the respect paid by the living to the dead has preserved for the world many magnificent fruits of architectural genius and labor. A notion that the dead may require the things they have been fond of in life has also preserved to the existing world many relics of the customs of past ages. The tombs of Egypt have supplied an immense quantity of them, which have taught the present age more of the manners of ancient nations than all the learned books that have been written. It is an awful remembrance, at the same time, that inanimate things were not all that the dead were expected to take with them. Herodotus tells us of favorite horses and slaves sacrificed at the holocaust of the dead chief. The same thing has been done in our own day in Ashantee. In many countries the wives had the doom, or privilege, as it was thought, of departing with their husbands; and down to the present generation the practice has lived in full vigor in the Hindu suttee. Among the Jews, the Greeks, the Romans, and many ancient nations the dead were buried beyond the towns. In Christian countries, if the remains of the saint to whom a church was dedicated could be obtained, they were buried near the altar in the choir. It became a prevalent desire to be buried near these saints, and the bodies of men eminent for their piety, or high in rank, came thus to be buried in churches.

Camouflage (*kà'-mōō'-fläzh'*), a French term used to denote various means or methods of protective concealment, as, for example, the painting of ships, supply trains, wagons, or cannon in such manner as to render them practically indistinguishable from their surroundings when viewed at a distance. Dummy guns with dummy gunners and ammunition dumps are constructed so as to draw the enemy's fire upon certain points. Hills with trees and grazing cattle are painted on screens hiding the passage of soldiers or supply trains behind them. On the western front in the great European war the practice of this art proved of great value and led to its extension in many unsuspected fields, especially by the French who organized regular corps for the purpose. The artists with their forces of scene painters, sculptors, mechanics, and carpenters are styled *camoufleurs*.

Candlemas, in its ecclesiastical meaning, is the feast of the Purification of the Virgin Mary, and is observed on the 2d of February. This festival is very strictly kept by the Roman Catholic Church, there being a procession with many lighted candles, and those required for the service of the ensuing year being also on that occasion consecrated; hence the name Candlemas Day. In Scotland, this day became one of four term-days appointed for periodical annual payments of money, interest, and taxes.

An old document, of the time of Henry VIII., preserved in the archives of the Society of Antiquaries, London, concerning the rites and ceremonies in the English Church, speaks thus of the custom of carrying candles: "On Candlemas Daye it shall be declared that the bearyinge of candels is done in memorie of Christe, the spirituall lyghte whom Simeon dyd prophecye ['a light to lighten the Gentiles'], as it is redde in the churche that daye." But an older and heathen origin is ascribed to the practice. The Romans were in the habit of burning candles on this day to the goddess Februa, the mother of Mars. There is a tradition in most parts of Europe, which extends also to the United States, to the effect that a fine Candlemas portends a severe winter. In Scotland, the prognostication is expressed in the following distich:

> "If Candlemas is fair and clear,
> There'll be twa winters in the year."

Carpet-baggers. Corrupt and often ignorant politicians — mostly from the North — who flocked to the South during the era of Reconstruction. They were uniformly "on the make," and were responsible for much of the venality and rascality that disgraced that period of the history of the South.

Castle Garden. Popularly referred to as the landing place for European emigrants. It is a circular building situated on the Battery, New York, and from 1855 to 1891 served the above named purpose. It is now used as an aquarium.

Catacombs. Subterraneous chambers and passages formed generally in a rock, which is soft and easily excavated, such as *tufa*. The most celebrated catacombs are those on the Via Appia, at a short distance from Rome. To these dreary crypts it is believed that the early Christians were in the habit of retiring, in order to celebrate their new worship in times of persecution, and in them were buried many of the saints and martyrs of the primitive Church. They consist of long, narrow galleries, usually about eight feet high and five feet wide, which twist and turn in all directions, very much resembling mines. The graves were constructed by hollowing out a portion of the rock, at the side of the gallery, large enough to contain the body. The entrance was then built up with stones, on which usually the letters D. M. (Deo Maximo), or XP, the first two letters of the Greek name of Christ, were inscribed. Other inscriptions and marks, such as the cross, are also found. At irregular intervals these galleries expand into wide and lofty vaulted chambers, in which the service of the Church was no doubt celebrated, and which still have the appearance of churches. The original extent of the catacombs is uncertain, the guides maintaining that they have a length of twenty miles, whereas about six only can now be ascertained to exist, and of these many portions have either fallen in or become dangerous. Art found its way into the catacombs at an early period, and many remains of frescoes are still found in them. Belzoni, in 1815 and 1818, explored many Egyptian catacombs built 3,000 years ago, and brought to England the Sarcophagus of Psammetichus, formed of Oriental alabaster exquisitely sculptured. In the Parisian catacombs, formerly stone quarries, human remains from the Cemetery of the Innocents were deposited in 1785, and many of the victims of the Revolution of 1792–94 are interred in them.

Catching a Tartar means to be outdone or outwitted. An Irish soldier in a battle against the Turks shouted to his commanding officer that he had caught a "Tartar." "Bring him along, then," said the general. "But he won't come." "Then come along yourself." "Bedad, and so I would, but he won't let me," answered Pat.

Cemeteries, National. In the United States numerous cemeteries are maintained by the Federal government for the burial, free of cost, of officers and enlisted men of the army and navy who have died in the regular or volunteer service or after having been mustered out or honorably discharged. The same rights are accorded to army nurses, and, under regulations prescribed by the war department, wives of officers and enlisted men may also be interred. The national cemeteries are in the charge of the quartermaster-general of the War Department at Washington. With the exception of one in Mexico City, all of the 84 national cemeteries are situated within the United States. The following list shows their location:

Alexandria, La.
Alexandria, Va.
Andersonville, Ga.
Andrew Johnson (Greeneville), Tenn.
Annapolis, Md.
Antietam (Sharpsburg), Md.
Arlington, Va.
Balls Bluff (Leesburg), Va.
Barrancas, Fla.
Baton Rouge, La.
Battleground (Washington), D. C.
Beaufort, S. C.
Beverly, N. J.
Brownsville, Tex.
Camp Butler, Ill.
Camp Nelson, Ky.
Cave Hill (Louisville), Ky.
Chalmette, La.
Chattanooga, Tenn.
City Point, Va.
Cold Harbor, Va.
Corinth, Miss.
Crown Hill (Indianapolis), Ind.
Culpeper, Va.
Custer Battlefield (Crow Agency), Mont.
Cypress Hills (Brooklyn), N. Y.
Danville, Ky.
Danville, Va.
Fayetteville, Ark.
Finns Point (Salem), N. J.
Florence, S. C.
Fort Donelson (Dover), Tenn.
Fort Gibson, Okla.
Fort Harrison (Varina Grove), Va.
Fort Leavenworth, Kans.
Fort McPherson (Maxwell), Neb.
Fort Scott, Kans.
Fort Smith, Ark.
Fredericksburg, Va.
Gettysburg, Pa.
Glendale, Va.
Grafton, W. Va.
Hampton, Va.
Jefferson Barracks, Mo.
Jefferson City, Mo.
Keokuk, Iowa.
Knoxville, Tenn.
Lebanon, Ky.
Lexington, Ky.
Little Rock, Ark.
Loudon Park (Baltimore), Md.
Marietta, Ga.
Memphis, Tenn.
Mexico City, Mexico.
Mill Springs (Nancy), Ky.
Mobile, Ala.
Mound City, Ill.
Nashville, Tenn.
Natchez, Miss.
New Albany, Ind.
Newbern, N. C.
Philadelphia, Pa.
Poplar Grove (Petersburg), Va.
Port Hudson, La.
Quincy, Ill.
Raleigh, N. C.
Richmond, Va.
Rock Island, Ill.
Salisbury, N. C.
San Antonio, Tex.
San Francisco, Cal.
Santa Fe, N. Mex.
Seven Pines, Va.
Shiloh (Pittsburg Landing), Tenn.
Soldiers' Home (Washington), D. C.
Springfield, Mo.
St. Augustine, Fla.
Staunton, Va.
Stone River (Murfreesboro), Tenn.
Vicksburg, Miss.
Wilmington, N. C.
Winchester, Va.
Woodlawn (Elmira), N. Y.
Yorktown, Va.

Center of Area and Population of the U. S. The center of area of the United States, excluding Alaska and Hawaii and other recent accessions, is in northern Kansas, in

approximate latitude 39° 55′, and approximate longitude 98° 50′. The center of population, indicated below, is, therefore, about three-fourths of a degree south and more than twelve degrees east of the center of area.

Date	Center of Population, Approximate Location by Important Towns	Westward Movement During Preceding Decade, Miles
1790	23 miles east of Baltimore, Md.,	..
1800	18 miles west of Baltimore, Md.,	41
1810	40 miles northwest by west of Washington, D. C.,	36
1820	16 miles north of Woodstock, Va.,	50
1830	19 miles W. S. W. of Moorefield, in the present State of W. Va.,	39
1840	16 miles south of Clarksburg, in the present State of W. Va.,	55
1850	23 miles S. E. of Parkersburg, in the present State of W. Va.,	55
1860	20 miles south of Chillicothe, Ohio,	81
1870	48 miles east by north of Cincinnati, Ohio,	42
1880	8 miles west by south of Cincinnati, Ohio,	58
1890	20 miles east of Columbus, Ind.,	48
1900	6 miles southeast of Columbus, Ind.,	14
1910	W. part of Bloomington, Ind.,	39
1920	8 miles southeast of Spencer, Ind.,	10
	Total,	568

Chemical Substances, Common Names of.

Common Names	Chemical Names
Alum,	Sulphate of aluminum and potassium.
Aqua fortis,	Nitric acid.
Aqua regia,	Nitro-hydrochloric acid.
Calomel,	Mercurous chloride.
Carbolic acid,	Phenol.
Caustic potash,	Potassium hydrate.
Caustic soda,	Sodium hydrate.
Chalk,	Calcium carbonate.
Copperas,	Sulphate of iron.
Corrosive sublimate,	Mercuric chloride.
Cream of tartar,	Bitartrate of potassium.
Epsom salts,	Magnesium sulphate.
Fire damp,	Methane.
Glauber's salt,	Sodium sulphate.
Goulard water,	Basic acetate of lead.
Grape sugar,	Glucose.
Iron pyrites,	Sulphide of iron.
Jewelers' putty,	Oxide of tin.
Laughing gas,	Nitrous oxide.
Lime,	Calcium oxide.
Lunar caustic,	Silver nitrate.
Mosaic gold,	Bisulphide of tin.
Muriatic acid,	Hydrochloric acid.
Plaster of Paris,	Calcium sulphate.
Realgar,	Sulphide of arsenic.
Red lead,	Oxide of lead.
Rochelle salts,	Sodium potassium tartrate.
Sal ammoniac,	Ammonium chloride.
Salt, common,	Sodium chloride.
Salt of tartar (potash),	Potassium carbonate.
Saltpetre,	Potassium nitrate.
Salts of lemon,	Oxalic acid.
Slaked lime,	Calcium hydrate.
Soda,	Sodium carbonate.
Soda, baking,	Sodium bicarbonate.
Soda, washing,	Sodium carbonate.
Spirits of hartshorn,	Ammonia, solution of.
Spirits of salts,	Hydrochloric acid.
Sugar of lead,	Lead acetate.
Tartar emetic,	Potassium antimony tartrate.
Verdigris,	Basic acetate of copper.
Vermilion,	Sulphide of mercury.
Vinegar,	Dilute acetic acid.
Vitriol, blue,	Copper sulphate.
Vitriol, green,	Ferrous sulphate.
Vitriol, oil of,	Sulphuric acid.
Vitriol, white,	Zinc sulphate.
Volatile alkali,	Ammonia.

Chivalry, a term which indicates strictly the organization of knighthood as it existed in the Middle Ages, and in a general sense the spirit and aims which distinguished the knights of those times. The chief characteristics of the chivalric ages were a warlike spirit, a lofty devotion to the female sex, a love of adventure, and an undefinable thirst for glory. The Crusades gave for a time a religious turn to the spirit of chivalry, and various religious orders of knighthood arose, such as the Knights of St. John, the Templars, the Teutonic Knights, etc. The education of a knight in the days of chivalry was as follows: In his twelfth year he was sent to the court of some baron or noble knight, where he spent his time chiefly in attending on the ladies, and acquiring skill in the use of arms, in riding, etc. When advancing age and experience in the use of arms had qualified the page for war, he became an *esquire*, or *squire*. This word is from Latin *scutum*, a shield, it being among other offices the squire's business to carry the shield of the knight whom he served. The third and highest rank of chivalry was that of knighthood, which was not conferred before the twenty-first year, except in the case of distinguished birth or great achievements. The individual prepared himself by confessing, fasting, etc.; religious rites were performed; and then, after promising to be faithful, to protect ladies and orphans, never to lie nor utter slander, to live in harmony with his equals, etc., he received the *accolade*, a slight blow on the neck with the flat of the sword from the person who dubbed him a knight. This was often done on the eve of battle, to stimulate the new knight to deeds of valor; or after the combat, to reward signal bravery. Though chivalry had its defects, chief amongst which, perhaps, we may note a tendency to certain affectations and exaggerations of sentiment and profession, yet it is to be regarded as tempering in a very beneficial manner the natural rudeness of feudal society. It taught the best ideals which the times could understand.

Christmas Tree. The Christmas Tree, which has become an almost universal symbol, and is by most persons supposed to have originated in Germany, had its origin in Egypt at a period long before the Christian era. The palm-tree is known to put forth a branch every month, and a spray of this tree, with twelve shoots on it, was used in Egypt at the time of the winter solstice, as a symbol of the year completed.

Cigar. The word, of course, is Spanish, and is derived from *cigarra*, the Spanish name for grasshopper. When the Spaniards first introduced tobacco into Spain from the island of Cuba, they cultivated the plant in their gardens, which in Spanish are called *cigarrals*. Each grew his tobacco in his cigarral. When one offered a smoke to a friend, he would say: "*Es de mi cigarral*," that is, it is from my garden. Soon the expression came to be: "Este cigarro es de mi cigarral," this *cigar* is from my garden. The grasshopper (cigarra) was very common in Spain, and *cigarral* meant the place where the cigarra sings.

Cities, Popular Names of.

Aberdeen. Granite City.
Athens. City of the Violet Crown.

Bagdad. City of Peace.
Baltimore. Monumental City, from the number of monuments it contains.
Birmingham. The Midland Capital.
Boston. City of Notions, from the amount of "Yankee notions," so called, manufactured there; Hub of the Universe, so called by Dr. Oliver Wendell Holmes; Tri-Mountain City, from the three hills on which it was originally built.
Brighton. Queen of Watering Places, "London-super-Mare."
Brooklyn. City of Churches, from the number of churches it contains.
Buffalo. Queen City of the Lakes.
Chicago. Garden City, from the number and beauty of its private gardens; Windy City, from the constant winds blowing from the lakes.
Cincinnati. Queen City, so called when it was the commercial metropolis of the Middle West.
Cleveland. Forest City, from the number of trees on its streets.
Columbus, Ohio. The Arch City.
Constantinople. City of the Golden Horn.
Detroit. City of the Straits, from its location on the strait connecting Lake St. Clair and Lake Erie.
Edinburgh. Modern Athens.
Hannibal, Mo. Bluff City, from its location on the bluffs of the Missouri River.
Indianapolis. Railroad City, from its being a great railroad center.
Jerusalem. Holy City; City of David; City of Peace.
Keokuk, Ia. Gate City, from its situation at the foot of the Mississippi Rapids.
Liverpool. The Modern Tyre.
Louisville, Ky. Falls City, from the falls of the Ohio River, here located.
Lowell, Mass. City of Spindles, from its large manufacturing interests.
Manchester. Cottonopolis.
Minneapolis. Flour City.
Nashville, Tenn. City of Rocks, from its natural surroundings.
New Haven. City of Elms, from the great number of these trees it contains.
New Orleans. Crescent City, from its position on a curve of the Mississippi.
New York. Empire City, from its being the chief city of the United States.
Paris. City of the Lily, or City of Louis.
Philadelphia. City of Brotherly Love, from the meaning of the name.
Pittsburg, Pa. Iron City, from the extent of its iron manufactures; and Smoky City, from the smoke which overhangs it.
Portland, Me. Forest City, from the number of trees in its streets.
Rochester, N. Y. Flower City, from the profusion of flowers and extensive nurseries there.
Rome. City of the Seven Hills.
St. Louis. Mound City, from the artificial mounds found there.
San Francisco. City of the Golden Gate.
Springfield, Mass. City of Homes, from the many people who own their own homes.
Springfield, O. Flower City, from the beauty of its surroundings.
Venice. City of St. Mark, City of the Seventy Isles.
Washington. City of Magnificent Distances, from its being laid out on a large and regular scale.
Worcester, Mass. The Faithful City, so called from its motto: *Floreat Semper Civitas Fidelis.*

Columns, Spires, and Towers, Height of.

	Feet
Eiffel Tower, Paris,	984
Woolworth Building, New York City,	792
Metropolitan Life Bldg., New York City,	700
Washington Monument, Washington, D. C.,	555
City Hall, Philadelphia,	537
Ulm Cathedral,	529
Cologne Cathedral,	512
Custom House Tower, Boston,	505
Strassburg,	468
St. Stephen's, Vienna,	465
Pyramid of Cheops, Egypt,	451
St. Peter's, Rome,	448
Cathedral, Salisbury,	406
Cathedral, Antwerp,	400
Cathedral, Cremona,	397
Cathedral, Florence,	387
St. Paul's, London,	364
Milan Cathedral,	355
Bunker Hill Monument, Charlestown, Mass.,	221

Confidence Man. One who by plausible stories and falsehoods or by assurance obtains the confidence of kind-hearted people. This well-known phrase is said to have originated thus: A few years ago, a man in New York, well dressed and of exceedingly genteel manners, went about saying, in a very winning manner, to almost every gentleman he met, "Have you confidence enough in me, an entire stranger, to lend me five dollars for an hour or two?" In this way he got a good deal of money, and came to be generally known in the courts and elsewhere as "the confidence man."

Copperheads. A popular nickname which originated during the Civil War in the United States, and was applied to a faction in the North which was very generally considered to be in secret sympathy with the Rebellion, giving it aid and comfort by attempting to thwart the measures of the Government. The name is derived from a poisonous serpent called the copperhead, whose bite is considered as deadly as that of the rattlesnake. The copperhead, unlike the rattlesnake, gives no warning of its attack, and is, therefore, the type of a concealed foe.

Crystal Palace. The name "Crystal Palace" was applied by Douglas Jerrold, in "Punch," to the building in Hyde Park, London, in which the Great Exhibition of 1851, was held. After its close, the materials of which it was composed were sold to a company, for £70,000, and removed to the present site at Sydenham. It was designed by Sir Joseph Paxton, and is used for popular concerts and other entertainments, as well as for a permanent exhibition of the art and culture of various nations.

Dangerous Trades. The expression "dangerous trades" is especially applied to those trades in which some form of poison or disease is incidental to the trade itself as at present carried on. It is not generally used with reference to those trades in which sudden injury and death are caused by dangerous machinery or unguarded perils, but rather refers to those slower acting causes which, while not so sensational in their horrors, are even more frightful in their results.

American legislation has been much more unresponsive in safe-guarding workers in these trades than that of England and Europe generally. The following is a classified list of those trades which have been considered dangerous in acts of the British Parliament.

1. Trades in which lead is a poisonous element: — The manufacture of earthenware and china, file cutting, the manufacture of white lead, lead smelting, the use of lead in print or dye works, the manufacture of red, orange, or yellow lead, glass polishing, enameling of iron plates, enameling and tinning of hollow metal ware and cooking utensils, processes in which yellow chromate of lead is made, or in which goods dyed with it undergo the process of building, winding, weaving, etc.

2. Trades which produce other chemical poisons:— Manufacture of paint and colors, extraction of arsenic, dry cleaning, paper staining, coloring and enameling, hatters' and furriers' work, the manufacture of matches, chemical

works, bronzing and metallochrome powder in lithographic works, India rubber works, dyeing with certain dyes, mixing and casting of brass, gun metal, bell metal, white metal, phosphor-bronze and manila mixture.

3. Trades in which anthrax or lockjaw is an incident:— Wool sorting, the handling of hides and skins, hair factories, brush-making, bone factories, fellmongers' works, furriers' works, tanneries, wool combing, blanket stoving and tentering, warp dressing, carbonizing and grinding of rags, flock making, feather cleaning.

4. Trades in which the danger arises from injurious particles in the air or from dust:— Basic slag works, manufacture of silicate of cotton, file cutting, flour mills, trades which use grindstones or emery wheels, china scouring, silk combing, flax scutching.

5. Trades in which sudden accidents are so frequent as to demand special legislation:— Metal works which use converters, electrical generating works, bottling and bottle testing, quarries, manufacture of salt.

6. Processes which require a sudden change from great heat to cold and *vice versa*, such as lacquering and japanning, galvanizing of iron and the work carried on in furnaces and foundries.

7. Processes that require artificial humidity: — Cotton spinning, weaving, etc., flax spinning, weaving, etc., wool spinning, silk spinning.

This list shows a wide prevalence of trades in which special dangers exist, and calls for the utmost remedial precaution on the part of both the public and all workers immediately concerned.

Dark Horse. A frequent phrase in sporting and political parlance, and indicating one who, up to a certain time kept in the background, suddenly comes to the front, and snatches victory from the hands of others. The phrase was used by Thackeray in his "Adventures of Philip." Said Philip, referring to some talk about a candidate for parliament: "Well, bless my soul, he can't mean me. Who is the dark horse he has in his stable?"

Days of Grace. In the reign of Henry II., the day first mentioned in each term of court was called "essoign day," because the court then took the essoigns or excuses of those who did not appear according to the summons of the writs. But as — by a custom traced by Blackstone to the Germans of the days of Tacitus — three days of grace were allowed to every defendant within which to appear, the courts did not sit for the despatch of business until the fourth day after that time. On the other hand, they continued to sit till the fourth day after the last return. The rule allowing days of grace in the United States was adopted from the English law.

Dead Letter Office, in the United States postal department, is the place where unclaimed letters are sent. After remaining a month in the office to which they are directed, the unclaimed or "dead" letters are sent to Washington, and opened in the dead letter office. If the writer's address can be found, the letter is returned to him; if not, it is destroyed. In one year nearly 7,000,000 pieces of mail matter were received — many had no state on the address, 3,000 had no address at all; $92,000 in cash and more than $3,000,000 in drafts were found in the letters. Thousands of magazines, illustrated papers, picture cards, and valentines were sent to hospitals.

Death Warrant of Jesus Christ. In 1810, some workmen, while excavating in the ancient city of Amiternum (now Aquila), in the kingdom of Naples, found an antique marble vase in which lay concealed a copper plate, bearing on the obverse side a long inscription in the Hebrew tongue. This, when translated, proved to be the death-warrant of Jesus Christ. On the reverse side of the plate were found the words: "A similar plate is sent to each tribe." After its excavation, it was enclosed in an ebony box, and preserved in the sacristy of the Carthusians. This relic, if genuine, is to Christians the most impressive and interesting legal document in existence. It has been faithfully transcribed, and reads as follows:

Sentence rendered by Pontius Pilate, acting Governor of Lower Galilee, stating that Jesus of Nazareth shall suffer death on the cross.

In the year seventeen of the Emperor Tiberius Cæsar, and the 27th day of March, the city of the holy Jerusalem — Annas and Caiaphas being priests, sacrificators of the people of God,— Pontius Pilate, Governor of Lower Galilee, sitting in the presidential chair of the prætory, condemns Jesus of Nazareth to die on the cross between two thieves, the great and notorious evidence of the people saying:

1. Jesus is a seducer.
2. He is seditious.
3. He is the enemy of the law.
4. He calls himself falsely the Son of God.
5. He calls himself falsely the King of Israel.
6. He entered into the temple, followed by a multitude bearing palm-branches in their hands.

Orders the first centurion, Quilius Cornelius, to lead him to the place of execution. Forbids any person, whomsoever, either poor or rich, to oppose the death of Jesus Christ.

The witnesses who signed the condemnation of Jesus are:

1. Daniel Robani, a Pharisee.
2. Joannus Robani.
3. Raphael Robani.
4. Capet, a citizen.

Jesus shall go out of the city of Jerusalem by the gate of Struenus.

Decoration Day, or Memorial Day, is a day designated as a legal holiday in all the States, except Idaho and Texas, for the purpose of commemorating the soldiers who fell in the Civil War, and decorating their graves. The day thus set apart is May 30th, in all the Northern and Western States and in Virginia. In the latter State, as in all the Southern States, the name adopted is "Confederate Memorial Day." Alabama, Georgia, Mississippi, and Florida observe April 26th; North Carolina and South Carolina, May 10th; Tennessee, the second Friday in May; and Louisiana, June 3d — Jefferson Davis's birthday, which is also observed in a number of other Southern States.

DIAMONDS OF NOTE

Carats (uncut)	Carats (cut)	Name	Discovered	Possessor
3,025¾	{ 516½	Cullinan I,	1905	King George V.
	{ 309¾	Cullinan II,	1905	
1680(?)	*Never cut*	Braganza,	1741	Among Portuguese royal jewels.
787½	367$^{5}/_{16}$	Rajah of Mattan,	1756	Rajah of Mattan (Borneo).
....	194¾	Orloff,	.....	Czar of Russia (scepter).
....	139½	Florentine,	.....	Emperor of Austria.
242½	.....	Tavernier,	1668	Stolen in 1792.
150	138½	.....	1775	Among Portuguese royal jewels.
410	136⅞	Pitt or Regent,	1702	King of Prussia.
254	127	Star of the South,	1853	Gaekwar of Baroda, India.
186½	106$^{1}/_{16}$	Koh-i-nur,	B. C. 56	Royal family of England.
....	86	Shah,	.....	Czar of Russia.
89¾	78$^{5}/_{16}$	Nassac,	.....	Lord (Marquis of) Westminster.
288$^{5}/_{8}$	.....	*Light Yellow*,	.....	Stewart (diamond).
150	.....	Porter Rhodes,	1872	*Found in South Africa.*
112	67⅛	*Blue*,	.....	
83	52½	Sancy,	15th Cent.	Czar of Russia.
....	49	Pigott,	.....	Bought by Messrs. Rundell and Bridge.
83½	46⅛	Star of South Africa,	1867	
88½	44½	Dudley,	.....	Earl of Dudley.
...	49½	Hope,	.....	Mr. Henry Hope's family.
...	40	Pasha of Egypt,	.....	Khedive of Egypt.
....	28	Charles the Bold,	.....	

Dixie. Popularly applied to the States south of Mason and Dixon's line, the former boundary of slavedom. Also, in folklore, a fabulous realm of peace, plenty, and indolence, whose charms form the burden of many a negro melody. Brewer says that a Mr. Dixie was a slaveholder of Manhattan Island, compelled by public opinion to remove his human chattels to the South. In their new abode they had to toil ceaselessly, and often sighed for their old home at the North, which lapse of time and distance invested with a halo of paradisaic pleasures. This "Dixie Land" became to the entire colored race in the South a species of Utopia, similar to the Scottish "Land o' the Leal" or the Fortunate Islands of the ancients.

Dollar Mark, $. Writers are not agreed as to the derivation of this sign to represent dollars. Some say it comes from the letters U. S., which after the adoption of the Federal Constitution, were prefixed to the federal currency, and which afterwards, in the hurry of writing, were run into one another, the U being made first and the S over it. The more probable explanation is that it is a modification of the figure 8, and denotes a piece of eight reals, or, the dollar which was formerly divided into *eight* parts. It was then designated by the figures $^{8}/_{8}$.

Domes of the World, Great.

	Diameter feet	Height feet
Pantheon, Rome,	142	143
Duomo, Florence,	139	310
St. Peter's, Rome,	139	330
Capitol, Washington, D. C.,	135½	287½
St. Sophia, Constantinople,	115	201
Baths of Caracalla (ancient), Rome,	112	116
St. Paul's, London,	112	215

Duel. A premeditated and prearranged combat between two persons, with deadly weapons, for the purpose of deciding some private difference or quarrel. The combat generally takes place in the presence of witnesses called seconds, who make arrangements as to the mode of fighting, place the weapons in the hands of the combatants, and see that the laws they have laid down are carried out. The origin of the practice of duelling is referred to the trial by "wager of battle," which obtained in early ages. This form of duel arose among the Germanic peoples, and a judicial combat of the kind was authorized by Gundebald, King of the Burgundians, as early as 501. A. D. When the judicial combat declined the modern duel arose, being probably to some extent an independent outcome of the spirit and institutions of chivalry. France was the country in which it arose, the Sixteenth Century being the time at which it first became common. Upon every insult or injury which seemed to touch his honor, a gentleman thought himself entitled to draw his sword, and to call on his adversary to give him satisfaction, and it is calculated that 6,000 persons fell in duels during ten years of the reign of Henry IV. His minister, Sully, remonstrated against the practice; but the King connived at it, supposing that it tended to maintain a military spirit among his people. In 1602, however, he issued a decree against it, and declared it to be punishable with death. Many subsequent prohibitions were issued, but they were all powerless to stop the practice. During the minority of Louis XIV. more than 4,000 nobles are said to have lost their lives in duels. The practice of duelling was introduced into England from France in the reign of James I.; but it was never so common as in the latter country. Cromwell was an enemy of the duel, and during the protectorate there was a cessation of the practice. It came again into vogue, however, after the Restoration, thanks chiefly to the French ideas that then inundated the court. As society became more polished duels became more frequent, and they were never more numerous than in the reign of George III. Among the principals in the fatal duels of this period were Charles James Fox, Sheridan, Pitt, Canning, Castlereagh, the Duke of York, the Duke of Richmond, and Lord Camelford. The last-mentioned was the most notorious duellist of his time, and was himself killed in a duel in 1804. A duel was fought between the Duke of Wellington and Lord Winchelsea in 1829, but the practice was dying out. It lasted longest in the

army. By English law fatal duelling is considered murder, no matter how fair the combat may have been, and the seconds are liable to the same penalty as the principals. In 1813, the principal and seconds in a fatal duel were sentenced to death, though afterwards pardoned. An officer in the army having anything to do with a duel renders himself liable to be cashiered. In France duelling still prevails to a certain extent; but the combats are usually very bloodless and ridiculous affairs. In the German army it is common, and is recognized by law. The duels of German students, so often spoken of, seldom cause serious bloodshed. In the United States duels are now uncommon. In some of the States the killing of a man in a duel is punishable by death or by forfeiture of political rights, and in a large number the sending of a challenge is a felony. In the army and navy it is forbidden. During the Revolution there were a number of duels: Charles Lee was wounded by John Laurens; Gwinnett, a signer of the Declaration, was killed by Gen. McIntosh; Alexander Hamilton was slain by Aaron Burr. Decatur was killed and Barron wounded fighting a duel. Andrew Jackson killed Dickinson, and fought several other duels. Col. Benton killed Lucas, and had other encounters. Henry Clay and John Randolph fought in 1826. De Witt Clinton was a duellist.

Dun. The word "dun" is by some supposed to be derived from the French *donner*. The "British Apollo" of 1780, says, however, that the word owes its origin to a Joe Dun, a famous bailiff of Lincoln, in the time of Henry VII. He is said to have been so very successful in the collection of debts that his name became proverbial, and whenever it seemed almost impossible to make a man pay, people would say, "Why don't you Dun him?"

Dwarf. A term applied to any animal or plant greatly below the usual size of its kind, particularly to a human being of small dimensions. Accounts of dwarf tribes have been common from early times, such tribes being located especially in Africa; and it would appear from the accounts of Du Chaillu, Schweinfurth, and other travelers that there are several dwarfish tribes throughout this continent. The Obongo, a race of dwarfs, are described as living in woods near the Okanda River, in wretched huts made of branches. Other races are the Mabongo, and the Akka dwarfs of Central Africa; and a race is said to exist in the Congo State, not as a distinct community, however, but mixed with other tribes. Individual dwarfs occur in all races, and were formerly a fashionable appendage to the courts of princes and the families of nobles. Jeffery Hudson, the favorite dwarf of Charles I., at the age of thirty is said to have been only eighteen inches high, though he afterwards grew to three feet and nine inches. Bébé, the celebrated dwarf of Stanislas of Poland, was thirty-three inches; Wybrand Lolkes, a Dutch dwarf, when sixty years of age was only twenty-seven inches; Charles H. Stratton, "General Tom Thumb," was thirty-one inches high at the age of twenty-five; Francis Flynn, "General Mite," was only twenty-one inches at sixteen.

Dying Gaul, The. This celebrated antique statue of the Pergamene school, formerly known as "The Dying Gladiator," may be seen in the Capitoline Museum, Rome. The warrior nude, sits on the ground with bowed head, supporting himself with his right arm. The statue is especially fine in the mastery of anatomy displayed, and in its characterization of the racial type.

Earthquakes. A shaking of certain parts of the earth's surface, produced by causes not perceivable by our senses. This motion occurs in very different ways, having sometimes a perpendicular, sometimes a horizontal undulating, and sometimes a whirling motion. It also varies much in degrees of violence, from a shock which is hardly perceptible to one which bursts open chasms and changes the appearance of the ground itself. During these shocks sometimes smoke and flames, but more frequently stones and torrents of water are discharged. There is little doubt that earthquakes and volcanic eruptions are kindred phenomena, the latter differing from the former principally in proceeding from a permanent crater. All observations go to prove that both are due to disruptions produced by internal heat at a great depth beneath the surface of the earth. Of the particular way in which this force works, however, there are various theories. It has been thought by some that the center of earthquakes and volcanic disturbances is always near the sea or other large supplies of water, and that the disturbances are directly caused by the filtration of the water down to igneous matter, and the consequent generation of vast quantities of steam which frees itself by explosion. Others have sought to explain earthquakes as part of the phenomena of a planet cooling at the surface. The parts of the world most frequented by earthquakes are exhibited in the following table:

Area	Earthquakes
Scandinavia,	646
British Isles,	1,139
France,	2,793
Spain and Portugal,	2,656
Switzerland,	3,895
Italy,	27,673
Holland and North Germany,	2,326
Sicily,	4,332
Greece,	10,306
Russia,	258
Asia Minor,	4,151
India,	813
Japan,	27,562
Africa,	179
Atlantic Islands,	1,704
United States, Pacific Coast,	4,467
Atlantic Coast,	937
Mexico,	5,586
Central America,	2,739
West Indies,	2,561
South America,	8,081
Java,	2,155
Australia and Tasmania,	83
New Zealand,	1,925

The most remarkable earthquakes of history are the following:

	B. C.
One which made Eubœa an island,	425
Elice and Bula, in Peloponnesus, swallowed up,	372
One at Rome, when, in obedience to an oracle, M. Curtius, armed and mounted on a stately horse, leaped into the dreadful chasm it occasioned (*Livy*),	358

B. C.

Duras, in Greece, buried, with all its inhabitants; and twelve cities in Campania also buried, . . 345
Lysimachia and its inhabitants totally buried,. . 283

A. D.

Ephesus and other cities overturned, ... 17
One accompanied by the eruption of Vesuvius; the cities of Pompeii and Herculaneum buried, . . 79
Four cities in Asia, two in Greece, and two in Galatia overturned, ... 107
Antioch destroyed, ... 115
Nicomedia, Cæsarea, and Nicæa overturned, . . . 126
In Asia. Pontus, and Macedonia, 150 cities and towns damaged, ... 357
Nicomedia again demolished, and its inhabitants buried in its ruins, ... 358
One felt by nearly the whole world, ... 543
At Constantinople; its edifices destroyed, and thousands perished, ... 557
In Africa; many cities overturned, ... 560
Awful one in Syria, Palestine, and Asia; more than 500 towns were destroyed, and the loss of life surpassed all calculations, ... 742
In France, Germany, and Italy, ... 801
Constantinople overturned; all Greece shaken, . . 936
One felt throughout England, ... 1089
One at Antioch; many towns destroyed, among them Mariseum and Mamistria, ... 1114
Catania, in Sicily, overturned, and 15,000 persons buried in the ruins, ... 1137
One severely felt at Lincoln, ... 1142
At Calabria; one of its cities and all its inhabitants overwhelmed in the Adriatic Sea, ... 1186
One again felt throughout England; Glastonbury destroyed, ... 1274
In England; the greatest known there,. 1318
At Naples; 40,000 persons perished, ... 1456
At Lisbon; 1,500 houses and 30,000 persons buried in the ruins; several neighboring towns ingulfed with their inhabitants, ... 1531
One felt in London, part of St. Paul's and the Temple churches fell, ... 1580
In Japan; several cities made ruins, and thousands perished, ... 1596
Awful one at Calabria, ... 1638
One in China, when 300,000 persons were buried in Pekin alone, ... 1662
One severely felt in Ireland, ... 1690
One at Jamaica, which totally destroyed Port Royal, whose houses were ingulfed forty fathoms deep, and 300 persons perished, ... 1692
One in Sicily, which overturned fifty-four cities and towns, and 300 villages. Of Catania and its 18,000 inhabitants not a trace remained; more than 100,000 lives were lost, ... 1693
Palermo nearly destroyed; 6,000 lives lost, ... 1726
Again in China; and 100,000 people swallowed up at Pekin, ... 1731
In Hungary; a mountain turned round, ... 1736
One at Palermo, which swallowed up a convent; but the monks escaped, ... 1740
Lima and Callao demolished; 18,000 persons buried in the ruins, ... 1746
In London, a slight shock, February 8th; but severer shock, March 8th, ... 1750
Adrianople nearly overwhelmed, ... 1752
At Grand Cairo; half of the houses and 40,000 persons swallowed up, ... 1754
Quito destroyed, ... 1755
Great earthquake at Lisbon. In about eight minutes most of the houses and upward of 50,000 inhabitants were swallowed up, and whole streets buried. The cities of Coimbra, Oporto, and Braga suffered dreadfully, and St. Ubes was wholly overturned. In Spain, a large part of Malaga became ruins. One-half of Fez, in Morocco, was destroyed, and more than 12,000 Arabs perished there. Above half of the island of Madeira became waste; and 2,000 houses in the island of Mytilene, in the Archipelago, were overthrown. This awful earthquake extended 5,000 miles; even to Scotland, ... 1755
In Syria, extended over 10,000 square miles; Baalbec destroyed, ... 1759
At Martinico, 1,600 persons lost their lives, . . . 1767
At Guatemala, which, with 8,000 inhabitants, was swallowed up, ... 1773
A destructive one at Smyrna, ... 1778
At Tauris; 15,000 houses thrown down, and multitudes buried, ... 1780
Messina and other towns in Italy and Sicily overthrown; 40,000 persons perished, ... 1783

A. D

Archindschan wholly destroyed, and 12,000 persons buried in its ruins, ... 1784
At Borgo di San Sepolcro; many houses and 1,000 persons swallowed up, ... 1789
Another fatal one in Sicily, ... 1791
In Naples; Vesuvius overwhelmed the city of Torre del Greco, ... 1794
In Turkey, where, in three towns, 10,000 persons lost their lives, ... 1794
The whole country between Santa Fé and Panama destroyed, including Cusco and Quito; 40,000 people buried in one second, ... 1797
At Constantinople, which destroyed the royal palace and an immensity of buildings, and extended into Romania and Wallachia, ... 1800
A violent one felt in Holland, ... 1804
At Frosolone, Naples; 6,000 lives lost, ... 1805
At the Azores; a village of St. Michael's sunk, and a lake of boiling water appeared in its place, . . 1810
Awful one at Caraccas (*which see*), ... 1812
Several throughout India; district of Kutch sunk; 2,000 persons buried, ... 1819
Genoa, Palermo, Rome, and many other towns greatly damaged; thousands perish, ... 1819
One in Calabria and Sicily, ... 1826
In Spain; Mercia and numerous villages devastated; 6,000 persons perish, ... 1829
In the Duchy of Parma; no less than forty shocks were experienced at Borgotaro; and at Pontremoli many houses were thrown down, and not a chimney was left standing, ... 1834
In Calabria, Cosenza and villages destroyed; 1,000 persons buried, ... 1835
In Calabria; 1,000 buried at Rossano, etc., ... 1836
In many cities of Southern Syria, by which hundreds of houses were thrown down, and thousands of lives lost, ... 1836
At Martinique; nearly half of Port Royal destroyed; nearly 700 persons killed, and the whole island damaged, ... 1839
At Ternate; the island made a waste, and thousands of lives lost, ... 1840
Awful and destructive earthquake at Mount Ararat, in one of the districts of Armenia; 3,137 houses were overthrown, and several hundred persons perished, ... 1840
Great earthquake at Zante, where many persons perished, ... 1840
At Cape Haytien, St. Domingo, which destroyed nearly two-thirds of the town; between 4,000 and 5,000 lives were lost, ... 1842
At Point à Pitre, Guadaloupe, which was entirely destroyed, ... 1843
At Rhodes and Macri, when a mountain fell in at the latter place, crushing a village, and destroying 600 persons, ... 1851
At Valparaiso, where more than 400 houses were destroyed, ... 1851
In South Italy; Melfi almost laid in ruins; 14,000 lives lost, ... 1851
At Philippine Isles; Manila nearly destroyed, . . . 1852
In Northwest of England, slight, ... 1852
Thebes, in Greece, nearly destroyed, ... 1853
St. Salvador, South America, destroyed, ... 1854
Amasca, in Japan, and Simoda, in Niphon, destroyed; Jeddo much injured, ... 1854
Broussa, in Turkey, nearly destroyed, ... 1855
Several villages in Central Europe destroyed, . . . 1855
Jeddo nearly destroyed, ... 1855
At the island of Great Sanger, one of the Moluccas, volcanic eruption and earthquake; nearly 3,000 lives lost, ... 1856
In the Mediterranean; at Candia, 500 lives lost; Rhodes, 100; and other islands, 150, ... 1856
In Calabria, Montemurro and many other towns destroyed, and about 22,000 lives lost in a few seconds, ... 1857
Corinth nearly destroyed, ... 1858
At Quito; about 5,000 persons killed, and an immense amount of property destroyed, ... 1859
At Erzeroum, Asia Minor; above 1,000 persons said to have perished, ... 1859
At San Salvador; many buildings destroyed, no lives lost, ... 1859
In Cornwall, slight, ... 1859–1860
At Perugia, Italy; several lives lost, ... 1861
At Mendoza, South America; about two-thirds of the city and 7,000 lives lost, ... 1861
In Greece; North Morea, Corinth, and other places injured, ... 1861
Guatemala; 150 buildings and fourteen churches destroyed, ... 1862

	A. D.
Rhodes; thirteen villages destroyed, about 300 persons perished, and much cattle and property lost,	1863
Manila, Philippine Isles; immense destruction of property; about 10,000 persons perished,	1863
Central, West, and Northwest of England,	1863
At Macchia, Bendinella, etc., Sicily; 200 houses destroyed, sixty-four persons killed,	1865
In San Francisco, California, great damage,	1865
On the Hawaiian (Sandwich) Islands, accompanied by an eruption of Mauno Loa. During a period of fifteen days over two thousand shocks were experienced. The eruption of lava was profuse, causing much destruction of life and property,	1868
Peru, Ecuador, and Chile were largely devastated by a violent earthquake, which destroyed several large cities along the coast. It is reported that between 30,000 and 60,000 people lost their lives,	1868
Island of Ischia,	1884
Charleston, South Carolina,	1886
Mentone and the Riviera of Italy,	1887
Japan, 4,000 killed; 50,000 houses destroyed,	1891
Greece, 200 lives lost and many buildings destroyed,	1894
Constantinople and along the Dardanelles,	1894
Valparaiso, Chile, great loss of life and property,	1906
San Francisco, 1,000 lives lost and $400,000,000 in property destroyed,	1906
Sicily and Calabria. Greatest earthquake of modern times, if not of all time, resulting in the destruction of Messina, Reggio, and many smaller towns and villages, including upward of 200,000 lives,	1908

East India Company. The name of various mercantile associations formed in different countries in the Seventeenth and Eighteenth Centuries for the purpose of conducting under the auspices of the government a monopoly of the trade of their respective countries with the East Indies. The greatest of these was the British East India Company.

Education, Cost of, in Various Countries. The figures given in the tables of the cost of higher education in various countries are from the report of the Commissioner of Education, and are intended to give an idea of the approximate amounts paid for higher education in the principal countries of the world. Educational systems differ greatly in different countries, and it is possible to make fair comparisons of cost only where it is possible to make fair comparisons of the systems employed. In Germany a great deal of such work as is done in higher educational institutions in this country is carried on in the secondary schools, or gymnasia. In a number of countries which might have place in these tables it was impossible to obtain data, according to the Commissioner's report, and no safe figures can be given. In other cases census figures had to be used, though dating back several years previous to the time of the report. The data for Greece were obtained shortly after the war with Turkey, and are much lower than might be expected.

The cost of higher education in the United States can be approximated only, as the expenses are met by so many different methods. For the same reason only an approximation of the per capita can be given.

Country	Expenditure for Higher Education	Per Capita (Cents)
Algeria,	$ 128,535	2.9
Argentine,	250,000	6.0
Australia,	614,140	15.2
Austria,	2,692,370	11.3
Belgium,	748,267	11.4
Bulgaria,	75,498	2.3
Canada,	1,014,254	19.5
Denmark,	299,686	13.7
France,	4,391,012	11.4
Germany,	7,450,366	14.3
Great Britain and Ireland,	8,353,655	21.7
Greece,	103,636	4.3
Hungary,	1,240,246	7.1
Italy,	2,198,833	7.0
Liberia,	102,434	1.8
Netherlands,	767,229	15.3
Norway,	166,717	8.3
Portugal,	253,268	5.0
Rumania,	426,324	7.3
Russia (and Siberia),	4,740,709	3.7
Servia,	63,690	2.8
Spain,	487,892	2.8
Sweden,	653,209	13.0
Switzerland,	672,505	21.8
United States,	40,705,120	50.0

Esperanto. This artificial international language, which has recently received considerable impetus, was invented by Dr. Zamenhof, an oculist of Warsaw, in 1887. His brochure was published under the pseudonym, Dr. Esperanto; hence the name. Simple in grammar, and forming its words by the addition of prefixes and suffixes to root words, it is akin to English in syntax, to French in vocabulary, to Spanish or Italian in sound, to German in the abundance of prefixes and suffixes, to Greek in correlative pronouns and the formation of participles and compound tenses, and to the Slavonic languages in the want of the indefinite article.

The grammar, which is absolutely regular and without any exceptions, has been reduced to the utmost extent, having due regard to the necessary qualities of clearness, precision, and flexibility. There are only sixteen rules, and the reading, it is stated, can be learned in one hour. The noun is indicated by the terminal "o," to which "j" is added to indicate the plural. Adjectives terminate in "a," adverbs in "e," and the infinitive in "i."

The principle adopted in the formation of the vocabulary is the selection of those root-words which are common to all the principal European languages, then those which are common to all but one, to all but two, and so forth. For connective words (conjunctions, prepositions) Latin and Greek, too, have been used sometimes. By means of an elaborate system of clearly defined prefixes and suffixes the dictionary is simplified and augmented to an almost unlimited degree: e. g. *mal* is the prefix denoting contrary notion, thus bona=good, malbona=bad, fermi=to close, malfermi=to open; *in* is the suffix for the feminine, thus knabo=boy, knabino=girl; *et* is the suffix for diminutives, thus knabeto=little boy, knabinetino=little girl; knabinetinigi would mean to behave like a little girl, and so forth. The syntax of Esperanto is free, the order of words suffering very little constraint. Its pronunciation is phonetic, every letter having always the same sound and being pronounced where written. Numerous works have been published in Esperanto, including a number of scientific works, to show the adaptability of the tongue to all purposes.

In 1906, the English Chamber of Commerce

put Esperanto on the examination list for applicants for positions. It is an elective branch of study in many schools to-day, especially in France. Recently it has been made an elective in several prominent American universities. In Frankfort, Germany, an International Commercial Esperanto Society was founded in 1906. American officers and magistrates in the Philippines find the language useful. There are yearly international congresses of Esperantists, and the study of the language extends to all parts of the world. There are about thirty journals and papers advocating the cause. The English organ is *The British Esperantist.* The headquarters of the American Esperanto Association is in Boston, Mass.

The following is a specimen of the language, which shows how readily it can be understood by an English-speaking individual: "Esperanto estas helpa lingvo internacia, eksterordinare facila; estas tre bonsona, kaj egale bona por la komerco, la scienco, la literaturo kaj la poezio."

The favorite grammar of Esperanto for English-speaking people is O'Connor's Complete Textbook.

Flag, United States. On June 14, 1777, the United States Congress passed a resolution declaring "that the flag of the thirteen United States be stripes alternate red and white; that the union be thirteen stars, white in a blue field, representing the new constellation." In 1794, Congress decreed that after May 1, 1795, "the flag of the United States be fifteen stripes, alternate red and white, and that the union be fifteen stars, white in a blue field." This change was made to mark the admission of Vermont and Kentucky into the Union. The stars and stripes were then equal and a star and stripe were to be added with the admission of each new State. It was realized, however, that the addition of a stripe for each new State would soon render the flag too large, and a resolution was accordingly passed by Congress, April 4, 1818, reducing the number of stripes to thirteen — representing the original Union — and making the stars twenty in number. It was, furthermore, enacted that a new star should be added for each new State admitted into the Union. The flag now contains forty-eight stars, corresponding to the forty-eight states.

According to tradition the first flag, known as the "Stars and Stripes," was made by Mrs. Betsy Ross of Philadelphia, about whom succeeding years have thrown a glamour of patriotic romance.

Fool, or Jester, Court. Among the more celebrated of French court fools were Triboulet of the court of Francis I.; Chicot, the jester of Charles IX.; and Angely, the cynical buffoon of Louis XIII., and the last of his order in that country. England had also her special representatives in this field of Momus, the court fool of Henry VIII., with his retinue of giants and Xit, the dwarf, and Archie Armstrong, James I.'s licensed joker, being the most celebrated. Court fools in all European countries save Russia were discontinued soon after the first quarter of the Seventeenth Century. Peter the Great and the Empress Anne, however, kept up the practice much later.

Freemasonry. The name of a secret brotherhood which claims a very remote origin, and seems to have descended to us directly from the craft guilds of the mediæval period. Modern Masonry arose in England in the early part of the Eighteenth Century, and has no connection with the builder's craft. It was first established in the United States in 1730. There are now in the United States and British America a total of about 1,500,000 members.

DEGREES IN FREEMASONRY

York Rite	Scottish Rite		
Lodge	*Lodge of Perfection*	*Councils of Princes of Jerusalem (Continued)*	*Consistories of Sublime Princes of the Royal Secret (Continued)*
1. Entered Apprentice.	4. Secret Master.	16. Prince of Jerusalem.	25. Knight of the Brazen Serpent.
2. Fellow Craftsman.	5. Perfect Master.	*Chapters of Rose Croix*	26. Prince of Mercy.
3. Master Mason.	6. Intimate Secretary.	17. Knight of the East and West.	27. Commander of the Temple.
Chapter	7. Provost and Judge.	18. Knight of the Rose Croix de H. R. D. M.	28. Knight of the Sun.
4. Mark Master.	8. Intendant of the Building.	*Consistories of Sublime Princes of the Royal Secret*	29. Knight of St. Andrew.
5. Past Master.	9. Elect of Nine.	19. Grand Pontiff.	30. Grand Elect Knight. K. H., or Knight of the Black and White Eagle.
6. Most Excellent Master.	10. Elect of Fifteen.	20. Master Ad Vitam.	31. Grand Inspector Inquisitor Commander.
7. Royal Arch Mason.	11. Sublime Knight Elect.	21. Patriarch Noachite.	32. Sublime Prince of the Royal Secret.
Council	12. Grand Master Architect.	22. Prince of Libanus.	33. Sovereign Grand Inspector-General of the 33d and Last Degree.
8. Royal Master.	13. Knight of the Ninth Arch.	23. Chief of the Tabernacle.	
9. Select Master.	14. Grand Elect Perfect and Sublime Mason.	24. Prince of the Tabernacle.	
10. Super Excellent Master.	*Councils of Princes of Jerusalem*		
Commandery.	15. Knight of the East or Sword.		
11. Red Cross Knight.			
12. Knight Templar.			
13. Knight of Malta.			

Gardens of the World. *Garden of Eden.* First abode of man, supposed to be located near the city of Babylon.

Garden of England. Worcestershire and Kent. Both so called.

Garden of Erin. Carlow, in Leinster.

Garden of Europe. Italy and Belgium. Both so called.

Garden of France. Amboise, in the *département of Indre-et-Loire.*

Garden of Gethsemane. East of Jerusalem, near the Brook Kedron.

Garden of Helvetia. Name given to Thurgau, Switzerland.

Garden of the Hesperides. In the western part of the mythological world.

Garden of India. Oude.
Garden of Italy. Sicily.
Garden of South Wales. The southern division of Glamorganshire.
Garden of Spain. Andalusia.
Garden of the Argentine. Tucumán, a province of Argentina.
Garden of the East. Ceylon and Burmah. Both so called. Ceylon is also called "The Resplendent"; the "Jewel of the Eastern Sea"; the "Gem of Paradise." Its climate and productions are quite unrivaled.
Garden of the West. Illinois and Kansas. Both so called.
Garden of the World. The region of the Mississippi.

Giants. The following are among authentic instances of persons who attained to the stature of giants: The Roman Emperor Maximin, a Thracian, nearly 9 feet high; Queen Elizabeth's Flemish porter, 7 feet 6 inches; C. Munster, a yeoman of the guard in Hanover, who died in 1676, 8 feet 6 inches high; Cajanus, a Swedish giant, about 9 feet high, exhibited in London in 1742; C. Byrne, who died in 1783, attained the height of 8 feet 4 inches; Patrick Cotter O'Brien, who lived about the same time, was 8 feet 7½ inches; a Swede in the celebrated grenadier guard of Frederick William I. of Prussia stood 8½ feet. In 1844, died Pauline Wedde (called Marian), over 8 feet 2 inches at the age of 18. Among noted giants recently exhibiting are: Anna Swan, a native of Nova Scotia, above 8 feet high; her husband, Captain Bates, a native of Kentucky, of the same height; Chang-wu-gon, the Chinese giant, 7 feet 9 inches high.

Gypsies. Popularly supposed to be Egyptians. In *Italian* they are known as Zingaro; *Spanish*, Zingaro; *French*, Bohemien; *Danish*, Tater. They are a peculiar vagabond race which appeared in England for the first time about the beginning of the Sixteenth Century, and in eastern Europe at least two centuries earlier, and are now found in every country of Europe, as well as in parts of Asia, Africa, and America. The Gypsies are distinguishable from the peoples among whom they rove by their bodily appearance and by their language. Their forms are generally light, lithe, and agile; skin of a tawny color; eyes large, black, and brilliant; hair long, coal black, and often ringleted; mouth well shaped, and teeth very white.

Hall of Fame. A hall erected on University Heights, New York, in 1900, in commemoration of great Americans. It is a semi-circular colonnade connecting two of the buildings of New York University, with a ground floor underneath containing a long hall and six rooms to be used as a museum to contain memorials of those honored. Space is provided within the colonnade for 150 panels, which are to contain bronze tablets bearing the names (with busts or statues of bronze on parapets just above) of such Americans as shall be judged most famous in their respective fields by an electorate of eminent American citizens appointed by the senate of the University.

Only persons who shall have been dead ten or more years are eligible to be chosen. Fifteen classes of citizens were particularly recommended for consideration, to-wit: Authors and editors, business men, educators, inventors, missionaries and explorers, philanthropists and reformers, preachers and theologians, scientists, engineers and architects, lawyers and judges, musicians, painters and sculptors, physicians and surgeons, rulers and statesmen, soldiers and sailors, distinguished men and women outside the above classes. Fifty names were to be inscribed on the tablets at the beginning, and five additional names every fifth year thereafter, until the year 2,000, when the 150 inscriptions will be completed. In case of failure to fill all the panels allotted, the vacancies are to be filled in a following year.

In February, 1904, the plan was announced of an additional structure in the form of a loggia joining the colonnade on the north, having thirty panels for foreign born Americans, six to be filled in 1905, and beyond this of a Hall of Fame for Women, about 30 by 60 feet, with a museum on the ground floor and a main story above of twenty-eight columns supporting a pedimented roof, with places for sixty tablets, ten to be filled in 1905.

The rules prescribed that the Council should invite nominations from the public. Every nomination seconded by a member of the University Senate should be submitted to an electorate of one hundred eminent citizens selected by the Council.

In October, 1900, the University Senate received the ballots of the electors. Of the one hundred judges selected, ninety-seven voted. The number of names which had been submitted to them was 252. Of these each judge returned a vote for fifty. The rule required that no candidate receiving less than fifty-one votes could be accepted. The returns showed that but twenty-nine candidates received the required number and were chosen. These were as follows: George Washington, Abraham Lincoln, Daniel Webster, Benjamin Franklin, Ulysses S. Grant, John Marshall, Thomas Jefferson, Ralph Waldo Emerson, Henry W. Longfellow, Robert Fulton, Washington Irving, Jonathan Edwards, Samuel F. B. Morse, David G. Farragut, Henry Clay, Nathaniel Hawthorne, George Peabody, Robert E. Lee, Peter Cooper, Eli Whitney, John J. Audubon, Horace Mann, Henry Ward Beecher, James Kent, Joseph Story, John Adams, William E. Channing, Gilbert Stuart, Asa Gray.

In October, 1905, under the rules named above, the senate received the ballots of ninety-five electors out of 101 appointed, of whom only eighty-five undertook to consider the names of women. A majority of fifty-one was demanded, but in the case of the names of women, a majority of only forty-seven. The following persons were found to be duly chosen: John Quincy Adams, James Russell Lowell, William Tecumseh Sherman, James Madison, John Greenleaf Whittier, Mary Lyon, Emma Willard, Maria Mitchell.

The third election was held in 1910, the total number of ballots cast being ninety-seven, and the number required for a choice fifty-one. Ten new members were elected, as follows: Harriet Beecher Stowe, Oliver Wendell Holmes, Edgar Allan Poe, James Fenimore Cooper, Phillips

Brooks, William Cullen Bryant, Frances E. Willard, Andrew Jackson, George Bancroft, John Lothrop Motley.

In 1915 nine new members were added, as follows: Mark Hopkins, Francis Parkman, Elias Howe, Joseph Henry, Rufus Choate, Daniel Boone, Charlotte Cushman, Alexander Hamilton, Louis Agassiz.

In 1920 seven new members were elected, as follows: Samuel L. Clemens (Mark Twain), James B. Eads, Patrick Henry, William T. G. Morton, Alice Freeman Palmer, Augustus Saint-Gaudens, Roger Williams.

The Hall of Fame as now constituted includes fifteen authors, twelve statesmen, five preachers, five teachers, five scientists, four soldiers and sailors, four inventors, four jurists, two philanthropists, two artists, one reformer, one pioneer, one engineer, one dentist, and one actress.

Hartford Convention. A political assembly which met at Hartford, December 15, 1814, to January 5, 1815. It was composed of twelve delegates from Massachusetts (including its president, George Cabot), seven from Connecticut, and four from Rhode Island (appointed by the legislatures of those States), and two from New Hampshire and one from Vermont (appointed by counties), all Federalists. While composed of able, high-minded men, Federalism at this juncture was exceedingly unpopular, and, as the sessions were held behind closed doors, the report arose that secession was contemplated. The object of the convention was to devise effective means of defense against foreign nations, at the same time safeguarding the rights of individual states from alleged Federal encroachment, and no treasonable intention could be proved. The convention suggested changes which were chiefly expressed in the form of proposed amendments to the Constitution. The legislatures of two states approved these recommendations and sent representatives to Washington to advocate their adoption.

Hobson's Choice. Tobias Hobson was the first man in England that let out hacking horses. When a man came for a horse he was led into the stables where there was a great choice; but he was obliged to take the horse which stood next to the stable door; so that every customer was alike well served according to his chance. Hence, when something which ought to be one's own election is forced upon him, we say he took *Hobson's choice.*

Holidays in the United States.

JANUARY 1ST. *New Year's Day:* In all the States except Arkansas and Massachusetts.

JANUARY 8TH. *Anniversary of the Battle of New Orleans:* In Louisiana.

JANUARY 19TH. *Lee's Birthday:* In Florida, Georgia, North Carolina, South Carolina, Virginia, Alabama, Mississippi, and Arkansas.

FEBRUARY. *Mardi-Gras:* In Alabama and the parish of Orleans, Louisiana.

FEBRUARY 12TH. *Lincoln's Birthday:* In California, Colorado, Connecticut, Delaware, Illinois, Iowa, Indiana, Kansas, Michigan, Minnesota, Montana, Nevada, New Jersey, New York, North Dakota, Oregon, Pennsylvania, South Dakota, Utah, Washington, West Virginia, and Wyoming.

FEBRUARY 22D. *Washington's Birthday:* In all the States, District of Columbia, Porto Rico, and Alaska.

MARCH 2D. *Anniversary of Texan Independence:* In Texas.

MARCH 4TH. *Inauguration Day:* In District of Columbia in years when a President of the United States is inaugurated.

Good Friday: In Alabama, Connecticut, Delaware, Florida, Louisiana, Maryland, Minnesota, New Jersey, Pennsylvania, Porto Rico, and Tennessee.

APRIL 19TH. *Patriots' Day:* In Maine and Massachusetts.

APRIL 26TH. *Confederate Memorial Day:* In Alabama, Florida, Georgia, and Mississippi.

MAY 10TH. *Confederate Memorial Day:* In North Carolina and South Carolina.

MAY (Second Friday). *Confederate Day:* In Tennessee.

MAY 20TH. *Anniversary of the Signing of the Mecklenburg Declaration of Independence:* In North Carolina.

MAY 30TH. *Decoration Day:* In all the States (and District of Columbia, Porto Rico, and Alaska), except Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, and Texas.

JUNE 3D. *Jefferson Davis's Birthday:* In Florida, Georgia, Alabama, Mississippi, Texas, Arkansas, and South Carolina. In Louisiana, known as "Confederate Memorial Day."

JULY 4TH. *Independence Day:* In all States, District of Columbia, Porto Rico, Alaska.

JULY 24TH. *Pioneers' Day:* In Utah.

AUGUST 16TH. *Bennington Battle Day:* In Vermont.

SEPTEMBER (first Monday). *Labor Day:* In all the States (and District of Columbia and Alaska). In Louisiana, observed in Orleans Parish.

SEPTEMBER. *Primary Election Day:* In Wisconsin, first Tuesday. In Oregon, even years.

SEPTEMBER 9TH. *Admission Day:* In California.

SEPTEMBER 12TH. *"Old Defenders' Day":* In Baltimore, Md.

OCTOBER 12TH. *Columbus Day:* In Alabama, Arkansas, California, Colorado, Connecticut, Delaware, Idaho, Illinois, Indiana, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, Ohio, Oklahoma, Pennsylvania, Rhode Island, Vermont, and Washington.

OCTOBER 31ST. *Admission Day:* In Nevada.

NOVEMBER 1ST. *All Saints' Day:* In Louisiana.

NOVEMBER. *General Election Day:* In Alabama, Alaska, Arizona, California, Colorado, Delaware, Florida, Idaho, Illinois, Indiana, Iowa, Louisiana, Maine, Maryland, Michigan, Minnesota, Missouri, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio (from 5.30 A. M. to 9 A. M. only), Oklahoma, Oregon, Pennsylvania, Rhode Island (biennially in even years), South Carolina, South Dakota, Tennessee, Texas, Virginia, West Virginia, Wash-

ington, Wisconsin, and Wyoming, in the years when elections are held therein.

NOVEMBER 11TH. *Armistice Day.* A national holiday and also observed in all the States.

NOVEMBER. *Thanksgiving Day* (usually last Thursday in November): In all the States, and in the District of Columbia, Porto Rico, and Alaska, though in some States it is not a statutory holiday.

DECEMBER 25TH. *Christmas Day:* In all the States, District of Columbia, Porto Rico and Alaska.

Sundays and Fast Days are legal holidays in all the States which designate them as such.

There are no statutory holidays in Mississippi, but by common consent the Fourth of July, Thanksgiving, and Christmas are observed. In New Mexico, Washington's Birthday, Decoration Day, Labor Day, Flag-Day (June 14), and Arbor Day are holidays when so designated by the governor. In South Carolina, Thursday of Fair Week is a legal holiday.

Arbor Day is a legal holiday in North Dakota, Illinois, Minnesota, Maine, and Wyoming, the day being set by the governor. In Nebraska, April 22d; Montana, third Tuesday in April; Arizona, first Monday in February; Utah, April 15th; Rhode Island, second Friday in May; Idaho, first Friday after May 1st; Florida, first Friday in February; Georgia, first Friday in December.

Every Saturday after 12 o'clock noon is a legal holiday in California in public offices, Illinois (in cities of 200,000 or more inhabitants), Maryland, Michigan, New York, New Jersey, Ohio, Pennsylvania, Rhode Island, Virginia, the District of Columbia (for banking purposes), and in New Orleans, La., and Charleston, S. C.; in Louisiana in cities exceeding 15,000, and in Missouri in cities of 100,000 or more inhabitants; in Tennessee, for State and county officers, and in Colorado during June, July, and August; in Indiana, first Saturday in June to last Saturday in October, inclusive, for all public offices in counties having a county-seat of 100,000 population or more.

There is no national holiday, not even the Fourth of July. Congress has at various times appointed special holidays. In the second session of the Fifty-third Congress it passed an act making Labor Day a public holiday in the District of Columbia, and it has recognized the existence of certain days as holidays for commercial purposes, but, with the exception named, there is no general statute on the subject. The proclamation of the president designating a day of Thanksgiving only makes it a legal holiday in the District of Columbia and the Territories.

CHURCH DAYS

Ember and Rogation Days are certain periods of the year devoted to prayer and fasting. Ember Days (twelve annually) are the Wednesday, Friday, and Saturday after the first Sunday in Lent, after the feast of Pentecost (Whit Sunday), after the festival of the Holy Cross, and after the festival of St. Lucia.

Rogation Days occur on the Feast of St. Mark, April 25, and on the three days immediately preceding Ascension Day.

Easter, the Christian passover and festival of the resurrection of Christ. The English name is probably derived from that of the Teutonic goddess of spring, Ostera or Eostre, whose festival occurred about the same time as the celebration of Easter. Those of the early Christians who believe the Christian passover to be a commemoration of Christ's death adhered to the custom of holding the Easter festivity on the day prescribed for the Jewish pasch, the 14th day of the first month, that is, the lunar month of which the 14th day either falls on or next follows the day of the vernal equinox. But most of the Christian Churches, attaching greatest importance to the day of Christ's resurrection, held to Easter's being celebrated on the Sunday which followed the 14th day of the moon of March, the day on which Christ suffered. This question was the cause of a serious difference in the Church as early as the Second Century, and was not finally settled until the Council of Nice in 325. The rule was then adopted which makes Easter day to be always the first Sunday after the full moon which happens upon or next after March 21st; and if the full moon happens on a Sunday, Easter day is the Sunday after. By this arrangement Easter may come as early as March 22d, or as late as April 25th. This sacred festival is celebrated in every part of the Christian world with great solemnity and devotion, and generally also with proper sports and observances. Among the best known of the latter is the custom of making presents of colored eggs, called pasch or pace eggs. This custom originated from the old German legend of a white hare stealing into the house on Easter eve and secreting a number of beautifully colored eggs in odd corners for good little children. In America, where the hare is practically unknown, the custom has been transferred to the rabbit, its near relation. Hence, the colored Easter eggs are popularly referred to as "rabbit's eggs."

OLD ENGLISH HOLIDAYS

These holidays, with their names, had their origin in mediæval England when the state religion was that of the Church of Rome, and they are still observed generally or in some parts of England, Scotland, and Ireland.

JANUARY 6TH. *Twelfth Day*, or *Twelfth-tide*, sometimes called Old Christmas Day, the same as Epiphany. The previous evening is Twelfth Night, with which many social rites have long been connected.

FEBRUARY 2D. *Candlemas:* Festival of the Purification of the Virgin. Consecration of the lighted candles to be used in the church during the year.

FEBRUARY 14TH. *Old Candlemas:* St. Valentine's Day.

MARCH 25TH. *Lady Day:* Annunciation of the Virgin. April 6th is old Lady Day.

JUNE 24TH. *Midsummer Day:* Feast of the Nativity of John the Baptist. July 7th is old Midsummer Day.

JULY 15TH. *St. Swithin's Day.* There was an old superstition that if rain fell on this day it would continue forty days.

AUGUST 1ST. *Lammas Day:* Originally in England the festival of the wheat harvest. In the Church the festival of St. Peter's miraculous deliverance from prison. Old Lammas Day is August 13th.

SEPTEMBER 29TH. *Michaelmas:* Feast of St. Michael, the Archangel. Old Michaelmas is October 11th.

NOVEMBER 1ST. *Allhallowmas:* Allhallows or All Saints' Day. The previous evening is Allhalloween, observed by home gatherings and old-time festive rites.

NOVEMBER 2D. *All Souls' Day:* Day of prayer for the souls of the dead.

NOVEMBER 11TH. *Martinmas:* Feast of St. Martin. Old Martinmas is November 23d.

DECEMBER 28TH. *Childermas:* Holy Innocents' Day.

Honeymoon. "Honeymoon" is a word left us, while the custom giving it name is a thing of the past. It had its origin among the ancient Germans, whose newly-married couples drank mead mingled with honey for thirty days after the wedding.

Honor, Legion of. A French order of merit founded by Napoleon in 1802 and regularly established in 1804. The distinction was awarded for meritorious military or civil services. At the beginning the order comprised 3,665 chevaliers, 450 officers, 300 commanders, 105 grand officers, and a grand master, the last being Napoleon himself. The order has been subjected to many alterations in consequence of the successive changes of dynasties in France. As reorganized under the republic in 1872, the constitution of the order provides for five classes — chevaliers, officers, commanders, grand officers, and grand crosses. Attached to these dignities are stipends or honorariums ranging from 250 francs for a chevalier to 3,000 francs for a grand cross. In 1892 the order contained 43,851 members of all classes. In 1897 the maximum number of additional crosses to be distributed was fixed by law at 14,320. The decoration or emblem of the order is a star of five double rays in white enamel edged with gold, bearing on its obverse the female head personifying France with the inscription *République Française* and on the reverse two French flags and the motto *Honneur et Patrie*. The star is surmounted by a wreath of oak and laurel, and suspended from a red ribbon. The distinction is also conferred upon foreigners and sometimes upon women.

Horoscope. In astrology, an observation of the aspect of the heavens at the moment of a person's birth, by which the astrologer claimed to foretell the future. A scheme or figure of the 12 houses or 12 signs of the zodiac, in which is marked the disposition of the heavens at a given time, and by which astrologers formerly told the fortunes of persons, according to the position of the stars at the time of their birth.

Illiteracy in United States.

PER CENT ILLITERATE IN POPULATION 10 YEARS OF AGE AND OVER, CENSUS OF 1920.

STATE	PER CENT	STATE	PER CENT
Alabama	16.1	Nebraska	1.4
Arizona	15.3	Nevada	5.9
Arkansas	9.4	New Hampshire	4.4
California	3.3	New Jersey	5.1
Colorado	3.2	New Mexico	15.6
Connecticut	6.2	New York	5.1
Delaware	5.9	North Carolina	13.1
District of Columbia	2.8	North Dakota	2.1
Florida	9.6	Ohio	2.8
Georgia	15.3	Oklahoma	3.8
Idaho	1.5	Oregon	1.5
Illinois	3.4	Pennsylvania	4.6
Indiana	2.2	Rhode Island	6.5
Iowa	1.1	South Carolina	18.1
Kansas	1.6	South Dakota	1.7
Kentucky	8.4	Tennessee	10.3
Louisiana	21.0	Texas	8.3
Maine	3.3	Utah	1.9
Maryland	5.6	Vermont	3.0
Massachusetts	4.7	Virginia	11.2
Michigan	3.0	Washington	1.7
Minnesota	1.8	West Virginia	6.4
Mississippi	17.2	Wisconsin	2.4
Missouri	3.0	Wyoming	2.1
Montana	2.3	United States	6.0

Immigration to United States.

PERIOD	IMMIGRANTS ARRIVED
1820–1829 inclusive,	128,502
1830–1839 inclusive,	538,391
1840–1843 inclusive,	321,416
Year ending September 30—	
1844,	78,615
1845,	114,371
1846,	154,416
1847,	234,968
1848,	226,527
1849,	297,024
1850,	310,004
October 1st to December 31, 1850,	59,976
Year ending December 31st—	
1851,	379,466
1852,	371,603
1853,	368,645
1854,	427,833
1855,	200,877
1856,	195,857
January 1st to June 30, 1857,	112,123
Year ending June 30th—	
1858,	191,942
1859,	129,571
1860,	133,143
1861,	142,877
1862,	72,183
1863,	132,925
1864,	191,114
1865,	180,339
1866,	332,577
1867,	303,104
1868,	282,189
1869,	352,768
1870,	387,203
1871,	321,350
1872,	404,806
1873,	459,803
1874,	313,339
1875,	227,498
1876,	169,986
1877,	141,857
1878,	138,469
1879,	177,826
1880,	457,257
1881,	669,431
1882,	788,992
1883,	603,322
1884,	518,592
1885,	395,346
1886,	334,203
1887,	490,109
1888,	546,889
1889,	444,427
1890,	455,302
1891,	560,319
1892,	579,663
1893,	439,730
1894,	285,631
1895,	258,536
1896,	343,267
1897,	230,832
1898,	229,299
1899,	311,715
1900,	448,572
1901,	487,918
1902,	648,743
1903,	857,046
1904,	812,870
1905,	1,027,421
1906,	1,100,735
1907,	1,285,349
1908,	782,870
1909,	751,786
1910,	1,041,570
1911,	878,587
1912,	838,172
1913,	1,197,892
1914,	1,218,480
1915,	326,700
1916,	298,826
1917,	295,403
1918,	110,610
1919,	114,132
1920,	430,001
1921,	805,228

Inauguration Day. The present date of the inauguration of the president of the United States is March 4th. A committee appointed by the Constitutional Convention chose the first Wednesday in March, 1789, as the date for the first Congress under the Constitution to meet. This date happened to be March 4th, which has since then been used as the date of presidential inauguration. Twenty-two presidents have been inaugurated on March 4th, viz., George Washington, in 1793; John Adams, in 1797; Thomas Jefferson, in 1801 and 1805; James Madison, in 1809 and 1813; James Monroe, in 1817; John Quincy Adams, in 1825; Andrew Jackson, in 1829 and 1833; Martin Van Buren, in 1837; William Henry Harrison, in 1841; James K. Polk, in 1845; Franklin Pierce, in 1853; James Buchanan, in 1857; Abraham Lincoln, in 1861 and 1865; Ulysses S. Grant, in 1869 and 1873; James A. Garfield, in 1881; Grover Cleveland, in 1885 and 1893; Benjamin Harrison, in 1889; William McKinley, in 1897 and 1901; Theodore Roosevelt, in 1905; William Howard Taft, in 1909; Woodrow Wilson, in 1913, and Warren Gamaliel Harding in 1921.

George Washington was inaugurated on April 30, 1789, because the bad weather had prevented Congress from assembling and organizing. James Monroe, Zachary Taylor, Rutherford B. Hayes, and Woodrow Wilson were inaugurated on March 5, 1821, 1849, 1877, 1917, respectively, because March 4th in those years fell on Sunday.

The vice-presidents, succeeding to office upon the death of presidents, were inaugurated as follows: John Tyler, April 6, 1841; Millard Fillmore, July 9, 1850; Andrew Johnson, April 15, 1865; Chester A. Arthur, September 19, 1881; Theodore Roosevelt, September 14, 1901.

John Bull. A collective nickname for the English people, first used in Arbuthnot's ludicrous "History of Europe." It is now also applied to characteristic English traits.

Junker (*yŏŏng'-kĕr*). A member of a noble Prussian family, who belongs to the landed aristocracy, and who, usually, enters the military profession and becomes a member of the officers' caste. As commonly used today, junker means a narrow-minded, haughty, and often bellicose member of the aristocracy. Since 1862, when the aristocratic party in Prussia came into unrestrained power under Bismarck's leadership, the word has been used to describe all those who desire to preserve intact the exclusive social, military, and political privileges which by feudal tradition belong to the "well-born." Junkerism and junkerdom indicate the policies, ideas, and prejudices which characterize the junker class in Prussia. By their assumption of superiority to all who engage in ordinary trades or occupations, the junkers greatly influenced social life in Germany. The arrogance of Prussian military officers was due to junker ideas.

Kitchen Cabinet. This name was given to Francis P. Blair, Amos Kendall and others, by the opponents of President Jackson's administration. Blair was the editor of the "Globe," the organ of the president, and Kendall was one of the principal contributors to the paper. As it was necessary for Jackson to consult frequently with these gentlemen, in order to avoid observation, they were accustomed, when they called upon him, to go in by a back door. The Whig party styled them, in derision, therefore, the "Kitchen Cabinet."

Ku-Klux-Klan. The name of a secret society which existed in several Southern States from about 1865 to 1876. Its object was to oppose the influence of the negro in government and in society. But the organization became perverted. The better class of citizens abandoned it to the more lawless element. Between 1868 and 1870, whippings, murders, and threats of assassination attributed to the Ku-Klux became so numerous that President Grant urged special repressive measures. Following the passage of the Enforcement Act in 1871, the outrages largely ceased and the "klan" gradually died out.

Liberty Bell. The famous Liberty Bell, weighing about 2,000 pounds, was made in London in 1752, and was ordered by the Pennsylvania Assembly for the State House, then located in Philadelphia.

When the Continental Congress, on July 4, 1776, declared the independence of the American colonies from Great Britain, the old bellman, in his enthusiasm and ecstasy, according to the story, rang the bell for two hours. In 1835, it cracked under a stroke of the hammer, and has remained impaired ever since. It has been transported to a number of expositions, and the utmost caution taken to preserve it as one of our most hallowed national relics. The bell contains the famous inscription: "Proclaim liberty throughout all the land unto all the inhabitants thereof — *Levit. XXV.*, 10."

Log. A contrivance used to measure the rate of a ship's velocity through the water. For this purpose there are several inventions, but the one most generally used is the following, called the *common log*. It is a piece of thin board, forming the quadrant of a circle of about six inches radius, and balanced by a small plate of lead nailed on the circular part, so as to swim perpendicularly in the water, with the greater part immersed. One end of a line, called the *log-line*, is fastened to the log, while the other is wound round a reel. When the log is thrown out of a ship while sailing, as soon as it touches the water it ceases to partake of the ship's motion, so that the ship goes on and leaves it behind, while the line is unwound from the reel, so that the length of line unwound in a given time gives the rate of the ship's sailing. This is calculated by knots made on the line at certain distances, while the time is measured by a sandglass running a certain number of seconds.

Marine Corps. An independent branch of the military service of the United States, popularly called the "marines," or the "soldiers of the sea." The corps is usually employed in garrisoning navy yards and naval stations at home, and in performing many special duties beyond the seas; as, for example, landing in case of disturbance in foreign countries to protect American citizens and property, and to guard our embassies and legations. While usually serving under the direction of the secretary of the navy, the corps may be detached by order of the President for service with the army.

When the United States declared war against Germany in 1917 the authorized strength of the marine corps was 15,000 men. This authorized strength was first increased to 30,000 and later to 75,000. On Aug. 8, 1918, the corps had attained a strength of 58,856 enlisted men in the regulars and 6,410 in the reserve, with 1,357 regular officers and 622 reserve officers, a total of 67,245. Voluntary enlistments were then discontinued but arrangements were made for inducting a limited number of men each month. When the armistice was signed in November, 1918, a total of 30,665 marines had been embarked overseas.

At the battle of Chateau Thierry, which began June 2, 1918, and the ensuing desperate struggles for Belleau Wood, a brigade of the marine corps defeated the best troops of the Prussian guard and stopped the German advance on Paris. In the great allied counter-attack launched by Foch, July 18, the marines broke through the German lines for an important gain near Soissons. At the battle for the St. Mihiel salient, September 15, 1918, the marines were brilliantly successful. With only 8,000 men engaged in the severest of battles, the marine corps lost 1,600 officers and men killed, and 2,500 officers and men severely wounded. Yet only 57 marines were captured by the enemy, including those wounded in advance of their lines. In honor of their heroic services, the French staff officially renamed Belleau Wood the Bois de la Brigade de Marine.

Mortality. In the sense in which it is most frequently employed, the *death rate,* i. e., the proportional quantity of individuals who, in a certain population, die in a given time. It is estimated that one-quarter of the earth's population die at or before the age of 7; the half part of it die at or before the age of 17. One in 100,000 persons reaches the age of 100 years; one in 500 reaches the age of 90; one in 100, the age of 60. It has been estimated that of the earth's population about 50,000,000 die yearly, or 100 each minute.

DEATH RATES FROM CERTAIN CAUSES IN THE UNITED STATES

Cause	Death Rate per 100,000		Increase or Decrease in Death Rate, 1890 to 1900	
	1900	1890	Increase	Decrease
Pneumonia,	191.9	186.9	5.0	....
Consumption,	190.5	245.4	....	54.9
Heart Disease,	134.0	121.8	12.2	....
Diarrhœal diseases,	85.1	104.1	....	19.0
Diseases of the kidneys,	83.7	59.7	24.0	....
Apoplexy,	66.6	49.0	17.6	....
Cancer,	60.0	47.9	12.1	....
Old age,	54.0	44.9	9.1	....
Bronchitis,	48.3	74.4	....	26.1
Cholera infantum,	47.8	79.7	....	31.9
Debility and atrophy,	45.5	88.6	....	43.1
Inflammation of the brain and meningitis,	41.8	49.1	....	7.3
Diphtheria,	35.4	70.1	....	34.7
Typhoid fever,	33.8	46.3	....	12.5
Influenza,	23.9	6.2	17.7	....
Diseases of the brain,	18.6	30.9	....	12.3
Croup,	9.8	27.6	....	17.8
Malarial fever,	8.8	19.2	....	10.4

DEATH RATE IN VARIOUS OCCUPATIONS

Occupation	Basis of Estimate	Death Rate	
		1900	1890
Males. All occupations,	5,575,745	15.0	13.8
Professional,	203,104	15.3	15.7
Architects, artists, and teachers of art, etc.,	23,485	23.5	18.2
Clergymen,	19,587	11.7	12.4
Engineers and surv'rs,	36,539	8.2	5.6
Journalists,	9,021	15.0	16.8
Lawyers,	28,597	17.2	17.7
Musicians and teachers of music,	16,008	15.2	16.0
Physicians and surgeons,	29,622	19.9	21.6
Teachers (school),	20,135	12.2	10.4
Others of this class,	20,110	16.0	....
Clerical and official,	424,781	13.5	9.8
Bookkeepers, clerks, and copyists,	278,137	13.6	11.2
Bankers, brokers, and officials of companies,	43,430	11.8	4.7
Collectors, auctioneers, and agents,	73,958	13.1	10.7
Others of this class,	29,256	15.1	....
Mercantile and trading,	493,994	12.1	12.3
Apothecaries, pharmacists, etc.,	14,728	18.3	16.2
Commercial travelers,	25,989	5.7	5.8
Merchants and dealers,	228,899	16.4	14.7
Hucksters and peddlers,	33,482	12.0	14.1
Others of this class,	190,896	7.4	....
Public entertainment,	87,888	15.4	14.5
Hotel and boarding-house keepers,	19,969	22.3	14.9
Saloon and restaurant,	67,919	13.3	14.4
Personal service, police, and military,	149,164	12.9	15.4
Barbers and hairdressers,	40,007	10.4	12.5
Janitors and sextons,	19,493	16.6	17.2
Policemen, watchmen, and detectives,	43,145	15.4	16.2
Soldiers, sailors, and marines (United States),	14,851	12.1	22.7
Others of this class,	31,668	10.9	....
Laboring and servant,	800,983	20.2	22.6
Labor (not agricultural),	719,647	20.7	25.3
Servants,	81,336	15.5	12.9
Manufacturing and mechanical industry,	1,796,928	13.8	13.0
Bakers and confectioners,	39,181	12.3	14.6
Blacksmiths,	56,840	18.3	15.6
Boot and shoe makers,	96,662	9.4	15.3
Brewers, distillers, and rectifiers,	5,840	19.7	14.7
Butchers,	38,228	16.1	14.9
Cabinetmakers and upholsterers,	24,787	18.0	15.3
Carpenters and joiners,	180,110	17.2	13.8
Cigarmakers and tobacco workers,	25,581	18.7	16.3
Compositors, printers, and pressmen,	54,374	12.1	11.1
Coopers,	11,020	23.8	21.5
Engineers and firemen (not locomotive),	71,388	15.7	13.6
Glass blowers and glass workers,	10,219	10.8	9.5
Hat and cap makers,	12,763	17.9	19.5
Iron and steel workers,	69,851	10.7	9.8
Leather makers,	16,697	12.3	10.3
Leather workers,	12,320	17.5	13.3
Machinists,	116,918	10.5	11.4
Marble and stone cutters,	26,272	14.9	13.8
Masons (brick and stone),	55,117	19.9	15.6
Mill and factory operatives (textile),	150,783	8.8	8.1
Millers (flour and grist),	6,044	26.6	17.3
Painters, glaziers, and varnishers,	108,992	16.2	13.0
Plasterers and whitewashers,	8,603	17.0	17.3
Plumbers and gas and steamfitters,	48,634	9.1	9.7
Tailors,	83,856	11.8	16.5

Occupation	Basis of Estimate	Death Rate 1900	Death Rate 1890
Tinners and tinware makers,	19,708	14.5	12.2
Others of this class,	446,140	13.9	....
Agriculture, transportation and other outdoor,	1,528,241	15.8	12.1
Boatmen and canalmen,	8,178	18.8	20.1
Draymen, hackmen, teamsters, etc.,	185,552	11.0	12.1
Farmers, planters, and farm laborers,	958,778	17.6	11.9
Gardeners, florists, nurserymen, vinegrowers,	34,296	17.2	14.8
Livery stable keepers and hostlers,	32,529	12.1	12.0
Lumbermen, raftsmen,	13,078	16.5	13.1
Miners and quarrymen,	38,890	9.6	7.8
Sailors, pilots, fishermen, and oystermen,	47,747	27.7	22.0
Steam R. R. employees,	129,472	10.8	9.0
Stockraisers, herders, and drovers,	966	32.1	19.4
Others of this class,	78,755	9.9	....
All other occupations,	90,662	6.5	....
Females. All occupations,	1,587,874	8.3	10.5
Musicians and teachers of music,	16,366	5.0	2.4
Teachers in schools,	91,964	5.9	4.3
Stenographers and typewriters,	33,780	2.7	1.8
Bookkeepers, clerks, and copyists,	72,713	5.6	3.2
Hotel and boarding-house keepers,	19,755	4.5	3.5
Laundresses,	59,300	5.1	6.7
Nurses and midwives,	41,912	9.5	11.2
Servants,	403,801	17.1	18.2
Artificial flower and paper-box makers,	12,624	1.3	3.5
Cigarmakers and tobacco workers,	12,838	4.1	3.4
Mill and factory operatives (textile),	162,392	4.0	5.3
Milliners,	29,122	5.9	4.4
Dressmakers, seamstresses,	195,176	5.2	
Telegraph and telephone operators,	7,801	5.4	4.1
All other occupations,	428,130	5.7	....

DEATH RATE IN CITIES

City	Deaths per 1,000 Inhabitants
Algiers,	30.08
Allegheny, Pa.,	18.4
Amsterdam,	26.07
Antwerp,	24.69
Atlanta, Ga.,	17.4
Baltimore,	18.5
Basel,	23.34
Berlin,	21.81
Birmingham, Ala.,	17.4
Bologna,	35.13
Bombay,	24.31
Bordeaux,	26.71
Boston,	16.4
Brussels,	29.06
Buffalo, N. Y.,	15.8
Cadiz,	28.23
Calcutta,	25.82
Charleston, S. C.,	27.0
Chicago,	15.1
Christiania,	21.53
Cincinnati,	16.9
Cleveland, O.,	14.2
Columbus,	15.3
Denver,	13.7
Detroit,	17.3
Dresden,	34.82
Edinburgh,	21.97
Fall River,	22.4
Frankfort-on-the-Main,	20.08
Genoa,	36.75
Glasgow,	28.92
Halifax,	23.39
Havana,	37.70
Indianapolis,	15.7
Jacksonville, Fla.,	19.2
Jersey City,	14.6
Kansas City,	14.8
Lausanne,	24.32
Leghorn,	31.37
Leicester,	23.74
Leipzig,	26.08
Liverpool,	25.81
London,	22.83
Los Angeles, Cal.,	15.0
Louisville, Ky.,	16.2
Manchester,	28.29
Mayence,	29.40
Memphis, Tenn.,	20.8
Messina,	28.91
Mexico,	30.94
Milan,	34.19
Milwaukee, Wis.,	12.7
Minneapolis,	11.6
Mobile, Ala.,	20.8
Montreal,	30.02
Munich,	45.48
Nashville, Tenn.,	17.8
Newark, N. J.,	14.4
Newcastle,	29.76
New Haven, Conn.,	15.9
New Orleans,	19.9
New York,	14.3
Nice,	34.89
Nottingham,	21.18
Palermo,	28.46
Paris,	22.04
Paterson, N. J.,	13.5
Pesth,	49.23
Philadelphia, Pa.,	15.7
Pittsburgh,	17.1
Providence, R. I.,	15.2
Quebec,	22.97
Richmond, Va.,	20.4
Rochester, N. Y.,	14.6
Rome,	34.14
Rotterdam,	31.48
Salt Lake City, Utah,	20.4
San Francisco,	15.9
Savannah, Ga.,	25.0
Scranton, Pa.,	14.8
Seattle,	8.4
St. Joseph,	9.1
St. Louis,	14.9
Stockholm,	30.45
St. Paul,	9.7
Stuttgart,	25.68
Sunderland,	22.42
Syracuse, N. Y.,	15.7
The Hague,	26.05
Toledo,	16.2
Turin,	26.07
Valparaiso,	64.58
Venice,	36.26
Washington, D. C.,	17.3
Wolverhampton,	24.65
Worcester, Mass.,	15.8
Zürich,	25.59

Mourning. The colors used as badges of grief or bereavement in different countries. In this country, as in Europe, the ordinary color for mourning is *black:* in China, as with the ancient Spartan and Roman ladies, it is *white;* in Turkey, it is *blue* or *violet;* in Egypt, *yellow;* in Ethiopia, *gray.* Some have attempted to trace the associations which caused the adoption of the various colors to natural causes. Thus black, which is the privation of light, is supposed very appropriately to denote the privation of life; white is an emblem of purity; yellow is the color of leaves when they fall, and represents that death is the end of all human hopes, etc. In the East, to cut the hair was considered a sign of mourning; among the Romans, on the contrary, it was deemed a mark of sorrow to let it grow.

NAMES AND NAME ORIGINS

GEOGRAPHICAL, PERSONAL, CURIOUS, AND OTHERWISE

KEY TO THE VOWEL SOUNDS

ă, as in farm, father; *ȧ*, as in ask, fast; *ắ*, as in at, fat; *ā*, as in day, fate; *ǡ*, as in care, fare; *ĕ*, as in met, set; *ē*, as in me, see; *ẽ*, as in her, ermine; *ĭ*, as in pin, sin; *ī*, as in pine, line; *ŏ*, as in not, got; *ō*, as in note, old; *ȯ*, as in for, fought; *ǒ*, as in sole, only; *o͝o*, as in fog, orange; *o͝o*, sound cannot be exactly represented in English. The English sound of u in *burn* and *burnt* is perhaps the nearest equivalent to *o͝o*; *o͞o*, as in cook, look; *o͞o*, as in coon, moon; *ŭ*, as in cup, duck; *ū*, as in use, amuse; *u͝o*, as in fur, urge; *u͝o* sound cannot be exactly represented in English. The English sound of u in *luke* and *duke* resembles the orignal sound of *ü*. The letter N represents the nasal tone of the preceding vowel, as in *encore* (ȧN-kōr′).

ABBREVIATIONS

Arab., Arabic or Arabian; *A. S.*, Anglo Saxon; *Boh.*, Bohemian; *Eng.*, English; *Fr.*, French; *Gael.*, Gaelic; *Ger.*, German; *Gr.*, Greek; *Heb.*, Hebrew; *Hind.* Hindustani; *Hung.*, Hungarian; *Ind.*, Indian; *It.*, Italian; *Lat.*, Latin; *M. H. G.*, Middle High German; *N. H. G.*, North High German; *Nor.*, Norwegian; *O. E.*, Old English; *O. F.*, or *O. Fr.*, Old French; *O. G.*, Old German; *O. H. G.*, Old High German; *Pers.*, Persian; *Port.*, Portuguese; *Russ.*, Russian; *Sp.*, Spanish; *Sw.*, Swedish; *Teut.*, Teutonic; *Turk.*, Turkish.

Aachen (*ä′-kĕn*). See Aix-la-Chapelle.

Aaron (*ȧr′-ŭn* or *ā′-rŭn*). From the Hebrew *′Aharon*, perhaps the same as *hārōn*, "a mountaineer"; *Arabic*, Haroon or Harun; *Fr.*, Aaron; *Ger.*, Aaron or Aron; *It.*, Aronne; *Lat.*, Aaron; *Port.*, Aarao; *Sp.*, Aron.

Abel (*ā′-bl*). From the Hebrew *Hebhel*, which St. Jerome translates "vanity or vapor." Gesenius renders the name "breath," and says the son of Adam was probably so called from the shortness of his life. *Arabic*, Habeel or Habil; *Fr.*, Abel; *Lat.*, Abel.

Aberdeen (*ăb-ẽr-dēn′*). The ancient and correct orthography of this name was "Aberdon," from *Aber*, the mouth of a river, and *Don*, the name of the river upon whose banks the city is built.

Abolitionists. A term denoting the Anti-Slavery party in the United States, which appeared soon after the founding of "The Liberator" by William Lloyd Garrison, in 1831; Garrison, Wendell Phillips, John Brown, E. P. Lovejoy, Joshua R. Giddings, John P. Hale, Salmon P. Chase, and Charles Sumner were avowed Abolitionists.

Abraham (*ā′-brȧ-hăm*). From the Hebrew *Abhraham*, according to some a Hebrew-Arab compound signifying "father of a multitude," from Hebrew *abh*, "father," and Arabian, *raham*. Others translate the name "lofty father of a multitude," or "father who shall see the people." *Arabic*, Ibraheem or Ibrahim; *Danish*, Abraham; *Dutch*, Abraham or Abram; *Fr.*, Abraham; *Ger.*, Abraham; *It.*, Abramo; *Lat.*, Abrahamus; *Russ.*, Avraam, or Abramii; *Sp.*, Abrahan; *Sw.*, Abraham.

Abram. Derived from same root as Abraham.

Absalom (*ăb′-sȧ-lom*). From the Hebrew *Abshalom*, signifying "father of peace"; from *abh*, "father," and *shalom*. *Fr.*, Absalon.

Abyssinia (*ăb-ĭs-sĭn′-ĭ-ȧ*). Named from the rivers Abia and Wabash, or, according to Bruce, from *habish*, "mixed," i. e., "the country of the mixed races"; others derive it from the land of the Abassins, or "mixed races."

Acadia (*ȧ-kā′-dĭ-ȧ*), or Acadie (*ȧ-kȧ-dē′*). The name originally given to Nova Scotia, but now only the poetical designation. It was granted by Henry IV., of France, November 8, 1603, to De Monts, a Frenchman, and a company of Jesuits, who were finally expelled from the country by the English governor and colonists of Virginia, who claimed all that coast by virtue of its prior discovery by the Cabots in 1497. In 1621, Sir William Alexander, a Scotchman, applied to and obtained of James I. a grant of the whole peninsula, which he renamed Nova Scotia, in honor of his native land.

Acquia Creek, Va. Indian *equiwi*, "between," or *akki*, "earth"; i. e., "earthy or muddy creek."

Acropolis (*ȧ-krŏp′-ō-lĭs*). From the Greek *akropolis*, "the upper city." Once a general name for the citadel of any ancient Greek city, but especially appropriated to that of Athens, famous for the placing on its summit in the Fifth Century, B. C., of the highest achievements of Greek art, the Parthenon and the Erechtheum, with the sculptures which adorned them without and within, and the Propylæa, or monumental gate, inside of the walls at the west end. At first Acropolis was the only name of the city, which was so called from Acrops, the founder. Afterwards, when the city extended over the adjoining plains, the name Acropolis was confined to the citadel and the hilly ground adjoining.

Ada (*ā′-dȧ*). According to some, this name has been corrupted from *Adama*, feminine of Adam. Others derive it from the name *Ead*, which is from A. S. *ead*, "happy"; or from the name *Eadith*. Littleton gives "Eada" (Saxon), Auda, Ada, and Idonea, which he translates, "fit, meet, proper"; also "pious, honest, rich."

Adam (*ȧd′-am*). From the Hebrew *Adham*, signifying "man"; literally, "earthy, red earth." Rudolph, however, says the name in Ethiopic means "to be fair, beautiful." *Arabic*, Adam; *Danish*, Adam; *Dutch*, Adam; *Fr.*, Adam; *Ger.*, Adam; *It.*, Adamo; *Lat.*, Adamus; *Port.*, Adão; *Sp.*, Adan.

Adela (*ȧd′-ē-lȧ*). A female name Latinized from Old German *edel*, "noble, noble descent or lineage."

Adelaide (*ȧd′-ĕ-lād*). From the Old German male name Adalheid (in Middle High German Adalhait, North High German Adelheid), signifying "a noble person"; from *edel*, "noble," and *heit*, "cheer."

Adelaide Island. In honor of the queen of William IV.

Adeline (*ȧd′-ē-līn*), **Adelina** (*ȧd-ē-lī′nȧ*). Diminutives of Adela. *Danish*, Adeline; *Dutch*, Adelina; *Fr.*, Adeline; *Ger.*, Adeline; *It.*, Adelina; *Lat.*, Adelina.

Adirondack. Mountains in New York and village in Warren County, of the same State. Indian word compounded from *doran*, "a people who eat bark," and *dak.*, "trees," with the French article *la* prefixed. This section was called by the natives *Coughsarage*, "the dismal wilderness."

Adolphus (*ȧ-dŏl′-fŭs*). The same as the Old German name Atalphus, which Wachter renders "helper of happiness," from *od* "happiness," and *hulf*, "help or helper." It is commonly defined as "noble wolf." *Danish*, Adolf; *Dutch*, Adolf; *Fr.*, Adolphe; *Ger.*, Adolf or Adolph; *It.*, Adolfo; *Lat.*, Adolphus; *Sp.*, Adolfo; *Sw.*, Adolf.

Adrian (*ā′-drĭ-ăn*), or Hadrian (*hā′-drĭ-ăn*). From the German name *Adrias*, so called from the capital of the Prætutii, on the coast of the Adriatic, where the family of the Emperor Adrian, according to his own account, had its rise. *Danish*, Adrian; *Dutch*, Adriaan; *Fr.*, Adrien; *It.*, Adriano; *Lat.*, Adrianus; *Port.*, Adriano; *Sp.*, Adrian.

Adriatic (*ā-drē-ăt'-ĭk, ăd-rē-ăt'-ĭk*) **Sea.** Indicates the Sea of Adrian or Hadrian.

Afghanistan (*ăf-găn-ĭs-tăn'*). The country of the Afghans.

Africa (*ăf'-rĭ-kȧ*). Origin traced to the Phenician *afer* (pl. *afri*), "a black man," whence Lat. *Africa*, and Gr., *Aphrike*.

Agatha (*ăg'-ȧ-thȧ*). A female name derived from the Greek *agathos*, "good." *Danish*, Agathe; *Dutch*, Agatha; *Fr.*, Agathe; *Ger.*, Agathe; *Gr.*, Agathe; *It.*, Agata; *Lat.*, Agatha; *Sp.*, Agata; *Sw.*, Agata.

Agnes (*ăg'-nĕs* or *ăg'-nēz*). From the German *agnos*, "chaste." *Danish*, Agnes, or Agnete; *Dutch*, Agnes; *Fr.*, Agnes; *Ger.*, Agnes; *It.*, Agnese; *Lat.*, Agnes.

Agra (*ä'-grä*), or Akberabad. Founded by Akber. *Abad*, a dwelling or town, generally connected with the name of its founder; hence, "town of Akber."

Ailean or **Aileen** (*ā-lēn'*). An Irish female name. Some translate it "light." If so, it may be a form of Helen; but it is more probably from the Erse *aïl*, "noble, beautiful"; or from *aille*, "handsome, fair"; or corrupted from *ailgean*, "noble offspring."

Aix-la-Chapelle (*āks-lä-shä-pĕl'*), or **Aachen.** Celebrated for its mineral springs, and for the chapel erected over the tomb of Charlemagne. To distinguish it from other places named Aix, it was so called from the domed basilica erected by Charlemagne.

Akron (*ăk'-rŏn*). City in Summit County, Ohio, which occupies the highest ground in the northern part of the State, and several other places named for the same reason. A Greek word, meaning "the summit or peak."

Alabama (*ăl-ȧ-bă'-mȧ*). State of the Union and a river of that State, named from an Indian tribe. There are several explanations of the meaning of the word. Gatchet gives "burnt clearing." Others say it means "here we rest." Haines, in his American Indian, gives "thicket clearers."

Alameda (*ăl-ȧ-mā'-dȧ*). County and city in California, town in Bernalillo County, New Mexico, and post-office in Clarke County, Alabama, named from the cottonwood trees growing in the vicinity. A Spanish word meaning "grove of poplar trees."

Alamo (*ă'-lȧ-mō*). Post-office in Contra Costa County, California, and many other places named from the old fort in Texas, which was so called from a grove of cottonwood trees. A Spanish word meaning "poplar or cottonwood."

Alan (*ăl'-an*). Some derive this name from Old French *alan, allan*, "a hunting dog," originally from the country of the *Alani* or *Alauni*, a warlike people of European Sarmanatia.

Alaric (*ăl'-ăr-ĭk*). From the Gothic *Alareiks*, "noble ruler"; *Danish*, Alarick; *Fr.*, Alaric; *Ger.*, Alarich; *It.*, Alarico; *Lat.*, Alaricus; *Sp.*, Alarico.

Alaska (*ȧ-lăs'-kȧ*). Territory of the United States. An Indian word meaning "great country," "continent," or "great land." It was encountered by Russian explorers as Al-ay-es-ka, the name having since changed through *Aliaska, Alaksa, Alashka*, to its present form. When purchased by the United States, the names of Walrussia, American Siberia, Zero Islands, and Polario were suggested, but Alaska was adopted in accordance with a proposition of Charles Sumner.

Albany (*ôl'-bȧ-nĭ*). County and city in New York, named in honor of the Duke of York (from his second title, Albany), afterwards James II., of England; *Albany*, derived from his Scotch title, originally the same as *Albyn*, the Celtic name of Scotland.

Albemarle (*ăl'-bē-märl*) **Sound, N. C.** After the Duke of Albemarle (Captain-General George Monk), one of the original members of the Charter Company.

Albert (*ăl'-bĕrt*). The same with the Old High German names, *Albrecht, Ailbracht*, and the North High German, *Albrecht*; from all-brecht, "very distinguished." *Danish*, Albrecht; *Dutch*, Albertus, or Albert; *Fr.*, Albert; *Ger.*, Albrecht; *It.*, Alberto; *Lat.*, Albertus; *Sp.*, Alberto; *Sw.*, Albert.

Albino (*ăl-bī'-nō*). Albino is a term originally applied to the white negro of the African coast (*albus*, white), by the Portuguese. The characteristics are extreme whiteness of the skin, white or very pale flaxen hair, and pink eyes. The wool of the negro Albino is generally perfectly white. Albinos are also found among white people. It is now known that these characteristics are the result of a peculiar disease, to which some animals, as the domestic rabbit, are also liable.

Albuquerque (*Sp., ăl-bōō-kâr'-kā*), New Mexico. Named by the Spaniards, from Albuquerque, a town in Spain, near the frontier of Portugal, which took its name from Alphonso d'Albuquerque, the "Portuguese Mars."

Alcazar (*ăl-käz'-ăr*). From the Arabic, *al qasr*, "the palace." The palace of the Moorish kings and later of Spanish royalty at Seville. A large part of it is of the original Alhambresque architecture, and extremely beautiful, though restored and too highly colored.

Aleutian (*ā-lū'-shĭ-ăn*). Islands in the Pacific Ocean. A derivation of the Russian word *aleaut*, meaning "bald rock," later appearing in the name applied to the river *Olutora* on the coast of Kamchatka, the people near the mouth of the stream being called Olutorsky. The Russians when first viewing the Alaskan natives applied the name Olutorsky. The initial O of the Russian invariably broadens into a sound almost equivalent to *a* in father, accounting for the transition from Olutorsky to Aleutsky, and then to Aleutian.

Alexander. From the Greek name *Alexandros*, "helper of men." *Dutch*, Alexander; *Fr.*, Alexandre; *Ger.*, Alexander; *It.*, Alessandro; *Lat.*, Alexander; *Sp.*, Alejandro, or Alexandro.

Alexandria, an Egyptian city named after Alexander the Great. In reading or speaking in Latin, this name is pronounced Alexan-dri'a, but it is properly Alex-an'dria, the accent being placed on the third syllable.

Alexis (*ȧ-lĕx'-ĭs*). From the Greek name *Alexis*, "help," "defense;" *Fr.*, Alexis; *Russ.*, Alexei.

Alfred. This name is usually translated "all peace." Neidinger derives the first syllable of the Anglo-Saxon name Alfred, Aelfred, from the word *alp, alf, elf*, "strong," "powerful." The name is rather from *alf-rad*, "help in counsel." *Danish*, Alfred; *Dutch*, Alfred; *Fr.*, Alfred; *Ger.*, Alfred; *It.*, Alfredo; *Lat.*, Alfredus; *Sp.*, Alfredo.

Algernon (*ăl'-jĕr-nŭn*). From *als* (aux) *gernons*, was originally given in the Twelfth Century to those who, contrary to the fashion of the time, wore their whiskers. Roquefort renders the Old French, *gernon, grenon, guernon, ghernon*, "poil de la barbe, moustache"; from Med. L. *granus, greno*; the latter is no doubt from L. *crinis*, "hair of the head."

Algiers (*ăl-jērz'*). From the Arabic, *Al-jazirah*, "the peninsula."

Alhambra (*ăl-hăm'-brȧ*). From the Arabic, *al-hamrā*, "red." A great citadel and palace founded in the Thirteenth Century above the city of Granada, Spain, by the Moorish kings.

Alice (*ăl'-ĭs*). From the Teutonic, meaning "noble" or "noble cheer." *Danish*, Else; *Dutch*, Elsje; *Fr.*, Alice; *Lat.*, Alicia; *Sw.*, Elsa.

Alison (*ăl'-ĭ-sŏn*). A Scottish female name, which in old parish registers is spelled *Alisone*. It is of French origin, and the same as *Alizon*. Roquefort gives Alizon, Alieite, Ailexe, Aileye, Auly, as female diminutives of Alexis.

Allée Verte (*ăl-lā'-vârt*). French, "green walk." A double avenue of limes beginning at the western end of the Boulevard d'Anvers in Brussels and extending along the bank of the Willebroeck Canal.

Alleghany (*ăl' -ĕ-gā-nĭ*), or **Allegheny,** also **Allegany.** County, city, and river in Pennsylvania, and mountains in eastern United States. An Indian word, variously spelled, the origin of which is in dispute. The most generally accepted derivation is from *welhikhanna,* "the best" or "the fairest river."

Allen. According to some, this is the same name as Allan and Alan. Lower shows that it is found written *Allayne.* It is a probable corruption of the name Alwine.

Allentown. City in Lehigh County, Pennsylvania, and borough in Monmouth County, New Jersey, named for William Allen, of Pennsylvania, at one time chief justice of the province.

All Saints' Bay. Because discovered by Vespucci on the Feast of All Saints in the year 1503.

Alma (*ăl'-mȧ*). At the time of the war between England and Russia this name was introduced in the west of England, so christened after the Battle of the Alma.

Alonzo (*ȧ-lŏn'-zō*), or **Alonso.** See Alphonso.

Alphonso (*ăl-fŏn'-sō, ăl-fŏn'-zō*), or **Alonzo.** From the Teutonic, meaning "battle eager." *Danish,* Alfons; *Fr.,* Alphonse; *It.,* Alfonso; *Lat.,* Alphonsus; *Port.,* Affonso; *Sp.,* Alfonso, or Alonso.

Alps. The word *Alp,* or *Alb,* is Keltic, and signifies "white." Its application to the white tops of the mountains of the Alps is a natural one, and it is singular that the names of nearly all the great mountains of the earth have some reference to their snow-covered summits.

Altai (*ăl-tī'*). A mountain range in central Asia, rich in the precious metals, is now called in Mongolian *Altain ula,* "mountain of gold," from *ula,* "mountain," and *altain,* genitive of *alta,* "gold." Al-tai (for Altagh) is the Tartaric form of the name. Hence the name Altaic which is applied to languages of the Mongol-Turkic class.

Altoona (*ăl-tōō'-nȧ*). City in Blair County, Pennsylvania, so named because of its high situation in the Allegheny Mountains; also town in Polk County, Iowa, situated on the highest point between the Des Moines and Mississippi Rivers. A derivative of the Latin word *altus,* "high."

Alvin (*ăl'-vĭn*), or **Alwin** (*ăl'-wĭn*). Means "winning all." *Dutch,* Alewijn; *Fr.,* Aluin; *Ger.,* Alwin; *It.,* Alvino; *Lat.,* Alwinus; *Sp.,* Aluino.

Amadeus (*ăm-ȧ-dē'-ŭs*). Translated, a "lover of God." *Fr.,* Amadée; *Ger.,* Amadeus; *It.,* Amedeo, or Amadeo; *Lat.,* Amadeus; *Sp.,* Amadeo.

Amanda (*ȧ-măn'-dȧ*). A female name from the Latin *Amanda,* "to be loved," i. e., "worthy of being loved." It is also found as a male name in the parish registers of Nottingham, England.

Ambrose (*ăm'-brōz*). From the Latin name Ambrosius, meaning "immortal, divine, godlike."

Amelia (*ȧ-mē'-lĭ-ȧ*). From *Aemylia,* name of a noble family in Rome, also the name of a vestal who rekindled the fire of Vesta, which had been extinguished by putting her veil over it. The name means "gentle, engaging, courteous." *Danish,* Amalie; *Fr.,* Amélie; *Ger.,* Amalie; *Sp.,* Amelia.

America. From Amerigo Vespucci, sometimes spelled Vespucius, who landed on the Western Continent south of the equator in 1499. His name was given to this country by a German geographer Martin Waldseemuller, who published an account of the four voyages of Vespucci, at Frankfort, Germany, in 1507.

Amherst (*ăm'-ĕrst*). County in Virginia, and towns in Hillsboro County, New Hampshire, and Hampshire County, Massachusetts, named for Lord Jeffrey Amherst.

Amiens (*ȧ-myăn'*). A noted city of France, capital of the former province of Picardy and of the present department of the Somme. It is situated on the banks of the Somme, 80 miles northeast of Paris, occupying the site of the ancient Samarbriva, capital of the Ambiani, literally "dwellers by the water," from which it takes its name. Its world-famous cathedral, built in the thirteenth century, the largest ecclesiastical structure in France, is one of the finest examples of Gothic architecture in Europe.

Amos (*ā'-mŏs*). From the Hebrew, signifying a "burden." *Fr.,* Amos.

Amy (*ā'-mĭ*). Some derive this name from the French *aimée,* "beloved"; others from *amie,* "a friend." It is found Latinized both Amata and Amicia. *Danish,* Amalie; *Fr.,* Aimée; *It.,* Amata.

Anabella. A female name formed from Hannibal, i. e., Annibal, the Carthaginian name. In Phenician it is found written *Chanbaal,* "favor of Baal."

Andalusia (*ăn-dȧ-lōō'-shĭ-ȧ*). Now a captaincy-general in southern Spain, comprising the modern provinces Almeria, Jaen, Granada, Cordova, Malaga, Seville, Cadiz, and Huelva. It was called by the Moors *Belad-al-Andalus,* the "land of the Andalus," Andalus being probably a corruption of the Latin *Valdalos,* "the Vandals."

Andes (*ăn'-dēz*). Properly "Cordilleras de los Andes," the "chain of the Andes," is a name of uncertain meaning. Garcilasso de la Vega says that it was derived from the Anti tribe near Cuzco. It has also been referred to a Peruvian word *anta,* "copper." Another proposed etymology is from *anta,* a "tapir," of which the Portuguese plural would be *antas,* so that the Cordilleras de los Antas would mean the "mountains of the tapirs."

Andrew. From the Greek *Andreas,* meaning "manly, brave, courageous." *Danish,* Andreas; *Dutch,* Andries; *Fr.,* Andre; *Ger.,* Andreas; *It.,* Andrea; *Lat.,* Andreas; *Port.,* Andre; *Sp.,* Andres.

Androscoggin (*ăn-drŏs-kŏg'-gĭn*). River in Maine and New Hampshire, and county in Maine. As a compliment to Sir Edmund Andros, name was changed from the Indian name first given to the river, from the tribe Amasagunticook that formerly lived on its banks, and variously spelled from pronunciations, Ammoncongan, Ammoscoggin, Amariscoggen. The authorities give the meaning "a fishing place for alewives," or "fish spearing."

Angela (*ăn'-jĕ-lȧ*). A female name of Italian origin, derived from *angelo,* "an angel."

Angelica (*ăn-jĕl'-ĭ-kȧ*). Translated "angelic." *Fr.,* Angelique; *Ger.,* Angelica; *It.,* Angelica.

Angelo, Sant' (*ăn'-jĕ-lō*), **Castle of.** The remodeled mausoleum of Hadrian in Rome. It is a huge circular tower about 230 feet in diameter on a basement about 300 feet square, with medieval chambers and casemates excavated in its solid concrete, and three Renaissance stories added on its summit to serve the purposes of a citadel.

Anna or **Anne.** Same origin as Hannah. *Dan.,* Anna; *Dutch,* Anna; *Fr.,* Anne; *Ger.,* Anne; *It.,* Anna; *Lat.,* Anna.

Anselm (*ăn'-sĕlm*). From the Teutonic, meaning "divine helmet," hence "a defender." *Dutch,* Anselmus; *Fr.,* Anselme; *Ger.,* Anselm; *It.,* Anselmo; *Lat.,* Anselmus; *Sp.,* Anselmo.

Antarctic Ocean. Denotes the ocean *anti,* "against" or "opposite to" the Arctic Ocean.

Antony (*ăn'-tō-nē*), **Anthony.** From Latin *Antonius,* meaning "inestimable." According to Littleton, the Antonian family were descended from Antius, son of Hercules.

Antwerp (*ănt'-wĕrp*). From *Andoverpum,* "at the wharf"; *werf,* a dam or wharf; literally, "what is thrown up,"—*werfen.*

Anzac (*ăn'-zăk*). A term used to denote certain colonial troops of the British empire. This coined name, formed from the first letters of the appellation "Australia and New Zealand Army Corps," and first employed as a code word for dispatches in the Dardanelles campaign of 1915-16, has been widely applied to British colonial soldiers.

Apennines (*ăp'-ĕn-īnz*). Now used as the name of the central mountain chain of Italy. The Roman term Mons Apenninus originally denoted the Mari-

time Alps near Genoa, the Mons Peninus signifying the Dauphiny Alps, more especially the part near the Great St. Bernard. The Romans explained the Mons Peninus or Pennine chain as the Pœnine or Punic Mountains, most likely because Hannibal crossed them when he invaded Italy.

Appalachian (*ăp-pȧ-lăch'-ĭ-ăn, ăp-pȧ-lā'-chĭ-ăn*) **Mountains.** From the Appalachicola River, or the ancient town called *Apalache*, found by DeSoto in Florida.

Appalachicola (*ăp-pȧ-lăch-ĭ-kō'-lȧ*) **River, Fla.** From an Indian town *Apalatichiokli*, "those on the other side"; another source notes it *Apalatchukla*, "old town," a former Indian settlement on its banks.

Appian Way. The Via Appia of ancient Rome, most famous of Roman highways. It ran from Rome to Brundisium (Brindisi) and is probably the first great Roman road which was formally undertaken as a public work. It was begun in 312 B. C., by Appius Claudius Cæcus, the censor, and was ultimately extended to Brundisium when a Roman colony was inaugurated there. At present the Appian Way, for a long distance after it leaves Rome, forms one of the most notable memorials of antiquity in or near the Eternal City, bordered as it is by tombs and the ruins of monumental buildings.

Appomattox (*ăp-pō-măt'-ŏks*). River and county in Virginia. An Indian word, meaning "a tobacco-plant country."

April. From *aperio*, "to open," this being the month in which the buds shoot forth.

Arabella (*ăr-ȧ-bĕl'-lȧ*). Corrupted from the old name *Oragel, Oragele*, meaning a "fair altar."

Arabia (*ȧ-rā'-bĭ-ȧ*). The country of the Arabs, "men of the desert."

Arc de Triomphe de l'Etoile (*ȧrk dŭ trē-ôNf' dŭ lā-twäl'*). Meaning "triumphal arch of the star." The largest triumphal arch in existence, at the head of the Champs Elysées, Paris.

Arch of Constantine (*kŏn'-stăn-tĭn*). An arch in Rome built 312 A. D., in honor of Constantine's triumph over Maxentius.

Arch of Septimius Severus. An arch in the Roman Forum, dedicated 203 A. D., in commemoration of victories over the Parthians.

Arch of Titus. An arch in Rome, built in commemoration of the taking of Jerusalem.

Arch of Trajan. Arch over the Appian Way at Benevento, Italy, dedicated A. D. 114, and one of the finest of ancient arches.

Archangel (*ärk-ān'-jĕl*). City of Russia, named in honor of the archangel, Michael.

Archibald (*är'-chĭ-bald*). From the Old German name *Ercheneals, Erchanpald*; from *erchanbald*, "bold in work or activity."

Arctic. The word "arctic" is derived from the Greek name for the constellation of the Bear, *Arctos*, and means "near Arctos," i. e., "in the extreme north."

Areopagus (*ăr-ē-ŏp'-ā-gŭs*). From the Greek *Areios pagos*, "Martial hill," i. e., "Hill of Mars." A low, rocky hill at Athens continuing westward the line of the Acropolis, from which it is separated by a depression of ground.

Argentina (*är-jĕn-tē'-nȧ*). Now the Argentine Republic, "silver republic," which owes its name to the silvery reflection of its rivers.

Argonne (*ȧr-gōn'*), **or Forest of Argonne.** A rocky, wooded plateau in northeastern France, extending along the borders of Lorraine and Champagne, between the Meuse and Aisne, and forming a part of the departments of Ardennes, Meuse, and Marne. Forming a natural defensive barrier, it is famous as the scene of important military campaigns, notably in 1792, in 1870, and in the operations following the German invasion of 1914.

Arizona (*ăr-ĭ-zō'-nȧ*). A state of the United States. Generally accepted that the name is derived from the Indian word meaning "arid zone or desert"; but Mowry claims that the name is Aztec, from *Arizuma*, signifying "silver bearing."

Arkansas (*ăr'-kăn-sô*, or *ăr-kăn'-săs*). River, State, county, and town in said State, and city in Cowley County, Kansas. Marquette and other French explorers wrote the word Alkansas and Akamsca, from the Indian tribe. The usual etymology derives the name from the French arc, "a bow," and Kansas, "smoky water," while another theory makes the prefix a Dakota word meaning "people"; hence, "people of the smoky water."

Arles (*ärlz.* Fr., *ärl*). A city in the department of Bouches-du-Rhone, France, situated on the left bank of the eastern arm of the Rhone near its mouth. It was anciently known as *Are-late* or *Arelatum*, "by the marsh" or "on the clay."

Arlington House. A mansion on the heights opposite Washington, District of Columbia, in the midst of the national cemetery. It was once the property of General Washington and the home of General Robert E. Lee.

Arnold. Bailey says this name in Saxon, *arnhold*, signifies "faithful to his honor"; Lower says the surname Arnulfe is the same as Arnold, in medieval records sometimes Latinized *Ernulphus*, which might be translated both "help in war" and "helping lord," all doubtless from *ern-walt*, "powerful lord." *Fr.*, Arnaud; *Ger.*, Arnold; *It.*, Arnaldo; *Lat.*, Arnoldus or Arnaldus.

Aroostook (*ȧ-rōōs'-tōōk*). River and county in Maine. An Indian word, meaning "good river," or "clear of obstruction."

Arras (*ȧ-räs'*). A city of northeastern France, the chief town of the department of Pas-de-Calais, on the south bank of the Scarpe. In Roman times it was known as Nemetacum and was the capital of the Atrebates, from which word Arras is derived. Arras was the birthplace of Robespierre. The city suffered immense damage in connection with the German invasion of 1914, and during the great Teutonic attack on the British lines in 1918 the vicinity of Arras was the scene of most desperate and sanguinary struggles.

Arthur. Armstrong derives this name from Gael. *ard*, "an eminent person"; literally, "high, lofty, exalted, noble, eminent, excellent, proud"; others derive it from *arth*, "a bear." *Fr.*, Arthur, or Artus; *It.*, Arturo; *Lat.*, Arthurus.

Asakasa (*ä-sä-kä'-sä*) **Pagoda.** A picturesque Buddhist tower in Tokyo, Japan.

Ascension Island. Was so named because discovered by the Portuguese on Ascension Day, 1501.

Ashley River, S. C. From Sir Anthony Ashley Cooper, afterward Earl of Shaftesbury, named in the original charter. Indian name of the stream, *Kiauah*.

Asia (*ā'shĭ-ȧ*). From the Sanskrit *ushas*, signifying "land of the dawn."

Asia Minor. Lesser Asia.

Astoria (*ăs-tō'-rĭ-ȧ*). City in Clapsop County, Oregon, named for the founder, John Jacob Astor, who established a fur-trading station there in early days.

Atchafalaya (*ăch-ȧ-fȧ-lī'-ȧ*) **River, La.** Choctaw Indian Achafalaya, "long river," i. e., *hucha*, "river," *falaya*, "long."

Athens (*ăth'-ĕnz*). A name of doubtful etymology, cannot be separated from that of Athene, the tutelary goddess of the city. Athens is either the city of Athene, as the Athenians believed, or Athene may be the goddess of Athens.

Athol (*ăth'-ŏl*). Town in Worcester County, Massachusetts, said to have been named for James Murray, second Duke of Athol.

Atlanta (*ăt-lăn'-tȧ*), **Ga.** Originally, Marthasville. Atlanta was suggested by the late Edgar Thomson of Philadelphia, owing to its geographical position, immediately on the dividing ridge, separating the Gulf and *Atlantic* waters.

Atlantic Ocean. Was known to the Greeks by

the name of *Atlantikos pelagos*, from the Isle of Atlantes, which both Plato and Homer imagined to be situated beyond the Straits of Gibraltar.

Aubrey (*ô'-brĭ*). A name derived from the Old German name *Amalric*, signifying "powerful without a blot," or "rich in chastity." Amalaric has been corrupted to *Alberic*, whence *Aubrey*.

Audrey, or **Audrie** (*ô'-drĭ*). A female name corrupted from Etheldreda.

August. Named by Augustus Cæsar after himself, because in this month he celebrated three distinct triumphs, reduced Egypt to subjection, and put an end to the civil wars. Before this the month was known in Rome as *sextilis*. In Gallia, however, and in other remote parts of the empire, the ancient name for this month was *Eaust*, or *Aust*, i. e., "harvest."

Augusta (*ô-gŭs'-tȧ*). The female form of Augustus, meaning "venerable." *Danish*, Auguste; *Dutch*, Auguste; *Fr.*, Auguste; *Ger.*, Auguste or Augusta; *It.*, Augusta; *Lat.*, Augusta.

Augusta, Maine. Given in 1737, after the name of the English Princess Augusta Charlotte, eldest granddaughter of George II. The Indian name of the locality was *Cushnoc*.

Augustin. See Augustine.

Augustine (*ô-gŭs'-tĭn, ô'-gŭs-tĭn*). From the Latin *augustus*, "venerable." *Dutch*, Augustinus, or Augustijn; *Fr.*, Augustin; *It.*, Augustino; *Lat.*, Augustinus; *Port.*, Agostinho; *Sp.*, Augustin.

Aurelia (*ô-rē'-lĭ-ȧ*). A female name derived from that of Aurelia, mother of Cæsar, formed from Aurelius, name of a Roman emperor.

Aurora (*ô-rō'-rȧ*). A female name from Latin *aurora*, "the dawn."

Austerlitz (*ows'-tĕr-lĭts*). The east town of the River Littawa; *ost*, "the east."

Austin. Corrupted down from Augustin.

Austin. County and city in Travis County, Texas, and town in Lonoke County, Arkansas, named for Stephen Fuller Austin, the first man to establish a permanent American colony in Texas (1844).

Australasia (*ôs-trăl-ā'-shĭ-ȧ*). Meaning, "Southern Asia," derived from the Latin *australis*, "southern."

Australia (*ôs-trā'-lĭ-ȧ*). Meaning, "the South." The first indication of Australia on any map is in a small map of the world which forms the vignette to a Dutch work, *Journael vande Nassauche Vloot*, under Admiral v'Hermitte, in 1623-4-5-6. The place indicated is to the west of Cape Carpentaria of the present map, and is marked "Land eendracht."

Austria (*ôs'-trĭ-ȧ*). From the German, *Österreich*, "the Eastern Empire," in contradistinction to the Western Empire founded by Charlemagne.

Aventine (*ăv'-ĕn-tīn*) **Hill.** One of the seven hills of ancient Rome, rising on the left bank of the Tiber, south of the Palatine. Below it to the northeast lay the Circus Maximus, and to the east the Baths of Caracalla.

Aztec (*ăz'-tĕk*). Village in San Juan County, New Mexico, named for one of the native tribes of Mexico. The word is said to mean "place of the heron." Other interpretations give "white" or "shallow land where vapors arise." Humboldt gives "land of flamingoes." The word *azcatl* means "ant," but Bushmann says that this word has no connection with the name of the tribe.

Baalbec (*bāl'-bĕk, bāl-bĕk'*), **Baalbek, Baalbak.** An ancient city of Syria, situated on the slope of Anti-Libanus, thirty-four miles northwest of Damascus. It is the Greek Heliopolis "city of the sun," famous for its ruins.

Baffin (*băf'-fĭn*) **Land.** Named for the famous Arctic navigator who discovered it.

Baldwin. From the Teutonic, probably meaning a "bold winner," or "powerful warrior"; by other authorities, "prince friend"; *Danish*, Balduin; *Dutch*, Boudewijn; *Fr.*, Baudouin; *Ger.*, Balduin; *It.*, Baldovino; *Lat.*, Balduinus.

Balearic (*băl-ē-ăr'-ĭk*) **Islands.** From the Greek *ballein*, "to throw"; so called because their inhabitants were skillful in the use of the sling.

Balkan (*bôl'-kăn, băl-kăn'*). From Turk., *balkh*, "high ridge," "high town"; also called Mount Hæmus, meaning "the snowy mount"; from Sanskrit *hima*, "snow."

Ballston Spa (*bôl'-stŭn spä*). Village in Saratoga County, New York. Named for Rev. Eliphalet Ball, an early settler, the "spa" being added in reference to the medicinal springs resembling the celebrated watering place in Belgium.

Balthasar (*băl'-tä-zär*). The Greek form of Belshazzar, "king protector"; *Fr.*, Balthazar or Balthasar; *It.*, Baldassare; *Lat.*, Balthasar; *Sp.*, Baltasar.

Baltic Sea. Denotes, in accordance with the Swedish *balt*, a "strait, a sea full of belts, or straits."

Baltimore (*bôl'-tĭ-mōr*). County and city in Maryland, and town in Windsor County, Vermont, named for the proprietor of a large tract of land in Maryland, Cecil Calvert, Lord Baltimore, who settled the province in 1635.

Banbury (*băn'-bĕr-ĭ*). A town in Oxfordshire, England, situated on the Cherwell twenty-two miles north of Oxford. *O. E.*, Berenburig, "Bera's fort."

Bangor (*băn'-gôr*), **Maine.** By Rev. Seth Noble, from a well-known psalm tune of that name. Previously the section was known as Sunbury; the Indian name, *Con*, or *Kenduskeag*.

Banks Land. So called in compliment to Sir Joseph Banks, the eminent naturalist and president of the Royal Society of Great Britain.

Baptist. From the Greek, meaning a "baptizer"; *Fr.*, Baptiste; *Ger.*, Baptist; *It.*, Battista; *Lat.*, Baptista; *Port.*, Baptista; *Sp.*, Bautista.

Barbadoes (*bär-bā'-dōz*). From the Latin *barba*, "a beard," in allusion to the beardlike streamers of moss always hanging from the branches of the trees.

Barbara (*bär'-bȧ-rȧ*). From the Greek, meaning "foreign, stranger"; *Dutch*, Barbara; *Fr.*, Barbe; *Ger.*, Barbara; *It.*, Barbara; *Lat.*, Barbara.

Barbary (*bär'-bȧ-rĭ*). The land of the Berbers.

Barberini (*bär-bā-rē'-nē*), **Palace.** A palace in Rome, near the Quirinal, begun by Urban VIII., whose name was Carlo Barberini, and finished in 1640. It is noted for its art treasures.

Barcelona (*bär-sē-lō'-nȧ*). Named from Hamilcar Barca, who founded it.

Bar Harbor. A village in Hancock County, Mount Desert Island, Maine, so named from a sandy bar, visible only at low tide.

Baring (*bā'-rĭng, bâr'-ĭng*), **Island.** Discovered by Captain Penny, received the name of Sir Francis Baring, First Lord of the British Admiralty.

Barnabas (*bär'-na-bas*), or **Barnaby** (*bär'-na-bĭ*). From the Hebrew *Bar Nebah*, which some translate "son of exhortation," or "son of consolation." It rather means "son of prophecy," from *bar-nebuah*. *Danish*, Barnabas; *Dutch*, Barnabas; *Fr.*, Barnabe; *Ger.*, Barnabas; *It.*, Barnaba; *Lat.*, Barnabas; *Sp.*, Bernabe.

Barrow Island. Discovered by Captain Penny, in 1850, received the name of John Barrow, son of Sir John Barrow, the eminent British statesman.

Barrow's Strait. So called by Captain Penny, in compliment to John Barrow, the son of Sir John Barrow, the traveler and statesman.

Bartholomew (*bär-thŏl'-ō-mū*). From the Hebrew *Bartolomai*, which, according to some, means "son of Ptolemy," but it translates rather "son of Tolmai." *Danish*, Bartholomæus; *Dutch*, Bartholomeus; *Fr.*, Barthelemi; *Ger.*, Bartholomaus; *It.*, Bartolommeo; *Lat.*, Bartholomæus; *Port.*, Bartholomeu; *Russ.*, Varfolomei; *Sp.*, Bartolome; *Sw.*, Bartholomaus.

Basil (*bā'-sĭl*). From the Greek, *Basileios*, meaning "kingly." *Danish*, Basilius; *Dutch*, Basilius;

Fr., Basile; *Ger.*, Basilius; *It.*, Basilio; *Lat.*, Basilius; *Russ.*, Vasilii; *Sw.*, Basilius.

Basque (*bask*) **Provinces.** The provinces of Vizcaya, Guipuzcoa, and Alava, in Spain, united to Castile in the Thirteenth and Fourteenth Centuries. From *bassoco*, "a mountaineer"; or, according to Humboldt, from *basoa*, "a forest."

Bastille (*bas-tēl'*), **The.** A celebrated state prison in Paris. Probably from the Latin, *bastile*, "a tower, fortress."

Bath (*băth*), **Maine.** From *Bath* in England, adopted February 17, 1781.

Baths of Caracalla (*kăr-ȧ-kăl'-ȧ*). Baths in ancient Rome, begun by Severus, 206 A. D. Named for the Emperor "Caracalla," a nickname for Marcus Aurelius Antoninus.

Baton Rouge (*băt'-ŭn rōozh*). City in East Baton Rouge Parish, Louisiana. It is a French name, meaning "red staff" or "stick," given because of a tall cypress tree which stood upon the spot where it was first settled. Some authorities say that the name is derived from the name of an Indian chief, whose name translated into French was "Baton Rouge." Still another theory ascribes the name to the fact that a massacre by the Indians took place upon the spot upon the arrival of the first settlers.

Bavaria. The country of the Boarii, a tribe related to the Boii.

Bayeux (*bä-yö'*). Named from the *Bajoccas*, a Keltic tribe name, meaning "great conquerors."

Bayeux Tapestry. A strip of linen 231 feet long and twenty inches wide, preserved in the Library at Bayeux, France, embroidered with episodes of the Norman conquest of England from the visit of Harold to the Norman court until his death at Senlac, each with its title in Latin. The work is of great archæological interest from its details of costume and arms. It is believed to have been made by Matilda, queen of William the Conqueror.

Bayreuth (*bī'-rūth*. German, *bī'-roit*), **Baireuth.** A former German burgraviate and principality, now in the northern part of Bavaria.

Bayreuth Festival. A musical festival held at Bayreuth, for the representation of the German composer's Wagner, works. The National Theater, in which it is held, was opened by Wagner in 1876.

Beacon Hill. An eminence in Boston, Mass., which has become famous in history. The old beacon, shown in all the early plans of the town, and which gave the name to Beacon Hill, was erected in 1634-1635, to alarm the country in case of invasion. It stood near the present State House, the exact spot being the southeast corner of the reservoir formerly standing on Temple Street. It was a tall mast, standing on cross timbers placed upon a stone foundation, supported by braces, and was ascended by treenails driven into it; and, sixty-five feet from the base, projected a crane of iron, from which an iron skeleton frame was suspended, to receive a barrel of tar or other combustibles. When fired, this could be seen for a great distance inland. It was newly erected in 1768, having fallen from some cause unknown; and in 1789 it was blown down. The next year a monument of brick, sixty feet high and four in diameter, was erected on its site to the memory of those who fell at Bunker Hill; and in 1811 this was taken down, the mound being leveled.

Beacon Street. A street in Boston, Mass., which extends from Tremont Street along the north side of the Common and Public Gardens westward. It is noted as a street of residence and its name is a synonym for the wealth and culture of the city.

Beatrice (*bē'-ȧ-trĭs*. French, *bā-ȧ-trēs'*), **Beatrix** (*bē'-ȧ-trĭks*). Female names formed from Latin *beatus*, "blessed, happy." *Danish*, Beatrix; *Dutch*, Beatrix; *Fr.*, Beatrice; *Ger.*, Beatrix, or Beatrice; *It.*, Beatrice; *Lat.*, Beatrix; *Sp.*, Beatriz; *Sw.*, Beatrix.

Beaufort (*bū'-fûrt*), **S. C.** In honor of Henri, Duke of Beaufort.

Behring (*bā'-rĭng*, or *bē'-rĭng*) **Strait, Alaska.** Named by Captain Cook, in memory of Ivan Ivanvitch or Vite Behring (who wrote it Bering or Bereng; *Behring*, a German corruption), a Russian navigator, its discoverer, in 1728. On some "olde mappes" (1566) the waters are noted as "Stret de Anian."

Belgium (*bĕl'-jĭ-ŭm*). Literally, the land of the Belgae.

Belinda. A female name. It may be from Italian *Bella Linda*, or corrupted from *bellino*, a diminutive of *bello*, "beautiful."

Bella. An abbreviation of both Isabella and Arabella.

Belleisle (*bĕl-īl'*). French for "beautiful island."

Bellevue (*bĕl-vū'*). A noted castle near Cassel in Germany. It contains a fine picture gallery. Among its masterpieces are specimens of Holbein, Rembrandt, Vandyck, Rubens, Teniers, Wouverman, Titian, Guido Reni, etc.

Beloochistan (*bĕl-ōō-chĭs-tän'*), or **Baluchistan.** From the Persian, meaning "the country of the Belooches, or Baluches."

Belvedere (*bĕl-vē-dēr'*). A portion of the Vatican Palace at Rome. The word is from the Italian, meaning "fair view."

Benedict (*bĕn'-ē-dĭkt*), or **Bennet** (*bĕn'-nĕt*). From the Latin *Benedictus*, "blessed"; *Danish*, Benedict; *Dutch*, Benedictus; *Fr.*, Benoit; *Ger.*, Benedict; *It.*, Benedetto; *Sp.*, Benito, or Benedicto; *Sw.*, Bengt.

Benjamin. From the Hebrew, *Binyamiyn*, which, according to the Samaritan Pentateuch, means "son of days"; i. e., "son of old age." Fuerstius translates it "lucky son." The name means, literally, "son of the right hand"; figuratively, "son of good fortune." *Danish*, Benjamin; *Fr.*, Benjamin; *Ger.*, Benjamin; *It.*, Beniamino; *Lat.*, Benjaminus.

Bennet. See Benedict.

Bennett. This occurs frequently as a female name in the registers of Kent, England. It is sometimes varied to Bennetta and Benett.

Bennington. Town in Hillsboro County, New Hampshire, and county, township, and town in Vermont, named for Governor Benning Wentworth, of New Hampshire, who gave grants for the original town, in 1748.

Berenice (*bĕr-ē-nī'-sē*), or **Bernice** (*bĕr-nī'-sē*). From the Latin, "bringing victory." *Gr.*, Berenike; *It.*, Berenice.

Beriah (*bē-rī'-ȧ*). The Hebrew *B'riyah*, which Simonis translates "in calamitate," i. e., "born in calamity"; Jones, "a calamity in his house"; and Tragelles, "gift."

Berkshire (*bĕrk'-shĭr*). This is derived from *barruc*, "a polled or pollard oak," and *scyre*, "a shire"; from the Shirmotes of that county being anciently held in the shade of a large polled oak-tree.

Berkshire. County in Massachusetts, named for Berkshire, England. Several towns in the county are named from the same.

Berlin (*bĕr'-lĭn*. German, *bĕr-lēn'*). The capital of Prussia, is a name the meaning of which has been much discussed. The name is probably Wendish, either from *berle*, "uncultivated ground," or, as Krebs thinks, from *barlin*, a "shelter," or "place of refuge"; or, according to Kloden, an "enclosure or field"; while Vilovski suggests *brljina*, "a pool," which conforms to the local conditions.

Bermudas (*bĕr-mū'-dȧs*). Named for the discoverer, Juan Bermudez, in 1522.

Bern (*bĕrn*. German, *bĕrn*). A Swiss canton which takes its name from its chief town, which grew up round a castle built in 1192, by Duke Berchtold V. of Zahringen. The name Berne appears in 1224 on a seal of the town. Not im-

probably, Berchtold gave the place the name of Berne in memory of Dietrich of Berne (Verona), a favorite hero of Alamannic poetry. According to the local legend, the town was named from a bear, the first animal killed in a hunting expedition in an oak forest on the site of the town. Hence a bear rampant on a gold field has been taken as the heraldic shield of the city, and a tame bear is always kept in a cave, like the wolf at Rome.

Bernard (*bĕr'-nard*). From the Old German Bernhard, from *bern-hart*, "strong or hardy."

Bernese Oberland (*bĕr-nēs'*, or *bĕr-nēz' ō'-bĕr-länt*). A mountainous region in the southern part of the canton of Bern, Switzerland, famous for its picturesque scenery.

Bertha (*bĕr'-thȧ*). From the Old German name, *Berta*, "bright or famous."

Bertram (*bĕr'-tram*). The Old German name, from *brecht-ram*, "renowned for strength." *Fr.*, Bertrand; *Ger.*, Bertram.

Bessie. Corrupted from Elizabeth.

Bibliotheque Nationale (*bē-blē-ō-tāk' näs-yôx-näl'*). That is, "National Library," the great French library, one of the largest in the world.

Big Sandy River, Ky. From its extensive sand bars, the Indian names *Tatteroi*, *Chatteroi*, and *Chatterwha* being from a similar application. Known to the Miamis as *Wepepoconecepewe*, by the Delawares as *Sikeacepe*, "Salt River."

Binnenhof (*bĭn'-nĕn-hōf*). Originally, the palace of Count William of Holland, at The Hague. It is an irregular agglomeration of buildings, in part medieval, inclosing a court in which stands the Hall of the Knights, a brick, chapel-like, gabled structure with turrets, now used as a depository for archives.

Birmingham (*bĕr'-mĭng-ŭm*). Probably a patronymic from the Bœrings; *ham*, a home or family residence, literally "a place of shelter," from *heiman*, "to cover." Hence, originally, "Bœring's home."

Biscay. Takes its name from the Spanish province of Biscaya or Viscaya, meaning the land of the Basques or Vasks.

Bismarck (*bĭz'-märk*). City in St. François County, Missouri, city in Burleigh County, North Dakota (capital of State), and many other places, named for Prince Otto von Bismarck of Germany.

Black Sea. Probably because it abounds with black rocks. Another explanation is that it is so called from its frequent storms and fogs. The Greeks called it *Euxine*, from *euxinos*, "hospitable," disliking its original name, *Axinos*, "inhospitable."

Blackstone River, R. I. In memory of William Blackstone, an Episcopal minister, the first white settler of Rhode Island. Indian name of stream *Kehetuck*, "great river," changed afterwards to *Pawtucket*, meaning "the forks," from *Pochatuck*, "a branch."

Blaise (*blāz*). In France the name of the saint is found written Blaise, and in Germany Blaes. In Latin it occurs as Blasius and Blavius. It seems to be the same as the Roman name *Blaesus*, which Statius renders "lisper."

Blenheim (*blĕn'-ĭm*) **Palace.** A mansion at Woodstock, Oxfordshire, England, built by Vanbrugh at national cost, 1705–16, for the first Duke of Marlborough.

Blue Grotto. A celebrated cavern on the shore of Capri in Italy.

Bodleian (*bŏd-lē'-ăn*), **Library.** A library of Oxford University, England, which was originally established in 1445, opened in 1488, and re-established by Sir Thomas Bodley in 1597–1602.

Boer (*bōōr*). Applied to Dutch inhabitants of the country districts of South Africa, is the Dutch name for farmer. The English word "boor" originally had the same significance.

Bohemia (*bō-hē'-mĭ-ȧ*). The country of the Boii. The inhabitants were called by Tacitus *Bohemi*.

Bois de Boulogne (*bwä dŭ bōō-lôn'-yŭ*). A park in Paris reached by the Champs Elysées, the avenue of the Grande Armee, or the avenue of the Bois de Boulogne. It literally means "Boulogne wood."

Bois de la Brigade de Marine, or **Marine Brigade Wood,** formerly Bois de Belleau, a forest near Château Thierry, France, where in June, 1918, a force of American marines halted the German advance on Paris. To commemorate this heroic achievement the French staff renamed the wood in their honor.

Bois de Vincennes (*bwä dŭ văn-sĕn'*). A public park in Paris larger than the Bois de Boulogne. It contains a farm for agricultural experiments, a drill-ground, and a race-course. Literally, "wood of Vincennes."

Boise (*boi'-zā*), **City, Idaho.** From the river on which it was located, the latter named by the French *Rivière Boisé*, "woody river."

Bokhara (*bō-kä'-rȧ*). The treasury of sciences, or "town of learning"; the chief town in a State of the same name.

Bolivia (*bō-lĭv'-ĭ-ȧ*. Spanish, *bō-lē'-vē-ä*). To perpetuate the memory of General Simon Bolivar, "the liberator of Peru."

Bologna (*bō-lōn'-yä*), and **Bologne.** Named from the Boii, originally *Bononia*.

Bolsheviki (*bōl'-shĕ-vē-kē'*). A Russian word meaning "belonging to the majority." Originally the radical wing of the Socialist Democratic party in Russia, which in 1917, after uniting with other radicals under the leadership of Lenine and Trotzky, overthrew the Kerensky régime and seized control of the government.

Bombay (*bŏm-bā'*). Named after an Indian goddess *Bambâ*, but translated by the Portuguese into *Buon-bahia*, "good bay."

Boniface (*bŏn'-ĕ-fās*). From the Latin *Bonifacius*, name of several popes; this, in turn, from *benefacio*, "to do good," hence, a "well-doer." *Danish*, Bonifacius; *Dutch*, Bonifacius; *Fr.*, Boniface; *Ger.*, Bonifaz, or Bonifacius; *It.*, Bonifacio; *Lat.*, Bonifacius; *Sw.*, Bonifacius.

Bordeaux (*bôr-dō'*). Literally means "the dwelling on the water"; *borda*, "a dwelling."

Borghese (*bōr-gā'-zā*) **Palace.** A famous Roman palace, seat of the Borghese family, and noted for its art collections. It was built toward the end of the Sixteenth Century by Martino Lunghi and Flaminio Ponzio.

Borgne (*bôrn'y'*) **Lake, La.** French word, meaning "blind of one eye," or "one-eyed," application never been explained; the legendary derivation is that some peculiar modern cyclops was encountered on its shores. The word also bears the translation of "dingy," which no doubt is the cause of the use of the word, given from a local first impression.

Borneo (*bôr'-nē-ō*). Comes from the Malay *Brunei*, once the name of the largest city on the island, and changed by the Portuguese to Borneo.

Bosnia (*bŏz'-nĭ-ȧ*). The country traversed by the river Borna.

Bosporus (*bŏs'-pō-rŭs*). A Greek term composed of *bous*, "an ox," and *poros*, "a ford," alluding to the legend that when Io was transformed into a cow she forded this strait. Hence the popular meaning, "The passage of the ox."

Boston (*bôs'-tŏn, bôs'-tŭn*). City in Massachusetts. By some authorities the name is said to have been given in honor of John Cotton, vicar of St. Bodolph's church in Boston, Lincolnshire, England, and one of the first clergymen in the American Boston. Others say it was named before the arrival of John Cotton, for three prominent colonists from Boston, England. The tracing for the word Boston elicits that in the Seventh Century a pious monk known as St. Botolph or bot-hopl (boat-help) founded a church in what is now Lincolnshire, in England. A town grew up around it, which was called Botolph's Town. This was con-

tracted into Botolphston, Bot-os-ton, finally Boston. Boston, Mass., owing to its hills, was called by the English *Trimountaine* or *Tremont*, "three hills" (Beacon, Kopp, and Fort Hills); at a court held in Charlestown, September 17 (N. S.), 1630, "It is ordered that Trimountain shall be called Boston." Indian name of locality *Shawmut*, an abbreviation of *Mushancoonmuk*, variously translated as "living fountains," "free lands or unclaimed lands."

Botany Bay. So called by Captain Cook from the great variety of plants which he found growing on its shores when exploring it in the year 1770.

Bramapootra (*brä-mȧ-pōō'-trȧ*). River of India, of Sanskrit origin, meaning "the offspring of Brahma," or "Brahma's son."

Brandenburg (*brän'-dĕn-bo͝org*). A former margravate and electorate of the German Empire, the nucleus of the kingdom of Prussia. The name means "forest fortress."

Brandywine River, Penn. Called by the first settlers the Swedes, *Fish-kiln*, "fish creek." Its present name is ascribed by tradition to the loss of a Dutch vessel laden with brandy, or *brand-wijn*. Other authorities derive it from Andrew Braindwine, who owned lands near its mouth, in early days. A third theory is that the slough near Downington discharged its muddy waters into the creek, tinging it the color of brandy. A celebrated battle was fought there, which accounts for the name being given to eight places in the country.

Brasenose (*brāz'-nōz*), **College.** The term *brazennose* or *brasenose* is a corruption of the word *brasen house*, or "brewing house."

Brazil (*brȧ-zĭl'*). Named from the color of its dye-woods, *braza*, "a live coal."

Brazos (*brä'-zōs*) **River, Tex.** As named by the Spaniards *Brazos de Dios*, "arm of God." The Spaniards established a mission on its banks some thirty miles from the mouth of the San Saba, and the guard having been called away, the Indians descended on the mission, completely destroying it. When the soldiery returned their loss was quickly discovered, and searching for a solution they found in the river many of the dead bodies of the depredators, still floating in its eddies; as they could discern no marks of violence they pronounced it a retributive miracle done by the "arm of God." The river then received its name of *Brazos de Dios*.

Brenner (*brĕn'-nĕr*) **Pass.** The lowest pass over the main chain of the Alps. It is situated in the Tyrol about twenty-five miles south of Innsbruck; has been used since Roman times; is traversed by a railway (since 1867), and is the main line of travel between Italy and Germany. Height, 4,485 feet.

Breton (*brĕt'-ŭn*) **Cape.** Discovered by mariners from Brittany.

Brian (*brī'-an*) or **Briant.** Names derived from the Irish name Brain, which has been rendered "warrior of great strength" (*bri-an*). According to some it has been Anglicised to Bernard.

Bridget (*brĭj'-ĕt*). Mr. Arthur derives this female name from Gaelic *brighid*, "fiery dart" or "shining bright," and he says the Gaelic word signifies also a hostage; Armstrong renders *brighide* "a hostage." *Danish*, Birgitte; *Dutch*, Brigetta; *Fr.*, Brigitte; *Ger.*, Brigitta; *It.*, Brigida, or Brigita; *Lat.*, Brigida; *Sp.*, Brigida.

Brighton (*brī'-tŭn*). Formerly Brighthelmston, from a personal name. A city and watering-place in Sussex, England, situated on the English Channel. It is the leading seaside resort in Great Britain.

Bristol, R. I. From the town of same name in England. Derived from Anglo-Saxon words *bris*, "bright," *stol*, "place."

Britain (*brĭt'-ăn* or *brĭt'-n*). From *brith*, meaning "to paint." The British poets called it *Inis gwyn*, "white island," which answers to the Roman name *Albion*. It is said that it was known to the Phenicians as *Barat-Anac*, or "the land of tin," as far back as the year 1037 B. C. Some five hundred years afterwards the island was alluded to by the Romans under the name of Britannia, which subsequently became shortened into Britain.

British Columbia. The only portion of North America that retains the name of the discoverer of the New World, with the exception of the District of Columbia.

British Museum. A celebrated museum at Great Russell Street, Bloomsbury, London, founded in 1753.

Brittany (*brĭt'-tȧ-nĭ*). In French, *Bretagne*, comprised the land appropriated by the kings of Britain, and was originally called *Armorica*, a Celtic name meaning the land "by the sea."

Broad River, S. C. The Indian name given by the Catawbas was Eswan Huppeday, or "Line River," because it was the established line between the Cherokees and Catawba tribes.

Broadway. The principal business street of New York, extending from Bowling Green northward to Central Park for about six miles.

Brocken (*brŏk'-ĕn*), or **Blocksberg** (*blŏks'-bĕrg*). The chief summit of the Harz Mountains, and the highest mountain in northern Germany, situated in the province of Saxony, Prussia. It is the Roman *Mons Bructerus*.

Bronxville. Village in Westchester County, New York. Named for Jonas or Jacob Bronck, an early settler.

Brooklyn. City in New York, corruption of the Dutch name Breuckelen, from a village in the province of Utrecht, Holland. The name signifies "broken up land, or marshy land."

Bruges (*brū'-jĕz*. French, *brüzh*). In Belgium, "a city with many bridges"; *brücke*, "a bridge."

Brussels (*brŭs'-sĕlz*), or **Bruxelles.** Meaning "the seat or site on the marsh"; *broek*, "a marsh," and *seli*, "a house."

Bryan. Same as Brian.

Bucharest (*bū-kā-rĕst'*). From an Albanian word, *bucurie*, "pleasure, joy," hence, "the city of enjoyment."

Buckingham (*bŭk'-ĭng-ŭm*). A tribe name, or "the dwelling among beeches"; *buche*, "the beech tree"; *ham*, "a home or family dwelling."

Buckingham Palace. The London residence of the sovereign, situated at the western end of St. James's Park.

Buda (*bōō'-dȧ*). In Hungary, took its name from Buda, the brother of Attila, as well as Bud-var and Bud-falva, meaning "buda's fort and village," *buda*, "a hut or dwelling."

Buenos Ayres (*bō'-nŭs ā'-rĭz* or *ârz.*) Meaning "good breezes," *buen*, "good."

Buffalo. A city in New York, named from the stream "Buffalo Creek, on which it is located, the stream receiving its name from the frequent visits of the American bison to a salt spring which welled up about three miles from its mouth, 'where the buffalo drinks.'" Indian name of the locality *Teosahwa* or *Teshuway*, "the place of the basswood," also *sisŭlichanne*, "waters sought by the buffaloes." The name has been given to counties in Nebraska, South Dakota, and Wisconsin, numerous creeks, rivers, towns, and villages.

Bulgaria (*bo͝ol-gā'-rĭ-ȧ*). A corruption of *Volgaria*, meaning the "country peopled by the Volsci." The Greeks called these people *Bulgars*, hence the name.

Burlington House, Old. A house standing between Bond Street and Sackville Street, London, named for Lord Burlington, by whom it was built.

Butte (*būt*). City in Montana, named from a bare butte overlooking the place. The word is French, meaning "small knoll or hill."

Buzzard's Bay, Mass. Waters discovered by Gosnold, May 21, 1602, and by him named "Bay of Hope." Indian name *Manomet*.

Cadillac (*kăd'-ĭl-ăk*. French, *kā-dēl-yăk'*). City in Wexford County, Michigan, named for La Motte (or La Mothe) Cadillac, who established a fort on the Detroit River in 1701.

Cadiz (*kā'-dĭz*. Spanish, *kā'-thēth*). From *Gadr*, meaning "an enclosure, a city, or fortified place," and *kir*, "a wall."

Cæsar (*sē'-zär*). Some translate this name "hairy"; Schlegel says from Sanskrit *kesa*, "adorned with hair." It is more probably, however, of Persian origin, and comes from the Persian *sar*, "head, highest, greatest, chief."

Cairo (*kī'-rō*), a corruption of the Arabic *Al-kâhirah*, "the victorious," so called because Kâhir (Mars), the planet of victory, was visible on the night when the city was founded.

Cairo (*kā'-rō*), **Ill.** A local fancied adoption from the Egyptian city Cairo, in its being a sister location, namely, at the mouth of a large river.

Calais (*kà-lē'*), in Middle Latin Calalea or Calesis. A noted seaport and fortress of France, situated on the strait of Dover near its narrowest part. While only a fishing village in the ninth century, it was greatly enlarged and improved by Baldwin IV. in 997 and by the count of Boulogne in 1224. In 1347 it was captured by the English who developed it into an important trade center, retaining possession until its recapture by the French in 1558.

Calcutta (*kăl-kŭt'-tà*). Called *Kalkatta* in early annals. Is supposed to be a corruption of the Indian name *Kali-Kata*, the "dwelling or sacred place of Kali," the wife of Siva.

Caleb. From the Hebrew *Kalebh*, "a dog."

California. Most authorities derive it from the two Spanish words, *calienie fornalia*, i. e., "hot furnace," given by Cortez in the year 1535 to the peninsula now known as Old or Lower California, of which he was the discoverer, on account of its hot climate. H. H. Bancroft, in his History of California, says the name was first given to the Gulf, then to Lower California.

Calton (*kôl'-ton*) **Hill.** A height in the northeastern part of Edinburgh.

Calumet (*kăl'-ū-mĕt*). River in Illinois and Indiana, county and village in Wisconsin, and seven other places in the country. A Canadian corruption of the French *Chalemel*, which literally means "little reed," but which, in its corrupted form, refers to the "pipe of peace" used by the Indians to ratify treaties. Haines derives the word from *calamo*, "honey wood."

Cambrai (*kăm-brā'*; Fr. *kăn-brĕ'*). A town on the Scheldt, in the department of Nord, France, about 120 miles northeast of Paris. The ancient town was known to the Romans as Cameracum and was then an important city of the Nervii. The modern city is celebrated for the manufacture of Cambrai which derive their name from it. Among its noted buildings are a magnificent town hall, and a fine cathedral in which Fénelon, celebrated bishop of Cambrai, is buried.

Cambria (*kăm'-brĭ-à*). The original name for Wales, so called on account of the Cmyri, or Kimri, who peopled it.

Cambridge (*kām'-brĭj*). City in Middlesex County, Massachusetts, so named for the English university town, after the general court decided to establish a college there. Twenty-two other places bear the name of the English town, two having the suffix "port" and one "springs." The English name is usually supposed to mean "the bridge over the river Cam," the real name of which is the Granta.

Camden, N. J. In honor of the distinguished English statesman, Earl of Camden (Cambden).

Camilla (*kà-mĭl'-là*). The feminine of Camillus. *Fr.*, Camille; *It.*, Camilla; *Lat.*, Camilla.

Camillus (*kà-mĭl'-lŭs*). Some translate this name "attendant at a sacrifice." The Roman name was probably corrupted from the Arabic, *Kasen-El*, signifying "oracle of God."

Campagna di Roma (*kăm-păn'-yà dē rō'-mà*). A large plain in Italy, surrounding Rome, lying between the Mediterranean and the Sabine and Alban mountains.

Campanile (*kăm-pà-nē'-lā*) **of Giotto.** A famous tower near the Duomo, at Florence, Italy, begun by the architect, Giotto, in 1334, and after his death, in 1337, continued by Andrea Pisano.

Canaan (*kā'-năn*). The "Land of Canaan" is interpreted to mean "lowland," from Semitic *kana*, "to humble," "subdue," generally denoting in the Old Testament the country west of the Jordan and the Dead Sea extending to the Mediterranean. Originally, it comprised only the strip of land, from ten to fifteen miles in breadth and 150 in length, shut in between the Lebanon and the Mediterranean, and extending from the Bay of Antioch to the promontory of the Cermal, i. e., southern Phenicia. Later, the name was extended to the whole territory west of the Jordan.

Canada (*kăn'-à-dà*). Called *La Nouvelle France* by the French settlers, is probably the native word *Kanata*, which means "a collection of huts or wigwams."

Canandaigua (*kăn-ăn-dā'-gwà*). Lake town in Ontario County, New York, and village in Lenawee County, Michigan. An Indian word, the derivation of which is in dispute. Morgan defines it as "a place selected for settlement," a "chosen spot"; Haines, "a town set off." Others have thought the word to be derived from *Cahnandahgwah*, "sleeping beauty," while another theory is that it is corrupted from the Seneca Indian, *Genundewahguah*, "great hill people," so called from a large hill near the lake.

Canaveral (*kà-năv'-ĕr-ăl*) **Cape, Fla.** Named by the Spaniards; a Spanish word meaning "the land of the rose tree."

Candia (*kăn'-dĭ-à*). From the Arabic *Khandae*, "the island of trenches."

Canterbury (*kăn'-tĕr-bĕr-ĭ*). A corruption of the Anglo-Saxon *Cantwarabyrig*, "the forts or strongholds of the Cantwere, or men of Cant" (Kent).

Cape Colony. A British colony in South Africa is so called after the parent settlement at Cape Town, which dates from the year 1826.

Cape Fear River, N. C. Was originally named by the English *Charles* River. Afterward the name of Cape Fair River was adopted from the Atlantic cape of that name, the stream being located by navigators as "coming in back of Cape Fair." Subsequently corrupted to *Fear*.

Cape Horn. The most southern point of South America was called Cape Hoorn by Schonten, who first rounded it in 1616, after Hoorn, his native place in North Holland.

Cape May, Va. Was so named by the Dutch commander, Captain Cornelius Jacobse May.

Cape of Good Hope. Discovered by Bartholomew de Diaz in 1487, was so named (Cabo de Bon Esperance) by John II., King of Portugal, who, finding that Diaz had reached the extremity of Africa, regarded it as a favorable augury for future maritime enterprises.

Capitoline (*kăp'-ĭt-ŏl-īn*) **Hill, The.** One of the seven hills of ancient Rome, northwest of the Palatine, on the left bank of the Tiber, on which the Capitol was erected. After the construction of the Servian wall it constituted the citadel of the city. On its southwestern summit was the famed Tarpeian Rock; on its northeastern summit rose the temple of Jupiter Capitolinus. The modern capitol stands between the two summits. From the Capitoline the Forum Romanum extends its long, narrow area toward the southeast, skirting the northern foot of the Palatine.

Capri (*kā'-prē*). Signifies "the island of goats," being derived from the Latin *caper*, a he-goat.

Caribbean (*kăr-ĭb-bē'-ăn*) **Sea.** Washes the territory of the Caribbs, whose name means "cruel men."

Carnatic. From Sanskrit, *Karnāta*, S. India tribe.

Carolina (*kăr-ō-lī'-nȧ*). Name given to two States, North and South Carolina. Near the middle of the Sixteenth Century, Jean Ribault visited the region and named it Carolina in honor of his king, Charles IX. of France, but the name never came into general use and soon disappeared. About 1628, this name was applied definitely to that part of the country lying between Virginia and Florida, having been given in honor of Charles I. of England. In an old manuscript, now in London, the following may be found; "1629–30, Feb. 10. The Attorney-General is prayed to grant by Patent 2 Degrees in Carolina," etc. In 1663, the name was definitely applied to the province granted to proprietors by Charles II. of England. This province was named in honor of the reigning king, and thus the old name given in honor of Charles I. was retained.

Caroline (*kăr'-ō-līn* or *lĭn*). From Carolus, from root of Charles. *Danish*, Caroline; *Dutch*, Carolina; *Fr.*, Caroline; *Ger.*, Caroline or Karoline; *It.*, Carolina; *Lat.*, Carolina; *Sw.*, Karolina.

Caroline Islands. Discovered by Lopez de Villalobos in 1543, and named after Charles V., Emperor of Germany and first king of Spain.

Carpathians (*kăr-pā'-thĭ-ănz*). The range of mountains north of Hungary, is a name derived from *Krapat* or *Karpa*, the local name of the main chain, which is explained by the Slavonic root *chrb*, signifying a "ridge" or "range of hills."

Carrara (*kă-rär'-ȧ*). A town in the province of Massa-e-Carrara, Italy. It is famous for the neighboring quarries of marble.

Carrie, Carry. Female names corrupted from Caroline.

Carson City, Nevada. In honor of Christopher Carson; or, as more widely known, "Kit" Carson, the noted frontiersman and hunter.

Carthage. From *Kartha-hadtha*, "the new city," in opposition to Utica, "the old."

Casa d'oro (*kä'-sä dō'-rō*). A noted palace of the Fourteenth Century. It has been marred by restoration. It has three stories, divided vertically into two divisions. The left-hand division has in the lowest story five open arches, the middle one round, and in the two upper ones most rich and graceful foliated arcades set between larger arches. The right-hand division consists of ornamented paneling, also set between decorated arches. Above there is a picturesque cresting in marble. To beauty of form this façade adds great and diversified charm of color in its incrusted and inlaid marbles.

Casco Bay, Me. From an Italian word, meaning "crane." Hence "Crane Bay."

Casper. See Jasper.

Caspian (*kăs'-pĭ-an*). The European name of the great inland sea of Asia, was so called by the Greeks from the Caspii, a tribe who, in the time of Herodotus, dwelt on its western shore, probably in the district of Jasp, which is supposed to preserve their name.

Cassandra (*kăs-săn'-drȧ*). Mr. Arthur translates this name "inflaming one with love." It is feminine of the Greek *Kassandros*. *Fr.*, Cassandre; *It.*, Cassandra; *Lat.*, Cassandra.

Catawba River, N. C. So named from the "Catawbaws," a tribe of Indians.

Catawissa (*kăt-ȧ-wĭs'-sȧ*) **River, Pa.** From the Delaware Indian word Gattawissa, "getting fat."

Catharine (*kăth'-ȧ-rĭn*). The real name of Catharine of Alexandria, the patron saint of girls and virgins, was Dorothea. St. Jerome says she had the name of Catharine from the Syriac *kethar* or *kather*, "a crown," because she wore the triple crown of martyrdom, virginity, and wisdom. The proper derivation of the word is from the Greek *Katharos*, "pure"; and, therefore, the correct spelling of the name is Catharine or Katharine. *Danish*, Catharine; *Dutch*, Catharina; *Fr.*, Catherine; *Ger.*, Katharine; *Gr.*, Katharine; *It.*, Caterina; *Lat.*, Catharina; *Russ.*, Ekaterina, or Yekaterina; *Sp.*, Catalina; *Sw.*, Katarina.

Catskill Mountains, N. Y. Name originally applied to the river (Kill) by the Dutch, and transferred to the mountains, *Katskill*, "panther creek," from the numerous panthers or lynxes (cat-like animals) formerly infesting the hills. The mountains were called Katsbergs by the Dutch.

Cattaraugus (*kăt-tȧ-rô'-gŭs*) **River, N. Y.** From an Iroquois Indian word, which may be translated, "bad spelling shore."

Cavaliers. The adherents of Charles I. and Charles II. during the civil war; also called Royalists.

Cayuga (*kā-yōō'-gȧ*). County, village, and lake in New York. Indian word, the derivation of which is in dispute. The generally accepted theory is that it means "long lake," having been originally applied to the lake, which is thirty-eight miles long and from one to three and one-half miles wide. Morgan derives it from *Gweugweh*, "the mucky land," while others say that it signifies "canoes pulled out of the water." One of the six nations of Indians was so called. Six small places in the country bear this name.

Cazenovia (*kăz-ē-nō'-vĭ-ȧ*). Lake and town in Madison County, New York, named by its founder, Col. John Lincklaen, for Theophilus de Cazenove, general agent of the Holland Land Company.

Cecil (*sē'-sĭl, sĭs'-ĭl, sĕs'-ĭl*). A male name derived from the Latin *Cecilus* or *Cæcilius*, a diminutive of *cæcus*, "blind," or "dim-sighted." Cecil is also found as a female name. *Dutch*, Cecilius; *Fr.*, Cecile; *Lat.*, Cæcilius.

Cecilia (*sē-sĭl'-ĭ-ȧ*). A baptismal name derived from Cæcilia, feminine of Cæcilus. See Cecil. *Dutch*, Cecilia; *Fr.*, Cécile; *It.*, Cecilia; *Lat.*, Cæcilia.

Celestial Empire. Applied to the Chinese Empire, because its legendary rulers were all celestial deities.

Central Park. The principal park in New York, extending from 59th Street to 110th Street, and from Fifth Avenue to Eighth Avenue. It was designed by Olmsted and Vaux, and contains besides numerous drives, the Mall, the Croton Reservoirs, Cleopatra's Needle (the Obelisk), the Metropolitan Art Museum, etc. Length two and one-half miles; area, about 840 acres.

Certosa (*chĕr-tō'-sȧ*). A former Carthusian monastery, at Pavia, Italy, one of the largest and most splendid existing.

Ceylon (*sē-lŏn'*). Hindustani *Silan* is derived from Pali *Sihalana* (Sanskrit *Sinhala*), "the land of lions," from *sinha*, "a lion." Its Aryan inhabitants were called *Sinhalas*. The old Sanskrit name of Ceylon is *Lanka*. Marco Polo calls it *Seilan*, whence the Portuguese forms *Cilan* and *Ceilão*, from the last of which comes the English term Ceylon.

Champ de Mars. (*shän-dŭ-märs'*). In early French institutional history, an annual political and military assembly, held in March. The time of meeting was changed to May in the Eighth Century, and thereafter these assemblies were called "Champs de Mai."

Champlain (*shăm-plān'*. French, *shän-plăn'*), **Lake, N. Y.** By its discoverer Samuel de Champlain, in 1609. Indian name *Canaderi-Guarante*, "mouth or door of the country." Allusion to the north entrance of the lake. In the Abenaqui tongue, called Petawa-bouque, "alternate land and water," alluding to its numerous islands. Iroquois name *Andiatora*.

Champs-Elysées (*shän-zā-lē-zā'*). An avenue, and the gardens surrounding it, in Paris, extending from the Place de la Concorde one and one-fourth miles to the Place de l'Etoile, celebrated as a place of public resort. It was acquired by the crown in 1616, and ceded to the city in 1828.

Charing Cross (*chăr'-ĭng krôs*). A cross in

memory of Queen Eleanor, erected by Edward I., one and one-fourth miles west-southwest of St. Paul's, London. It was demolished by the Long Parliament, in 1647, and restored by the South Eastern Railway Company, in 1865.

Charles. From the Teutonic, meaning "manly" or "noble spirited." *Danish*, Carl; *Dutch*, Karel; *Fr.*, Charles; *Ger.*, Karl; *It.*, Carlo; *Lat.*, Carolus.

Charles Cape, Va. So named in April, 1607, by Admiral Newport, in honor of "baby" Charles, son of James I., afterward King Charles I., of England.

Charleston, S. C. In honor of Charles II. of England, original settlement being called Charles Fort. The name of Charleston substituted in 1783.

Charleston, W. Va. Originally known as "Clendman's Settlement" and "The Town at the mouth of the Elk." December 19, 1794, the name of *Charlestown* was fixed by the Virginia Legislature, but from some cause unknown, through common consent it was changed to *Charleston*. The name Charlestown was given by George Clendman, its founder, in honor of his father Charles.

Charlotte (*shär'-lŏt*). From the Teutonic, meaning "noble-spirited."

Charlotte, N. C. A compliment to Princess Charlotte of Mecklenburg.

Charlottenburg (*shär-lŏt'-tĕn-bo͝org*). A city in the province of Brandenburg, Prussia, named from a palace built for Charlotte, wife of Frederick I. It is situated on the Spree, three miles west of Berlin. It contains the tombs of the Hohenzollerns, a technical school, and a porcelain factory.

Charlottesville. City in Virginia, named for Charlotte Augusta, Princess of Wales.

Charterhouse. The name of the Charterhouse, a famous school in London, is a corruption of the word *Chartreuse*, that is, "Carthusian." The Charterhouse was originally a Carthusian monastery founded in 1371, but was seized by Henry VIII. The present institution was founded by Sir Thomas Sutton, in 1611.

Chartists (*chär'-tĭsts*). A body of political reformers, chiefly working men, that sprang up in England about the year 1838. They disappeared as a party after 1849.

Chateau Thierry (*shă'-tō'-tyĕ'-rē'*). A historic town in France, situated on the Marne, 59 miles northeast of Paris. It takes its name from the ruins on nearby heights of a castle said to have been founded about 720 by Charles Martel in honor of Thierry IV. Its strategic position has exposed it to a long series of disasters in war. Chateau Thierry was captured by the English in 1421, by Charles V. in 1545, by the Spanish in 1591, suffered pillage in the Fronde wars, 1652, and was severely damaged in the Napoleonic campaign of 1814. The town was almost completely destroyed during the terrific battles of June, 1918, in which American troops, chiefly marines, thrust back the last great German attack on Paris.

Chatsworth (*chăts'-wĕrth*). A celebrated mansion in Derbyshire, England. The interior is adorned with painting and sculpture, and contains a splendid collection of drawings by the old masters, some fine old and modern paintings, a Venus by Thorwaldsen, and Canova's Napoleon, Madame Letitia, and Endymion.

Chattahoochee (*chăt-tà-ho͞o'-chē*) **River.** Translated "figured or painted stone," from the Indian *Chatehoche, chateo*, "stone," *hoche*, "marked or figured."

Chattanooga (*chăt-tà-no͞o'-gà*). City in Hamilton County, Tennessee, and creek in Georgia. From the Cherokee Indian word, meaning "crow's nest" or "eagle's nest."

Chaucer's Inn, the "Tabard." This old London tavern, immortalized by Chaucer as the "Tabard," was burnt down in the great fire of 1676. Upon its restoration the name was changed to the "Talbot," or Dog, which name it retained until about 1873, when it was demolished.

Chautauqua (*shà-tô'-kwā*). A village and summer resort situated on Chautauqua Lake, in western New York; noted as the seat, since 1874, of the Chautauqua Assembly. An Indian word which has been the subject of much controversy. Webster says it is a corruption of a word which means "foggy place." Another derivation gives the meaning as "bag tied in the middle," referring to the shape of the lake. It is also said to mean "place where a child was washed away." Dr. Peter Wilson, an educated Seneca, says it is literally "where the fish was taken out." Other meanings given are "place of easy death," "place where one was lost."

Cheapside (*chēp'-sīd*). The central, east-and-west thoroughfare of the city of London, originally a large open common. Formerly the road which skirted the West Cheap, or market place, was distinguished from the East Cheap. The West Cheap was a spacious open area from which there branched streets of booths and shops of the type made familiar by revivals of Old London. Cheap*side*, of course, ran by the side of the market-place.

Cheboygan (*shē-boi'-găn*). River, county, and city in Michigan. An Indian word, variously interpreted. Haines says it is composed of two words, *che*, "great," and *poygan*, "pipe." Another derivation gives the meaning, "the river that comes out of the ground." The Michigan Historical Society gives *Chabwegan*, "a place of ore."

Chemung (*shē-mŭng'*) **River.** Indian word, signifying "big horn," or "horn-in-the-water"; called by the Delawares *conongue*, a similar signification to the Iroquois.

Chenango (*shē-năng'-gō*) **River, N. Y.** From an Iroquois word, *ochenung*, "bull thistles."

Chepstow (*chĕp'-stō*). A town in Monmouthshire, England, situated on the Wye, thirteen miles northwest of Bristol. It contains the ruins of Chepstow Castle, a fortress of the Thirteenth and Fourteenth Centuries, with high walls and massive cylindrical towers.

Chesapeake (*chĕs'-à-pēk*). Bay in Maryland which gives name to several places in the country. An Indian name variously explained. Heckewelder says it is corrupted from *Tschischwapeki*, which is compounded of *kitshi*, "highly salted," and *peek*, "a body of standing water, a pond, a bay." Others give *che*, "great," and *sepi*, "waters." Bosman interprets it as "mother of waters." W. W. Tooker says that the early form was Chesopiooc, from *k'che-sepi-ack*, "country on a great river." The waters were called by the English, Bay of St. Mary.

Chester, Caster, Cester. Places whose names terminate with any of these words were sites of castles built by the Romans in Great Britain.

Chesuncook Lake, Me. Indian, meaning "the goose place." *Chesunk*, "a goose," *auke*, "a place." *Chesunk* or *Schunk* being the sound made by a wild goose when flying.

Cheyenne (*shī-en'*). Counties in Colorado, Kansas, and Nebraska, mountain in Colorado, rivers in Nebraska and South Dakota, city in Laramie County, Wyoming, and several small places named for the Indian tribe. The word is probably a corruption of the French *chien*, "dog," applied by some neighboring tribes to those at present known as Cheyennes. It was the custom for Indians to call themselves by the name which signified "men" and to call neighboring tribes by some opprobrious epithet. The word was doubtless introduced by the early French traders.

Chianti (*kē-ăn'-tē*). A group of mountains near Siena, Italy, in Tuscany. It gives name to celebrated wines.

Chicago (*shĭ-kô'-gō*). City and river in Illinois. The origin of the word is from the Indian, being a derivation by elision and French annotation from the word *Chickaugong*. Col. Samuel A. Starrow used the name in a letter to Gen. Jacob Brown, in

1816, as follows: "The river Chicago (or in English, 'Wild Onion River')." Schoolcraft in 1820 said: "Its banks produce abundantly the wild species of cepa or leek." Bishop Baraga gives: "From Chicag, or Sikag, 'skunk,' a kind of wild cat." John Turner defines skunk as *she-gahg*; onion, *she-gau-za-winzhe*, "skunk weed." When the word first appeared the country was inhabited by a tribe of Miamis, in whose dialect the word for skunk was "*se-kaw-kwaw*." Father Ferhorst gives the origin as *che-cag-wau*, a "place where skunks abound."

Chickahominy (*chĭk-ā-hŏm'-ĭ-nĭ*). River in Virginia, which, according to De Vere, is named from the Indian word, *Checahaminend*, "land of much grain," so called because it flows through fertile lowlands. Heckewelder, however, says that it is corrupted from *Tschikene-mahoni*, "a lick frequented by turkeys."

Chickamauga (*chĭk-ā-mô'-gā*) **River, Tenn.** From a Cherokee Indian word, meaning "river of death."

Chicopee (*chĭk'-ō-pē*), **Mass.** An Indian word, meaning "the birch-bark place," or "the cedar trees."

Chili (*chĭl'-ĭ*) or **Chile** (*chĭl'-ē*). A Peruvian name denoting "land of snow."

Chillicothe (*chĭl-ĭ-kŏth'-ē*). Cities in Ohio and Illinois, and towns in Wapello County, Iowa, and Livingston County, Missouri, named from an Indian tribe. The word is said to mean "town" or "city."

Chillon (*shĭl'-ŏn*. French, *shē-yôN'*). A castle in Vaud, Switzerland, at the eastern end of Lake Geneva. It covers an isolated rock on the edge of the lake, and is a very picturesque combination of semicircular and square towers and machicolated curtains grouped about a higher central tower. It is famous in literature and song, especially as the prison of Bonnivard, a defender of Swiss liberties against the Duke of Savoy in the Sixteenth Century.

Chiltern (*chĭl'-tērn*) **Hundreds.** The Chiltern Hills are a range of chalk eminences, in England, separating the counties of Bedford and Hertford, and passing through the middle of Bucks, to Henley in Oxfordshire. They comprise the Hundreds of Burnham, Desborough, and Stoke. They were once infested by robbers. To protect the inhabitants from these marauders, an officer of the Crown was appointed, under the name of the "Steward of the Chiltern Hundreds." The duties have long ceased, but the office — a sinecure with a nominal pay — is still retained.

China. Is a Western corruption of Tsina, so called in honor of Tsin, the founder of the great dynasty which commenced in the Third Century B. C., when a knowledge of this country was first conveyed to the Western nations. It was this Tsin who began to build the great wall of China (or Tsin) to keep out the Barbarians.

Chippewa (*chĭp'-pē-wā, chĭp'-pē-wā*). River in Michigan and counties in Michigan, Minnesota, and Wisconsin, named from an Indian tribe. The word *ojibwa*, according to some authorities, means "puckered moccasins." Other explanations are "he overcomes," or "he surmounts obstacles."

Chloe (*klō'-ē*). A female name derived from the Greek, signifying a "green bud or germ," hence a "young shoot," "blooming," etc. The name, says Lemprière, is supposed to bear the same signification as Flava, so often applied to the goddess of corn, and from its signification has generally been applied to women possessed of beauty and simplicity. *Fr.*, Chloé; *Gr.*, Chloe; *Lat.*, Chloe.

Christabel (*krĭs'-tā-bĕl*). Not an uncommon female name. It would seem to be derived from Cristobal, the Spanish form of Christopher.

Christian (*krĭs'-chăn*). A male and female name, signifying a member of Christ. The disciples were called *Christians* first at Antioch.

Christiania (*krĭs-tē-ā'-nē-ā*). Named after Christian IV. of Denmark.

Christina (*krĭs-tē'-nā*). A female name; probably derived from the Spanish name Cristina, from root of Christian. *Dutch*, Christina; *Fr.*, Christine; *Ger.*, Christiana; *It.*, Cristina.

Christmas Island. So named because Captain Cook set foot upon it on Christmas Day, 1777.

Christopher (*krĭs'-tō-fẽr*). From the Greek name *Christophoros*, signifying Christ's bearer or carrier. As a Christian name, this is usually given to one born on Good Friday. *Danish*, Christoffer; *Dutch*, Christophorus; *Fr.*, Christophe; *Ger.*, Christoph; *Gr.*, Christophoros; *It.*, Christoforo; *Lat.*, Christophorus; *Port.*, Christovao; *Sp.*, Christoval; *Sw.*, Kristofer.

Cimarron (*sē-mär-rōn'*) **River, Okla.** Of Spanish derivation, meaning "wild," "unruly."

Cincinnati (*sĭn-sĭn-nă'-tĭ*). City in Ohio, laid out and named by Col. Israel Ludlow, in honor of an organization of officers formed after the Revolutionary War and named in honor of Cincinnatus, the Roman patriot. The original settlement was called *Losantiville*, which was a composite name. French, *ville*, "town," Latin *os*, "mouth," *anti*, "before," with L (initial letter of the Licking River), that is, "the town before or opposite the mouth of Licking River."

Cintra (*sēn'-trä*). A town in the district of Lisbon, Portugal, fifteen miles northwest of Lisbon. It contains the Cork Convent, a Moorish Castle, the Palace of the Pena and the Royal Palace.

Circassia (*sẽr-kăsh'-ĭ-ā*). Named from the country of the *Tcherkes*, a Tartar tribe who settled in the neighborhood of the river Terck.

Circleville, Ohio. From its original location within one of the Indian mounds bearing the shape of a circle.

Circus Maximus (*sẽr'-kŭs măk'-sĭ-mŭs*). Anciently occupied the hollow between the Palatine and the Aventine hills. According to tradition, the site was already used for athletic exhibitions and provided with wooden seats under Tarquinius Priscus. Under Cæsar and Augustus it was first largely built of stone, and splendidly adorned. It was rebuilt by Nero, and again by Domitian and Trajan, and in its final form is said to have accommodated 385,000 spectators.

Circus of Romulus or **Maxentius.** A Roman circus built in 311 A. D., the most perfect ancient circus surviving.

Clara (*klăr'-ā*). A modern form of Clare. *Danish*, Clara; *Dutch*, Clara; *Fr.*, Clara; *Ger.*, Klara; *It.*, Clara; *Lat.*, Clara; *Sw.*, Klara.

Clare. A name probably derived from St. Clare, a popular saint in England, a friend of St. Francis, and foundress of all the *Poor Clares*. The name occurs in many medieval calendars. It is probably derived from Latin *clarus*, "bright, fair."

Clarissa (*klā-rĭs'-sā*). From the French name Clarisse (*It.*, Clarice), from root of Clare.

Clarksville, Tenn. As an honor to Gen. Geo. Rogers Clark, a distinguished Revolutionary soldier.

Claude (*klôd*). From the Roman name *Claudius*, another form of Clodius, Latinized from Clodio; from Old German, *laut*, "celebrated, distinguished, illustrious."

Claudia (*klô'-dĭ-ā*). Feminine of Claudius. *Dutch*, Claudia; *Fr.*, Claudie; *It.*, Claudia; *Lat.*, Claudia; *Sw.*, Klaudia.

Clement (*klĕm'-ĕnt*). Like the classical name Clemens, derived from the Latin *clemens*, "mild, calm, gentle." *Danish*, Clemens; *Fr.*, Clément; *Ger.*, Clemens; *It.*, Clemente; *Lat.*, Clemens; *Sp.*, Clemente.

Clementia (*klē-mĕn'-shĭ-ā*). A female name formed from Clement.

Cleopatra (*klē-ō-pā'-trā*). Found as a female name in the parish registers of Nottingham, Eng-

land. So called from Cleopatra, queen of Egypt. It is derived from *kleos*, "glory, renown, fame," and *patra*, "one's native country," hence, "fame of her fatherland."

Cleopatra's Needles. A pair of Egyptian obelisks of pink granite which were transported from Heliopolis to Alexandria in the eighteenth year of Augustus. One of them was taken to London and set up on the Thames Embankment, in 1878, and the other was soon after brought to New York and erected in Central Park.

Cleveland, Ohio. In honor of General Moses Cleaveland of Connecticut, who had charge of the surveying of this region, acting as general agent for the Connecticut Land Company. No authority for present spelling.

Cloaca Maxima (*klō-ā'-kȧ măk'-sĭm-ȧ*). The chief drain of ancient Rome, built by Tarquinius Priscus about 600 B. C., and still serving its purpose. The outlet on the Tiber is an arch twelve feet high.

Clotilda (*klō-tĭl'-dȧ*). From the Old German *Clothildis*, name of a queen of France, signifying "distinguished and noble," or "illustrious noble" (*laut-hild*).

Cluny (*klū-nē'*), **Hotel de.** A former palace of the abbots of Cluny, situated on the Boulevard St. Michel, Paris.

Cochituate (*kō-chĭt'-ū-āt*), **Mass.** Indian word, meaning "land on or near falls," or "rapid streams."

Cod, Cape, Mass. From the fish its name implies, discovered and named by Bartholomew Gosnold, May 15, 1602. This was the first land in the United States trod by an Englishman. *Tamwock*, its Indian name, means "codfish."

Cœur d'Alene (*kĕr dȧ-lān'*). Lake and town in Kootenai County, Idaho; named from a tribe of Indians. French name, meaning "needle hearts" or "awl hearts." Some authorities say that this name was given to these Indians because the expression was used by a chief of the tribe to denote his opinion of the Canadian trappers' meanness. Rev. M. Eells says that the name was given to the tribe by members of the Hudson Bay Company, because of their sharpness in trade.

Cohasset (*kō-hăs'-sĕt*), **Mass.** Indian word, meaning "place of pines."

Cohoes (*kō-hōz'*), **N. Y.** Corruption of the Iroquois word *gahaoose*, "shipwrecked canoe," having reference to the falls in the Mohawk at this place.

Colin (*kŏl'-ĭn*). From *Nicolin*, a diminutive of Nicol, from Nicolas or Nicholas.

Colorado (*kŏl-ō-rä'-dō*). From the river, a Spanish word meaning "ruddy or red," the waters of the stream usually quite limpid and pure, but when swollen by heavy rains, they sweep down immense volumes of red sand, mud, and silicious pebbles. Indian name, *Pashahono*.

Colorado River, Texas. Spanish word, meaning "red," applied through color of its waters; when so named it must have been at high water, as at other times the water is clear; the name more appropriately applied to the *Brazos*, whose waters are always red or muddy.

Colosseum (*kŏl-ŏs-sē'-ŭm*) or **Flavian Amphitheater.** Probably so named from the colossal statue of Nero, which stood near it in the Via Sacra. An amphitheater in Rome, begun by Vespasian (T. Flavius Sabinus) in 72 A. D., and for 400 years the seat of gladiatorial shows.

Colossus of Rhodes. A gigantic statue in commemoration of the successful defense of Rhodes against Demetrius Poliorcetes in 304 B. C. It required twelve years for its completion, and cost $470,000. It represented the Rhodian sun-god, Helios; was over 105 feet high, and was considered one of the seven wonders of the Old World.

Columbia. So named in honor of Christopher Columbus. Applied through poetical justice to Columbus, and first used by Dr. Timothy Dwight (1752–1818) in a popular song written by him which began;

> "Columbia, Columbia, to glory arise,
> The queen of the world and the child of the skies."

Now applied to the District containing the national capital, to counties in Arkansas, Florida, Georgia, New York, Oregon, Pennsylvania, Washington, and Wisconsin, and rivers in Oregon and Washington. The river was named by Captain Gray for the vessel in which he entered its mouth.

Columbus, Ohio. A tribute to Christopher Columbus; the ground when originally selected in 1812 was for the purpose of locating homes for Canadians and Nova Scotian refugees, and the committee, through a sentimental simile selected the name *Columbus*, "as to him we are primarily indebted in being able to offer the refugees a resting place."

Conception. (*kŏn-sĕp'-shŭn*) **Cape, Cal.** Named from one of the vessels belonging to Cortez's expedition.

Concord (*kŏng'-kûrd*). Town in Middlesex County, Massachusetts, so called either from the Christian concord among the first company, or from the peaceful manner of its acquisition, having been purchased from the Indians.

Concord, N. H. Indian name of the land, *Pennacook*, of the stream *Musketicook*, "dead stream." Early English settlers named it Rumford, after a Benjamin Rumford; changed to Concord to commemorate an expression of unanimity in a land controversy.

Conemaugh (*kŏn-ē-mô'*) **River, Penn.** Indian word, meaning "otter creek."

Coney (*kō'-nĭ*). Island at the extremity of Long Island, New York, which is said by some to have been so named because of the numbers of rabbits there. Another theory ascribes it to the winds having driven the sand into truncated cones. It appears, however, to have been originally called *Congu*, which may suggest another derivation.

Connecticut (*kŏn-nĕt'-ĭ-kŭt*). River and State. An Indian name derived from *Quonoktacut*, meaning, according to some authorities, "a river whose water is driven in waves by tides or winds." Haines says, "land on the long tidal river." Other interpretations are, "on long river," "long river," and "the long, or without end river." It was called by the Dutch Versche River, "Fresh River."

Conrad (*kŏn'-răd*). From the Old German name *Cunrad*, which Wachter translates "quick in counsel." Others render the name "gifted in council." *Danish*, Conrad; *Dutch*, Könraad; *Fr.*, Conrad; *Ger.*, Conrad; *It.*, Corrado, or Curado; *Lat.*, Conradus; *Sw.*, Konrad.

Constance (*kŏn'-stănss*). From the Latin name *Constantia*, a feminine of Constantius, "constancy, steadfastness." *Dutch*, Constantia; *Fr.*, Constance; *It.*, Costanza; *Lat.*, Constantia; *Sp.*, Constancia.

Constantine (*kŏn'-stăn-tīn*). From the Latin *Constantinus*, "firm, resolute." *Danish*, Constantin; *Dutch*, Konstantijn; *Fr.*, Constantin; *Gr.*, Konstantinos; *It.*, Constantino.

Constantinople (*kŏn-stăn-tĭ-nō'-pl*). The Anglicised form of *Constantinopolis*, "the city of Constantine," the name given by Constantine to Byzantium when he made it the Eastern capital of the Empire. Stamboul, or Istambul, "at the city," is the modern Turkish name.

Cooper River, S. C. In honor of Sir Anthony Ashley Cooper, afterward Earl of Shaftesbury, one of the original charterers. The *Cooper* and *Ashley* uniting form the peninsula on which Charleston is situated.

Cooperstown. Village in Otsego County, New York, named for the father of James Fenimore Cooper, the novelist.

Copenhagen (*kō-pĕn-hā'-gĕn*). In Danish, *Kjobenhavn*, the capital of Denmark, is first mentioned in 1027, by the name Hofn, "the haven," and in

1043 it was still a mere fishing village. Owing to its position it became a great resort for merchants, and to distinguish it from other havens was called *Kongsmanna hafn* or *Kjobmannahavn*, names translated by Saxo Grammaticus in the Twelfth Century as Portus Mercatorum, the "haven of the merchants."

Cora. From the Greek *Kore*, "a girl, damsel."

Cordelia (*kôr-dē'-lĭ-a* or *kôr-dēl'-ya*). According to Rev. Edward Davies, from the Keltic. *Creiddylad*, "jewel of the sea." *Fr.*, Cordelie.

Cornelia (*kôr-nē'-lĭ-a* or *kôr-nēl'-ya*). A female name formed from Cornelius.

Cornelius (*kôr-nē'-lĭ-ŭs* or *kôr-nēl'-yŭs*). Latin name, translated by some, "horn." *Danish*, Cornelius; *Dutch*, Kornelis or Cornelis; *Fr.*, Corneille; *It.*, Cornelio; *Lat.*, Cornelius; *Sp.*, Cornelio.

Corniche (*kôr-nēsh'*). **The.** A celebrated coast-road along the Riviera of France and Italy from Nice to Genoa.

Cornwall. The ancient British name of this country was *Cernyw*, a name probably received from the Latin *cornu*, "a horn." The Romans, who traded here for tin, called it *Cornubia*, which name it bore until the Saxons imposed the name of *Weales* upon the British who retreated into the fastnesses west of the Severn and the Dee. The latter portion of the name Cornubia was then dropped, and the word Wales substituted, forming the name "Corn-Wales," of which the present Cornwall is a corruption.

Corsica (*kôr'-sĭ-kà*). A Phenician word denoting "the wooded island."

Corso (*kôr'-sō*). One of the principal streets of Rome. It extends for nearly a mile from the Piazza del Popolo, and is the chief scene of the annual carnival.

Coshocton (*kō-shŏk'-tŭn*). County and village in Ohio, named from the Indian town of *Goshocking*. The word means, according to some authorities, "habitation of owls." Heckewelder gives "forks of the Muskingum, or union of waters." Others say "finished small harbor."

Cosmo (*kŏz'-mō*). A name originating in Italy, where it became famous in Milan and Florence, from being borne by the family of the Medici (Cosmo di Medici). From the Greek *Kosmos*, "order," "the world"; so called from its regularity and beauty.

Costa Rica (*kŏs'-tà rē'-kà*). Literally, Spanish for "rich coast."

Cotswold (*kŏts'-wōld*) **Hills.** So named from the Anglo-Saxon *cote* and *wold*, as meaning a place where there are no growing woods.

Council Bluffs. City in Pottawattamie County, Iowa, so called from a council held near there by Lewis and Clarke with the Indians.

Covent Garden Theater. A theater in Bow Street, Covent Garden, London, built by John Rich, the famous harlequin of Lincoln's Inn Theater, in 1731.

Coventry (*kŭv'-ĕn-trĭ*). The name of this city is not derived from "convent," as some suppose, but from *Cune*, or *Coven*, the name of the stream on which it is built.

Cracow (*krā'-kō*). The town of *Krak*, Duke of Poland.

Creole (*krē'-ōl*). A creole is a person born in the West Indies or South America of *European parents*. The name is often erroneously applied to persons of mixed white and black parentage. There are distinct names for each degree of admixture.

Crimea (*krĭ-mē'-à*). Named from a small town established in the peninsula by the Kimri, or Cymri, and known to the ancient Greeks as *Kimmerikon*.

Cripplegate (*krĭp'-l-gāt*) or **Crepelgate.** An old London gate. It was the fourth from the western end of the wall. The original gate was probably built by King Alfred when he restored the walls, 886 A. D. Stow says that in 1010, when the body of Edmund the Martyr, king of the East Angles, was borne through this gate, many lame persons who were congregated there to beg rose upright and were cured by its miraculous influence.

Cris Kingle (*krĭs' king'-l*). Also variously spelled Kriss Kingle, and Kriss Kringle, has been corrupted from the German word, *Christ-Kindel*, meaning the "little *Christ-child*." Later uses, especially among German peoples, have identified the name with that of Santa Claus and Saint Nicholas.

Crown Point, N. Y. Alleged to be so named because scalping ("crown") parties were sent out from this place by the French and Indians. The proper adaptation is no doubt an allusion to royalty, namely, "land belonging to the crown."

Cuba (*kū'-bà*. Spanish, *kōō'-ba*). The largest island of the West Indies, discovered by Columbus in 1492, on his first voyage. The word *Cuba* seems to have been a general term meaning "district," since we learn from Las Casas that the district was called *Cuba nacan*, the "central province," from *cuba*, a "territory," or "province," and *nacan*, "middle."

Cumberland Mountains and **River.** Named by the English (1748) in honor of the Duke of Cumberland, at that time prime minister of England, name applied by Dr. Thomas Walker, an explorer. From Anglo-Saxon, *comb*, "a valley or low place," a land of hollows. The North Carolina section of the mountains, known to the Indians as Wasioto. The river known as the *Shawanee* and *Gelisipi*.

Currituck Sound, N. C. A tribe of Indians of that name, who lived on its shores.

Cuzco (*kōōz'-kō*). A department of Peru. It is from a native term, meaning the "navel," so called from its central position in the realm of the Incas.

Cynthia (*sĭn'-thĭ-à*). From Cynthia, a name of Diana; so called from Mount Cynthus, where she was born.

Cyprian (*sĭp'-rĭ-an*). From the Latin *Cyprianus*, "of Cyprus." *Dutch*, Cypriaan; *Fr.*, Cyprien; *Ger.*, Cyprian; *It.*, Cipriano; *Port.*, Cypriano; *Sp.*, Cipriano.

Cyprus (*sī'-prŭs*). Perhaps named from the herb *kupros*, with which it abounded; called by the Greeks *Cerastes*, "the horned."

Cyril, Cyrill (*sĭr'-ĭl*). From the Latin name Cyrillus, a diminutive of Cyrus, meaning "little Cyrus." *Danish*, Cyrillus; *Dutch*, Cyrillus; *Fr.*, Crilley; *It.*, Cirillo; *Lat.*, Cyrillus.

Cyrus (*sī'-rŭs*). From Greek *kūros*, "the supreme power." According to others it has the same signification as Carshena, "illustrious." *Fr.*, Cyrus; *Ger.*, Cyrus; *Gr.*, Kuros; *It.*, Ciro; *Lat.*, Cyrus; *Sp.*, Ciro.

Dahlonega (*dà-lō-nē'-gà*), **Ga.** From the Indian, *taulawneca*, "yellow wampum," from the discovery of gold at this place. The Government established a mint here at one time.

Daisy. A female name, derived from the flower, whose name in Anglo-Saxon signifies "day's eye."

Dakota (*dà-kō'-tà*). Two States — North and South Dakota — counties in Nebraska and Minnesoto, and several small places, named for the Indian tribe. The name was originally spelled *Dahkota* or *Dacorta*, which means "friend," "ally," "beleagued or united people," or "allied nation," the common name of the confederate Sioux tribes.

Dakota River, Dak. Named originally from the territory. The stream was called by the Dakotas *chaussnsan*, meaning "tumbling."

Dalilah. Another spelling of Delilah.

Daniel (*dăn'-yĕl*). From the Hebrew, *Daniyyel*, which has been variously translated "judge of God," "God's judge," one who delivers judgment in the name of the Lord. *Danish*, Daniel; *Dutch*, Daniel; *Fr.*, Daniel; *Ger.*, Daniel; *It.*, Daniele; *Lat.*, Daniel; *Sp.*, Daniel.

Dantzic (*dănt'-sĭk.* German, *dänt'-sĭch*). Usually supposed to be a corruption of *Dansk-vik*, "Dane's town", or "Danish fort."

Danube (*dăn'-ūb*). The English name of the great river which the Germans call the Donau is derived from the Roman name *Danubius* or *Danuvius*.

Dardanelles (*där-dà-nĕlz'*). The modern name of the Hellespont, is derived from two Turkish forts guarding the passage, called by the Italians, *Dardanelli*, a name derived from the old Greek city of Dardanus in the Troad.

Dauphin (*dô'-fĭn.* French, *dō-făN'*). A title formerly borne by the eldest son of the kings of France. In 1349, Humbert, the last of the princes of Dauphine, having no issue, left his dominions to the King of France on condition that the king's eldest son should be styled the Dauphin. After the revolution of 1830 the title was abolished.

David (*dā'-vĭd*). From the Hebrew *Daviydh*, signifying "beloved." *Danish*, David; *Dutch*, David; *Fr.*, David; *Ger.*, David; *It.*, Davide, or Davidde; *Lat.*, David.

Death Valley. A desert region in Inyo County, eastern California, near the Nevada frontier, lying about 160 feet below the sea-level.

Deborah (*dĕb'-ō-rà*). From the Hebrew, *D'bhorah*, which Jerome translates "a bee, or eloquence." *Dutch*, Debora; *Fr.*, Débora; *It.*, Debora; *Lat.*, Debora.

December, the twelfth month, from the Latin, *decem*, ten. Tenth month of the Romans.

Delaware (*dĕl'-à-wâr*) **River** and **Bay.** The name Delaware, first given to the bay by Capt. Samuel Argall, afterward Deputy Governor of Virginia, who came to this country in company with Lord de la Ware. After landing in Virginia he was sent out of the Chesapeake, June 19, 1610, for provisions, and "caste anchor in a verie greate baaye," August 27th, on which date he christened its waters. The bay being a widened mouth of the stream the name was afterward adopted to its source. It was also called by the English *Charles River*, in honor of the king.

Delft (*dĕlft*). This name for earthenware is derived from *Delft*, a town in Holland, where extensive potteries existed from A. D. 1300.

Delhi (*dĕl'-hē*) or **Dehli** (*dā'-lē*). From the Sanskrit, *dahal*, "a quagmire," or from the Hind. word *dil*, an "eminence."

Delilah (*dē-lī'-là*). From the Hebrew *D'liylah*, signifying "weak, delicate."

Demetrius (*dē-mē'-trĭ-ŭs*). From the Greek, *Demetrios*, "sprung from the earth," or "from Ceres"; *Fr.*, Demetrius; *It.*, Demetrio; *Lat.*, Demetrius; *Russ.*, Dmitri.

Denis (*dĕn'-ĭs*) or **Dionysius** (*dī-ō-nĭsh'-ĭ-ŭs*). From the Greek, "belonging to the god of wine." *Danish*, Dionysius; *Dutch*, Dionysius; *Fr.*, Denis or Denys; *Ger.*, Dionys; *Gr.*, Dionysios; *It.*, Dionigio; *Lat.*, Dionysius; *Sp.*, Dionisio.

Denmark (*dĕn'-märk*). Called Dan-mörk in the Sagas. In old Norse *mörk* means a "forest," and, as forests commonly formed the boundaries of tribes, we obtain such words as *mearc* in Anglo-Saxon and *marca* in Old High German, meaning a "marsh land" or "boundary." But *marca* in Old Saxon means a district, and in Modern Danish *mark* means a "field," "plain," or "open country." Hence, Denmark probably means the "forest of the Danes," a name parallel to that of Holstein, which also was densely wooded.

Denver, Colo. After James W. Denver, ex-Governor of Kansas. The name adopted upon the consolidation in 1860 of the towns of St. Charles and Aurora.

Derrick or **Dirck.** A name corrupted from Theodoric.

Des Moines (*dē-moin'*). River, county, and city in Iowa. This name is thought to have been derived from the Indian word, *mikonang*, meaning "the road." This name was applied by the Indians to a place in the form of *Moingona*, which the French shortened into *Moin*, calling the river "riviere des Moins." Finally, the name became associated with the Trappist monks, and the river by a spurious etymology was called "la rivière des moines," "the river of the monks."

Detroit (*dē-troit'*), **Mich.** From the river or strait on which the city is built. Derived from two French words, *detroit*, "the narrows."

Deuteronomy (*dū-tēr-ŏn'-ō-mĭ*). From two Greek words meaning *second* and *law*. The fifth book of Moses is so named from its being mainly a repetition or second edition of laws previously enunciated.

Devil. Many philologists declare that the name of God is derived from *Good Spirit*, shortened by long use to "good" or "god." In the Anglo-Saxon the word "god" is used in the sense of "good" as well as to designate the Almighty, and it is only known by the context which is intended. By a similar process, Satan may have been known as *the Evil Spirit*, which shortened by usage would become *the Evil*, or *th'evil*, easily corrupted into *Devil*. In Anglo-Saxon the word *yfel*, "evil," is suggestive of *deófol*, "the devil." The common synonyms of this word, *Old Nick*, *Old Scratch*, and *Old Harry* are all derived from Norse sources. "Old Nick" is from the Finnish *Naeki*, or North-German *Nickel*, both meaning a demon. "Old Scratch" is from *Scrat* or *Schrat*, a Scandinavian wood demon; and "Old Harry" is from *Hari*, or *Herra*, Scandinavian terms identical with *Baal* or *Beel* in *Beelzebub*. The common pictorial representations of the devil are entirely copied or derived from Greek and Roman mythology. The pitchfork is the two-pronged scepter of Pluto, the King of Hades. The blackness is also from Pluto, who was named *Jupiter Niger*, the black Jupiter. The horn, tail, and cloven feet are from the Greek satyrs.

Dewy or **Dewey.** A Cornish form of David.

Diana (*dī-ăn'-à*) or **Dian** (*dī'-ăn*). So called after Diana, goddess of hunting. Some derive her name from *dia*, i. e., *dea*, and *Iana*. According to Varro, the same as Luna, "the moon." *Danish*, Diana; *Fr.*, Diane; *Ger.*, Diana; *Gr.*, Artemis; *It.*, Diana; *Lat.*, Diana.

Dinah. From the Hebrew *Diynah*, signifying "judged"; i. e., "acquitted, vindicated."

District of Columbia. See Columbia.

Dnieper (*nē'-pĕr*). From Don-ieper, "upper river." Scythian, *Danapris*.

Dniester (*nēs'-tĕr*). From Don-iester, "lower river Don." Originally from the Scythian, *Danaster*, "southern river."

Doge's (*dōj*) **Palace.** Formerly the palace of the doges of Venice, and now one of its most interesting architectural monuments. The present building was begun by Marino Falierno in 1354, but only the south and west façades retain their characteristic pointed architecture.

Dolores (*dō-lō'-rĕs*). Derived from the Spanish name, Dolores, signifying "sorrows," in allusion to the Seven Sorrows of Mary.

Dominic (*dŏm'-ĭ-nĭk*). From the Latin, *dominicus*, "of or belonging to a lord or master." It might also translate "little lord." *Danish*, Dominicus; *Dutch*, Dominicus; *Fr.*, Dominique; *It.*, Domenico; *Port.*, Domingos; *Sp.*, Domingo; *Sw.*, Dominicus.

Dominica (*dŏm-ĭ-nē'-kà*). "Sunday Island," indicative of its discovery by Columbus, namely Sunday, November 2, 1493.

Donald. An English form of *Donghal*, "brown stranger."

Dora. A female name abbreviated from Theodora.

Dorcas. From the Greek name, *dorkas*, signifying "a wild goat, antelope, gazelle."

Dorothy (*dŏr'-ō-thĭ*). From the Greek name

Dorothea, signifying "the gift of God." *Danish*, Dorothea; *Dutch*, Dorothea; *Fr.*, Dorothée; *Ger.*, Dorothea; *It.*, Dorotea; *Lat.*, Dorothea; *Sp.*, Dorotea; *Sw.*, Dorothea.

Dougall. An English form of Dughall.

Douglas (*dŭg'-lăs*). From Gaelic *dubh-ghlas*, "dark grey."

Dover, Del. From the town in England of that name. The Anglo-Saxon word means "ferry."

Dowager (*dow'-ă-jĕr*). Strictly speaking, a dowager is an endowed widow; i. e., one who has a "dower" from her late husband, or who has property brought by her to her husband on marriage ("dowry") and settled on herself after his decease. In practice the name "dowager" is applied to any widowed lady of title, to distinguish her from the wife of the present holder of the title.

Downing Street, London. So named after Sir George Downing, who, according to Wood, was "a sider with all times and changes, skilled in the common cant, and a preacher occasionally." The street contains the Treasury Building and the Foreign Office, hence the name Downing Street has come to be used for the British Administration.

Drury Lane. A street in London, near the Strand, with which it communicates through Wych Street. It is one of the great arteries of the parish of St. Clement Danes, an aristocratic part of London in the time of the Stuarts. It takes the name from Drury House, built by Sir William Drury, in the time of Henry VIII. Near the entrance of Drury Lane from the Strand, on the left, an old house, now a Mission House, still exists, which stood in the Lane with the old house of the Drurys, before the street was built.

Drury Lane Theater. This famous London theater was originally a cockpit, which was converted into a theater in the time of James I. It was pulled down and rebuilt in 1662, burned in 1672, and a new one built by Wren in 1674. The interior was rebuilt in 1775. In 1791, it was pulled down and rebuilt, being opened in 1794. It was burned down February, 1809, and replaced by a building, which was opened October 10, 1812. The latter was destroyed by fire in the early part of 1908, and replaced by the present structure.

Drusilla (*drōō-sĭl'-lă*). A female name derived from the Greek name *Drousille*, which Bailey translates "dewy eyes." The word signifies "dew, moisture, pure water"; and, figuratively, what is tender, delicate, young. *Fr.*, Drusille; *Ger.*, Drusille; *It.*, Drusilla; *Lat.*, Drusilla.

Dryburgh (*drī'-bŭr-ō*) **Abbey.** An ancient abbey, now in ruins, four miles southeast of Melrose, Scotland, whose fragments exhibit excellent Norman and Early English architectural details. In the south aisle is the tomb of Sir Walter Scott.

Dublin. In the Irish language this is *Dubh-linn*, the meaning of which is "black pool." The name has reference to the fact that the greater part of the site of the city was formerly a black, slimy expanse of mud, through which the River Liffey flowed sluggishly to the sea.

Dubuque (*dŏŏ-būk'*). County and city in Iowa, named for a French trader, Julien Dubuque.

Dugald. An English form of Dughall.

Duluth, Minn. In honor of the French explorer, Daniel Greysolon du Lhut, who visited this section in 1679.

Duncan. A Scottish surname. Some render it "powerful chieftain"; others derive it from the English form of *Donncha*.

Dunstan. Derived from a locality signifying, "the stone hill," or "the strong fortress" (*dun-stan*), but the Saxon compound is no doubt used figuratively.

Duquesne (*dū-kān'*). Borough in Allegheny County, Pennsylvania, named from old Fort Duquesne, which was named for a distinguished French officer, the Marquis Abraham Duquesne.

Easter Island. Named by Jacob Roggevin in consequence of his visit to its fertile shores on Easter Sunday, 1722; the island having been previously discovered by Captain Davis in 1686.

East River. Name applied to the body of water at New York, more properly a strait, connecting Long Island Sound with New York Bay; called a river no doubt from the river-like action of its tides; the name is used to distinguish it from North River, i. e., the Hudson. As the Dutch had the South and North Rivers to designate their territory limits, it was consistent that the stream east of their city of New Amsterdam should be indicated as *Oost Rivier*.

Ebenezer (*ĕb-ĕ-nē'-zēr*). From the Hebrew Ebhenezer, signifying "stone of help," name of the stone which Samuel set up near Mispeh, in witness of the Divine assistance obtained against the Philistines.

Ecuador (*ĕk-wă-dōr'*. Spanish, *ā-kwā-dōr'*). Spanish for Equator, so called by virtue of its geographical position.

Edenton, N. C. In honor of Charles Eden, royal governor in 1720.

Edgar. From the Anglo-Saxon name *Eadgar*. Watcher derives it from *ead-gar*, "author of happiness."

Edinburgh (*ĕd'-ĭn-bŭr-ō*). Formerly *Edwinesburg*, means ostensibly the fortress of Eadwine, the Northumbrian king, who was converted by Paulinus. He extended the Anglican dominion as far as the Forth, and may probably have erected a frontier fortress on the commanding rock on which Edinburgh Castle stands.

Edith. Formerly Eadith; from Anglo-Saxon *eadig*, "happy, rich."

Edmund (*ĕd'-mŭnd*). From Anglo-Saxon *ead-mund*, "guardian or defender of happiness." *Danish*, Edmund; *Fr.*, Edmond; *Ger.*, Edmund; *It.*, Edmondo; *Lat.*, Edmundus; *Sp.*, Edmondo, or Edmundo.

Edward (*ĕd'-ward*). From Anglo-Saxon *ead-weard*, "guardian of happiness." *Danish*, Eduard; *Dutch*, Eduard; *Fr.*, Edouard; *Ger.*, Eduard; *It.*, Eduardo, or Edoardo; *Lat.*, Edvardus, or Edoardus; *Port.*, Duarte; *Sp.*, Eduardo; *Sw.*, Eduard.

Edwin (*ĕd'-wĭn*). From the Anglo-Saxon name Eadwin, from *ead-winn*, "happy conqueror." *Danish*, Edwin; *Lat.*, Edwinus.

Eel River, Ind. From the translation of the Indian name, *shodmague*, "slippery fish" (the eel).

Effie. A Scottish corruption of Euphemia.

Egbert (*ĕg'-bĕrt*). Ferguson translates this name "edge-bright." It rather means, "distinguished in battle," from the Anglo-Saxon, meaning "an edge, sword, war, battle." *Lat.*, Egbertus.

Egypt. Is the Greek and not the native name of the country which on the monuments is called Kem (Ham), "the black," probably from the dark alluvial soil. The meaning of the Greek name Ægyptos has been much disputed. It has been explained as the "land" (*aia*) of the "vulture" (*guptos*), or rather of the sacred kite of Horus, which is the most conspicuous animal in the country. Another etymology derives it from the Coptic or from the town of Koptos, the seat of the earliest dynasties, where the caravan route from the Red Sea reaches the Nile, and hence the place that would first become known to strangers from the East. Another derivation is that it expresses the Hebrew for "the land of oppression."

Egyptian Expedition, The. An expedition undertaken by the French against Egypt in 1798–1801, with the ultimate object of attacking the British Empire in India. It was commanded by Napoleon Bonaparte.

Egyptian Hall. The Egyptian Hall in the Mansion House of the City of London was so called because of its exact correspondence with the Egyptian Hall described by Vitruvius.

Elba (*ĕl'-bȧ*). An island belonging to the province of Leghorn, Italy, situated in the Mediterranean, east of Corsica, and about five and one-half miles from Tuscany. Napoleon I. lived here in exile from May 4, 1814, to February 26, 1815.

Eldred (*ĕl'-drĕd*). From the Teutonic, meaning "all dread," hence "terrible." *Lat.*, Eldredus.

Eleanor (*ĕl'-ē-ȧ-nôr, ĕl'-ĕn-ôr*). Derived from Helen. *Danish*, Eleonore; *Dutch*, Leonora; *Fr.*, Eleonore; *Ger.*, Eleonore; *It.*, Eleonora; *Lat.*, Eleanora; *Sp.*, Leanor.

Electoral Commission, The. In the United States History, a board of commissioners created by Act of Congress, approved January 29, 1877, for the purpose of deciding disputed cases in the presidential election of 1876.

Elephanta (*ĕl-ĕ-făn'-tȧ*). An island six miles from Bombay, is locally called Gharipuri, the "place of caves." The Portuguese name Elephanta is derived from the colossal figure of an elephant carved on the rock, guarding the entrance to a magnificent cave-temple, which dates from the Eighth Century.

Elephantine (*ĕl-ē-făn-tē'-nā*). The Greek name of the island of Philæ at the first cataract of the Nile, so called because it was the mart to which the Nubians brought their ivory for sale.

Elgin (*ĕl'-gĭn*) **Marbles.** A collection of Greek sculptures comprising the bulk of the surviving plastic decorations of the Parthenon, and a caryatid and column from the Erechtheum, and recognized as containing the finest existing productions of sculpture.

Elias (*ē-lī'-as*). From the Greek form of Elijah, meaning "God the Lord." *Danish*, Elias; *Fr.*, Elie; *Ger.*, Elias; *It.*, Elia; *Lat.*, Elias.

Elihu (*ē-lī'-hū* or *ĕl'-ĭ-hū*). A name derived from Elias.

Elijah. See Elias.

Elisabeth. See Elizabeth.

Elisha (*ē-lī'-shȧ*). From the Hebrew, meaning "the salvation of God." *Fr.*, Elisee; *It.*, Eliseo; *Lat.*, Elisaeus; *Port.*, Eliseu; *Sp.*, Eliseo.

Eliza (*ē-lī'-zȧ*). Corrupted from Elisabeth. *Danish*, Elisa; *Dutch*, Elisa; *Fr.*, Elise; *Ger.*, Elisa; *Lat.*, Eliza, or Elisa.

Elizabeth (*ē-lĭz'-ȧ-bĕth*). From the Hebrew *Eliyshebha*, which St. Jerome translates "oath of my God"; Simonis, "oath of God"; Tregelles, "to whom God is the oath, who swears by God," i. e., worshipper of God; and Jones, "God of the seventh oath of my God, of God is her oath"; from *El* "God," *shebha*, "seven"; also an oath. *Danish*, Elisabeth; *Dutch*, Elizabeth; *Fr.*, Elisabeth; *Ger.*, Elisabeth; *It.*, Elisabetta; *Lat.*, Elizabetha; *Sp.*, Isabel.

Elizabeth, N. J. Named for Elizabeth Carteret, wife of Sir George Carteret.

Ellen. Some consider this the same as Helen, and, indeed, in Spanish Helen and Ellen are both represented by Elena. A correspondent of "Notes and Queries" says the name Ellen has no possible connection with Helen, which is older by a thousand years at least, and that Ellen is the feminine of Alain, Alan, or Allan. It may, however, be the same as Ailean.

Ellis Island. Variously called Oyster, Bucket, and Gibbett Island.

Elma. A female name abbreviated from Guilielma, a feminine formed from Gulielmus, from root of William.

Elmira. City in Chemung County, New York, said to have been named for Elmira Teall, daughter of Nathan Teal, a tavern keeper.

Elmo, Castle of Saint. A castle at Naples and a fort at Malta, said to be so named from Ermo, an Italianized corruption of Erasmus, a Syrian martyr of the Third Century.

Else or **Elsa.** See Alice.

Elsie. A name corrupted from Elizabeth.

Elvira (*ĕl-vī'-rȧ*). There are several suggestions as to the origin of this name, which is also found in the Italian. According to some it has been corrupted from the name Geloyra or Geluira, but there is no suggestion as to the origin of the latter name. Others think it another spelling of the Moorish name Elmira, a name said to be derived from *emir*. Miss Yonge seems to think it of Spanish origin.

Elysée (*ā-lē-zā'*), **Palace of.** The official residence of the President of France, in Paris. It was built in 1718, and, since the reign of Louis XV., has been the property of the state. It was used as a private residence by Napoleon I. and Napoleon III., to escape the publicity of the Tuileries. During the republic of 1848 it became the official residence of the president.

Emerald Isle. The author of this epithet was Dr. William Drennan, of Belfast, who died 1820. It occurs in a poem entitled "Erin," of which the fourth stanza runs thus;

"Arm of Erin! prove strong, but be gentle as brave,
And, uplifting to strike, still be ready to save,
Not one feeling of vengeance presume to defile
The cause, or the men of the Emerald Isle."

Emery (*ĕm'-ĕ-rĭ*). A name derived from the old name Amalaric, signifying "powerful without a blot," or "rich in chastity." *Danish*, Almerik; *Dutch*, Almerik; *Fr.*, Emeric, or Emeri; *Lat.*, Almericus; *Sw.*, Emmerik.

Emilia (*ē-mĭl'-ĭ-ȧ*), or **Emily** (*ĕm'-ĭ-lĭ*). A name corrupted from Amelia. *Fr.*, Emilie; *Ger.*, Emilie, or Emilia; *It.*, Emilia.

Emily. See Emilia.

Emma. Some derive this name from Greek *amme*, "a nurse"; others from the Latin, *Amata*, signifying "loved," name of the wife of King Latinus and mother of Lavinia. *Fr.*, Emma; *It.*, Emma; *Lat.*, Emma.

Emmanuel (*ĕm-măn'-ū-ĕl*), or **Immanuel.** From the Hebrew, meaning "God with us"; *Fr.*, Emmanuel; *Ger.*, Emanuel, or Immanuel; *It.*, Emanuele; *Lat.*, Emmanuel; *Port.*, Manoel; *Sp.*, Manuel.

Enaid or **Enid.** A Welsh female name signifying "soul, life."

Encyclopedists, or **Encyclopædists** (*ĕn-sī-klō-pē'-dĭsts*). The collaborators in the encyclopedia of Diderot and D'Alembert (1751–65). The Encyclopedists as a body were the exponents of the French skepticism of the Eighteenth Century.

Engadine (*ĕn-gȧ-dēn'*). A valley in the canton of Grisons, Switzerland, traversed by the Inn, noted for its health-resorts and high elevation. It is divided into the Upper and Lower Engadine, and is surrounded by mountains.

England (*ĭng'-lănd*). When Egbert, King of the West-Saxons, in 829, had subjugated the other six Saxon kingdoms, he summoned a general council at Winchester, at which it was declared that henceforth Britain should be called England, its people Englishmen, and himself King of England. Originally the name was *Englaland*, the land of the Engles, or Angles, who came over from Sleswick, a province of Jutland. *Engel* (variously spelled), is an old Teutonic word, meaning "angel."

Enid (*ē'-nĭd*). Another form of Enaid, which see.

Enoch (*ē'-nŏk*). Derived from the Hebrew *Hhanokh*, which Simonis renders "initiated, dedicated—i. e., to God"; and St. Jerome, "dedicated," simply. *Fr.*, Enoch or Henoch; *Lat.*, Enochus, or Henochus.

Ephraim (*ē'-frā-ĭm*). From the Hebrew *Ephrayim*, which Tragelles translates "double-land, twin-land"; others "two-fold increase, very fruitful"; from *p'riy*, "fruit of the earth," hence "fruitful." *Fr.*, Ephraim; *Lat.*, Ephraimus.

Epsom (*ĕp'-sŭm*). A market-town in the county of Surrey, fifteen miles southwest of London, chiefly celebrated now as the place near which the Oaks and Derby races are run. The Epsom races

are held on Epsom Downs, in the month of May (once in a while June). The Derby is a sweepstake for three-year-old entire colts and fillies. On the subsequent day the Oaks, for fillies only, is run.

Erasmus (*ē-răz′-mŭs*). The Latin name, from Greek *Erasmos,* "desirable, pleasant." *Danish,* Erasmus; *Fr.,* Erasme; *Ger.,* Erasmus; *Gr.,* Erasmos; *It.,* Erasmo; *Lat.,* Erasmus; *Sp.,* Erasmo.

Erastus (*ē-răs′-tŭs*). Means, "beloved." *Fr.,* Eraste; *Gr.,* Erastos; *Lat.,* Erastus.

Erechtheum (*ĕr-ĕk-thē′-ŭm*). An Ionic temple in Athens dating from the end of the Fifth Century B. C., remarkable for its complex plan and architectural variety, as well as for its technical perfection.

Eric (*ĕr′-ĭk, ē′-rĭk*). The same as the old Ericus, name of several Danish kings. Wachter says it should be written Errich, which he translates, "powerful in war."

Erie. The name of one of the Great Lakes, drained by the St. Lawrence, is an Indian word, which, in the form of "Erige" or "Erilke," was the name of a now extinct Indian tribe of the Hurons, exterminated by the Iroquois. The word signifies "cat" or "wild-cat"; another authority gives the meaning as "mad."

Erminia (*ĕr-mĭn′-ĭ-ȧ*). A female name derived from the Roman Herminius. Latinized from Hermann, an Old German compound signifying "war-man, warrior." It seems to have been in use in early times in Italy, and occurs in Tasso.

Ernest (*ĕr′-nĕst*). From Old German *ernst,* "ardent and vehement desire for study." *Danish,* Ernst; *Dutch,* Ernestus; *Fr.,* Ernest; *Ger.,* Ernst; *It.,* Ernesto; *Lat.,* Ernestus; *Sw.,* Ernst.

Ernestine. A female name formed from Ernest.

Erzeroom (*ĕrz-rōōm′*). From *Arz-er-Room,* "the fortress of the Romans."

Esau (*ē′-sô*). From the Hebrew, signifying "hairy, covered with hair." *Fr.,* Esau; *Lat.,* Esavus.

Escorial (*ĕs-kō′-rĭ-ȧl.* Spanish, *ĕs-kō-rē-ȧl′*). A celebrated building in Spain, situated twenty-seven miles northwest of Madrid, containing a monastery, palace, church, and mausoleum of the Spanish sovereign. Derives its name from the neighboring village El Escorial, from the scoria or cinders of some abandoned iron works.

Espiritu Santo (*ās-pē′-rē-tōō sän′-tō*) **Bay, Texas.** Spanish application, meaning "Bay of the holy Spirit."

Essie (*ĕs′-sĭ*). A female name derived from Esther or Hester.

Estelle. A French name derived from Spanish *estella,* from Latin *stella,* a "star."

Esther (*ĕs′-tẽr*). From the Persian *sitarah,* "star"; also "fortune, felicity." *Dutch,* Hester; *Fr.,* Esther; *Ger.,* Esther; *It.,* Ester; *Lat.,* Esthera; *Sp.,* Ester.

Estremadura (*ās-trā-mȧ-dōō′-rȧ*). From *Esytema-Durii,* the extreme limits of the River Douro.

Ethel (*ĕth′-ĕl*). From the Anglo-Saxon, signifying "noble."

Ethelbert (*ĕth′-ĕl-bẽrt*). From the Teutonic, meaning "nobly bright." *Danish,* Adelbert; *Dutch,* Adelbert; *Fr.,* Adalbert, or Adelbert; *Ger.,* Adelbert; *Lat.,* Ethelbertus, or Adalbertus.

Ethiopia, or **Æthiopia** (*ē-thĭ-ō′-pĭ-ȧ*). The "land of the blacks," according to the two Greek words, *aithein,* "to burn," and *ops,* "the face."

Etna (*ĕt′-nȧ*). The chief mountain in Sicily, and the highest volcano in Europe. The Greek name was *Aitna,* "burning mountain."

Eugene (*ū-jēn′*). A name derived from the Latin, *Eugenius,* "nobly descended." *Dutch,* Eugenius; *Fr.,* Eugène; *Ger.,* Eugen; *Gr.,* Eugenios; *It.,* Eugenio; *Sp.,* Eugenio.

Eugenia (*ū-jē′-nĭ-ȧ*). Feminine of the Latin name Eugenius. *Fr.,* Eugenie; *Gr.,* Eugenia.

Eunice (*ū′-nĭs, ū-nī′-sē*). A female name derived from the Greek name, *Eunike,* "happy victory." *Lat.,* Eunice.

Euphemia (*ū-fē′-mĭ-ȧ*). From the Greek, *Euphemia,* "words of good omen, or good report."

Euphrates (*ū-frā′-tēz*). A name which has a long history. Euphrates is merely a Greek adaptation of the Persian name *Hufrat* or *Ufratu.* The latter Persian form, *Phrat,* or *Frata,* has again been converted by the Arabs into *Farat,* the "sweet water," so as to make the name significant in Arabic. The upper course of the Euphrates is still called the Frat.

Eurasian (*ū-rā′-shăn*). This word, which is often met with in Indian newspapers, is applied to persons born of European fathers and native mothers. The word is a contracted combination of the two words, "European" and "Asian."

Europe (*ū′-rŭp*). From the Greek *eurus,* "broad," and *op,* "to see," or *ops,* "the face," in allusion to "the broad face of the earth."

Eusebius (*ū-sē′-bĭ-ŭs*). From the Greek, *Eusebes,* "pious," or "religious." *Fr.,* Eusebe; *Gr.,* Eusebios; *It.,* Eusebio; *Lat.,* Eusebius; *Sp.,* Eusebio.

Eustace (*ūs′-tās*). From the Latin name, *Eustathius,* "standing fast, firm, constant." *Dutch,* Eustatius; *Fr.,* Eustache; *It.,* Eustachio; *Lat.,* Eustachius; *Sp.,* Eustaquio.

Euxine (*ūks′-ĭn*). Greek, meaning "the hospitable"; formerly *axinos,* "the inhospitable sea."

Evan (*ĕv′-an*). A Welsh name. Evan, or rather Evans, is merely another spelling of Jones, which has been corrupted from the Greek original of John.

Eve. From the Hebrew *haovah,* "life, or causing life." *Arabic,* Hawa, or Heva; *Danish,* Eva; *Dutch,* Eva; *Fr.,* Eve; *Ger.,* Eva; *Gr.,* Eua, or Eva; *It.,* Eva; *Lat.,* Eva; *Sp.,* Eva; *Sw.,* Eva.

Evelina (*ĕv-ē-lī′-nȧ*), **Eveline** (*ĕv′-ē-līn*). Female names derived from Evelyn. Also considered diminutives of Eve.

Evelyn (*ĕv′-ē-lĭn*). From the Latin, meaning "hazel nut." Lower says the surname Evelyn is probably an ancient personal name, corresponding with the German Aveling or Abeling, the *ing* being patronymic.

Everard (*ĕv′-ẽr-ard*). Same as the German names Eberhard, Eberhardt. From *eberhart,* "strong as a wild boar"; perhaps, figuratively, strong man. *Danish,* Eberhard; *Dutch,* Everard; *Ger.,* Eberhard.

Ezekiel (*ē-zē′-kĭ-ĕl*). From the Hebrew, meaning "strength of God." *Dutch,* Ezechiel; *Fr.,* Ezechiel.

Ezra (*ĕz′-rȧ*). From the Hebrew, *Ezra,* meaning "a helper." *Fr.,* Esdras; *Lat.,* Ezra or Ezdras.

Fabian (*fā′-bĭ-an*). A name derived from the Roman *Fabius,* which, in turn, is derived from *faba,* a bean. *Danish,* Favian; *Dutch,* Fabiaan; *Fr.,* Fabien; *It.,* Fabiano; *Lat.,* Fabianus.

Fanny. A female name corrupted from Frances.

Farnese (*fär-nēz′.* Italian, *fär-nā′-zā*) **Palace.** A celebrated palace of the Farnese in Rome, founded in the first part of the reign of Leo X. It was begun by Sangallo the younger, was continued by Michael Angelo, and was completed by Giacomo della Porta. It is adorned with frescoes by Annibale Caracci.

Fear Cape, N. C. Is said to have been named Cape of Fear, owing to its tempestuous coast at the time Raleigh's fleet was trying to find an entrance, June 20, 1585. See Cape Fear River.

February (*fĕb′-rū-ā-rĭ*). From the Latin word, *febru,* "to purify," because the purification of women took place in this month.

Federalist (*fĕd'-ĕr-ăl-ĭst*), **The.** A collection of essays in favor and in explanation of the United States Constitution, first issued in serial form, October, 1787–April, 1788, in the "Independent Journal" of New York, where they were collected in book form with the title "The Federalist." Many editions have since been issued.

Felicia. A female name formed from Felix.

Felix (*fē'-lĭx*). A Latin name meaning "happy." *Danish*, Felix; *Dutch*, Felix; *Fr.*, Felix; *Ger.*, Felix; *It.*, Felice; *Sp.*, Felix.

Ferdinand (*fĕr'-dĭ-nănd*). One authority derives this name from the North High German name Ferdinand, or *Fert-nand*, translated, figuratively, "one quick of comprehension," or "man of rare abilities." Another translates it "pure peace." *Dutch* Ferdinand; *Fr.*, Ferdinand; *Ger.*, Ferdinand; *It.*, Ferdinando; *Lat.*, Ferdinandus; *Port.*, Fernando, or Fernao; *Sp.*, Fernando.

Fergus. An English form of Frederick.

Fernandina (*fĕr-năn-dē'-nȧ*), **Fla.** Given by the Spaniards in honor of their King Ferdinand.

Fiesole (*fē-ĕs'-ō-lē*). An old Etruscan city in the province of Florence, Italy, four miles northeast of Florence; the ancient Fæsulæ. It was the headquarters of Catiline 63–62 B. C., and was the scene of victory of Stilicho over the Teutonic invaders under Radagais about 406.

Fifth Avenue. The principal residence street of New York, extending from Washington Square to Harlem River, a distance of about six and one-half miles. The lower part of the avenue is now largely devoted to business.

Finland. Properly Fenland, meaning "the land of marches."

Fitchburg. City in Worcester County, Mass., named for John Fitch, one of the committee that procured the act of incorporation.

Fitzedward. A baptismal name, son of Edward. Norman *fitz*, for *filius*.

Fitzwilliam Museum. A museum at Cambridge University, England, founded by Richard, seventh and last Viscount Fitzwilliam, who bequeathed to the university (1816) his collection of books, paintings, illuminated manuscripts, engravings, etc., with the dividends of £100,000 South Sea annuities for the erection of a building, which was begun in 1837. The collection of ancient prints is one of the most valuable in existence.

Flaminian (*flā-mĭn'-ĭ-an*) **Way.** One of the oldest and most famous highways of ancient Rome. It extends in a direct line from Rome to Ariminum (Rimini) and was built by the censor Caius Flaminius in 220 B. C. Its superintendence was held to be so honorable an office that Augustus himself assumed it in 27 B.C., as Julius Cæsar had been curator of the Appian Way. Augustus restored it through its entire extent in commemoration of which triumphal arches were erected to him over the road at Ariminum and at Rome.

Fleet Street. A London street running from Ludgate Circus to the Strand and the West End. It is named from the Fleet brook. In the early chronicles of London many allusions are made to the deeds of violence done in this street. By the time of Elizabeth the street had become a favorite spot for shows of all descriptions. It is now the chief center of British journalism.

Flint, Mich. From the river on which it is located, the name derived from translation of the Indian name *Pewonigo*, "river of flint." The place first bore the name of *Flint River Settlement*.

Flora (*flō'-rȧ*). A female name derived from *Flora*, goddess of flowers and gardens, the same as the Chloris of the Greeks. *Dutch*, Flora; *Fr.*, Flore; *It.*, Flora; *Lat.*, Flora.

Florence (*flŏr'-ĕns*). A female name, said to have been Anglicised from Finin or Fineen, an Irish name used by men, meaning "flourishing." The English version is probably derived from Flora, the goddess of flowers. It might also mean "white," or "fair." *Danish*, Florenz; *Dutch*, Florentia; *Fr.*, Florence; *Ger.*, Florenz; *It.*, Fiorenza; *Lat.*, Florentia; *Sp.*, Florencia; *Sw.*, Florenz.

Florence, Italy. This is the French form adopted for the city whose Italian name, formerly *Fiorenza*, is now *Firenze*, meaning, as the Romans seem to have thought, "the city of flowers."

Florida. So named by Ponce de Leon, a Spanish navigator, in honor of his discovery of the land on Easter Sunday, March 27, 1513, which is called by Spaniards *Pascua Florida*, "Holy day of Flowers." He chose this name for two reasons: First, because the country presented a pleasant aspect; and, second, because he landed on the festival referred to. The second reason is generally considered to have more weight.

Fond du Lac (*fŏn-dū-lăk'*), **Wis.** French adaptation "bottom of the lake"; that is, "lower end, the foot."

Fontainebleau (*fôn-tān-blō'*). Originally a hunting-seat called Fons Bleaudi, but now a town in the department of Seine-et-Marne, France, thirty-seven miles south-southeast of Paris. The palace was from the Middle Ages one of the chief residences of the kings of France.

Formosa (*fôr-mō'-sȧ*). Portuguese for "beautiful."

Fort Wayne, Ind. Named (1794) in honor of "Mad" Anthony Wayne, a Revolutionary general.

Fountains Abbey. A Cistercian monastery of the Fourteenth Century, near Ripon, England, now the largest and most picturesque of English ecclesiastical ruins.

Fox Islands, Lake Michigan. From translation of the Indian name *Annemosine*, "place of the young fox"; *annemose*, "a young fox"; *ink*, "a place."

Fox River, Ill. Application of its Indian name *Meshdeke Wakpa*, "river of the foxes."

France (*frăns*. French, *fräns*). Country of the Franks, or, as the Germans call it, Frankreich, i. e., "Kingdom of the Franks." All western nations were styled Franks by the Turks and Orientals, and anything brought to them from the west invariably merited a prenomen descriptive of its origin, as, for example, *frankincense*, by which was meant incense brought from the country of the Franks.

Frances. Female name formed from Francis, "free." *Danish*, Francisca; *Dutch*, Francisca; *Fr.*, Francoise; *Ger.*, Francisca; *It.*, Francesca; *Lat.*, Francesca, or Francisca; *Sw.*, Franciska.

Francis (*frăn'-sĭs*). From the Latin Franciscus, which has been rendered, "one who had visited the Franks"; also, "free." *Danish*, Frants, or Franciscus; *Dutch*, Franciscus; *Fr.*, François; *Ger.*, Franz; *It.*, Francesco, *Port.*, Francisco; *Sp.*, Francisco; *Sw.*, Frans.

Franconia (*frăng-kō'-nĭ-ȧ*). German province inhabited by the Franks, so called from the *franca*, a kind of javelin which they carried.

Frank. A baptismal name corrupted from Francis.

Frankfort, Ky. Its county, Franklin, was named in honor of Benjamin Franklin, and when its capital was created, a composite word further commemorating the honor was adopted, Frank, diminutive of Franklin; *fort*, meaning "town"; "town of Franklin."

Frascati (*fräs-kä'-tē*). A town in the province of Rome, Italy, twelve miles southeast of Rome, celebrated for its villas. There are remains of a Roman amphitheater, and of a small but very perfect Roman theater, in which much of the stage-structure survives.

Frederick (*frĕd'-ĕr-ĭk*). The same as the Old German name *Friderich*, *Fridorich*, *Fridurih*. Junius translates the two latter "rich or powerful in peace." The more probable etymology is from *frid-reich*, "powerful protector." *Danish*, Fred-

erik; *Dutch*, Frederik; *Fr.*, Frederic; *Ger.*, Friedrich; *It.*, Frederico, or Federigo; *Lat.*, Fredericus; *Port.*, Frederico; *Sp.*, Federico; *Sw.*, Frederick.

Fredericksburg, Va. Name adopted 1727, in honor of Prince Frederick, father of George III.

French Broad. River in North Carolina, so named because the country west of the Blue Ridge was held by the French, according to some authorities. Others hold that the river was named by a party of hunters for their captain, whose name was French. The latter part of the name is used descriptively.

Friday. So named because allotted to Frigga, the wife of Odin, and the goddess of marriage.

Friendly Islands. So named on account of the friendly disposition of the natives.

Fuji-yama (*fōō'-jē-yä'-mä*). An extinct volcano and the highest mountain of Japan, situated seventy miles west-southwest of Tokio, and meaning "great mountain." There has been no eruption since 1707. It is a resort of pilgrims, and figures largely in Japanese art and legend.

Furness (*fẽr'-nẽs*) **Abbey.** The extensive ruins of Furness Abbey are among the most picturesque of English medieval remains. A large part of the fine church survives almost complete except the vaulting, and there is a beautiful early English chapter-house. The entrance to the ivy-draped cloisters is by three superb deeply recessed Norman arches.

Gabriel (*gā'-brĭ-ĕl*). From the Hebrew, Gabriyel, "man of God," "strength of God," or, according to some, the "hero of God." *Arabic*, Jabrâyil, or Jabrâil: *Fr.*, Gabriel; *Ger.*, Gabriel; *It.*, Gabriele; *Lat.*, Gabriel; *Sw.*, Gabriel.

Galena, (*gä-lē'-nä*), **Ill.** Name inherited from its mines of lead. Latin, *galena*, "lead ore."

Galilee (*găl'-ĭ-lē*). In the Roman period, the northernmost division of Palestine. It now belongs to Turkey. The name means the "circuit" or "district of the Gentiles," so called by the Hebrews because largely inhabited by Sidonians.

Galveston (*găl'-vĕs-tŭn*). County and city in Texas, named for Don Jose Galvez, Spanish viceroy of Texas, who, in 1779, established a colony on this island, and, in 1797, was proclaimed king by the people of Mexico.

Gamaliel (*gā-mā'-lĭ-ĕl*). From the Hebrew, *Gamliyel*, "the gift, or benefit of God."

Gambier (*găm'-bēr*). Village in Knox County, Ohio, named for Lord James Gambier, a British admiral, who was a benefactor of Kenyon College, located at this place.

Ganges (*găn'-jēz*). The Greek transformation of the name of the great Indian river. Handed on to the Romans and then to the Portuguese, it has been generally adopted throughout Europe as the equivalent of the Indian name *Ganga*, which signifies a "stream" or "flowing water."

Garden of the Gods. Locality near Pike's Peak, Colorado. Lewis N. Tappan and three others went from Denver to select a site for a town. They stood upon a rocky prominence and exclaimed, "A fit garden for the gods," hence the name.

Gasconade (*găs-kō-nād'*) **River, Mo.** Adopted by settlers as a memento of their Gasconade of France. The word translated means "a boaster."

Gaston. A name of French origin, probably from the French *gaston*, "baton."

Gaul. The name by which France was known to the Romans. It was known to the Greeks as *Galatia*, from which the Romans derived *Gallia*, "the land of the Galli," or Gauls. (*Keltic*, Gaeltachd: *O. Fr.*, Gaule.)

Genoa (*jĕn'-ō-ä*). The English form of the Italian *Genova*, probably from the same roots as Geneva, from the Celtic *genava*, "mouth" or "jaw."

Geoffrey (*jĕf'-rĭ*), or **Geffrey.** Sometimes translated "God's peace or joyful peace." The name has been corrupted from Galfrid for Walfrid; from Old German *walt-frid*, "powerful protector." *Danish*, Galfred; *Dutch*, Godfried; *Fr.*, Geoffroy; *It.*, Gioffreddo; *Lat.*, Galfridus.

George. From the Latin name, *Georgius*, "a tiller of the ground, a husbandman, a vine-dresser." *Danish*, Georg; *Dutch*, Georg; *Fr.*, George or Georges; *Ger.*, Georg; *Gr.*, Georgios; *It.*, Giorgio; *Lat.*, Georgius; *Port.*, Jorge; *Sp.*, Jorge; *Sw.*, Georg.

George, Lake, N. Y. So named in honor of England's king.

Georgeanna, Georgiana, Georgina. Female names derived from George.

Georgetown. Formerly a city, now a part of the District of Columbia, named for George Boone, an Englishman, who purchased several tracts of land in the neighborhood.

Georgia. Named in honor of George II. of England, who here established a colony in 1732.

Gerard (*jĕr'-ard*. French, *zhā-rär'*). From the Old German name Gerhard, Gerart; from *gerhart*, "very strong." Sometimes corrupted to Gar'ret and Ger'rit, i. e., "firm spear." *Danish*, Gerhard; *Dutch*, Gerard; *Fr.*, Gerard; *Ger.*, Gerhard; *It.*, Gerardo; *Lat.*, Gerardus; *Sw.*, Gerhard.

German Ocean. Indicative of its geographical position.

Germany. Known in ancient times as Tronges, the country of the *Tungri*, a Latin word signifying "speakers"; but the Romans afterward gave it the name of Germanus, meaning "neighbors," originally bestowed by the Gauls.

Gertrude (*gẽr'-trūd*). From the Old German name Gertrude; from *gerdraut*, which translates either "very faithful," or "very dear or beloved." Another meaning is given as "true spear." *Dutch*, Geertruida; *Fr.*, Gertrude; *Ger.*, Gertraud, or Gertrud; *It.*, Gertruda; *Lat.*, Gertruda; *Sw.*, Gertrud.

Gibraltar (*jĭb-rôl'-tär*). Derived from *Gibel el Tarik*, "the mountain of Tarik." Tarik was the leader of the Saracens when they entered Spain in 711, and he first fortified the hill as a base of operations and a ready point of access from the Barbary coast.

Gideon (*gĭd'-ē-on*). From the Hebrew *Gidhon*, which Tregelles renders "cutter down," i. e., "brave soldier." *Fr.*, Gedeon; *It.*, Gedeone; *Lat.*, Gideon.

Gila (*hē'-lä*) **River, Ariz.** Corruption of the Spanish word Guija, meaning "pebbly or pebble stone," applied by them owing to this local characteristic in its waters.

Gilbert (*gĭl'-bẽrt*). From the Teutonic, *Giselbert*, "bright," or "bright as gold." *Danish*, Gilbert; *Dutch*, Gilbert; *Fr.*, Gilbert; *Ger.*, Gilbert; *Lat.*, Gilbertus; *Sw.*, Gilbertus.

Giles (*jīlz*). Probably derived from Ægidus, from Greek, *aigidios*, "a goatskin." *Fr.*, Gilles. *Ger.*, Ægidius; *It.*, Egidio; *Lat.*, Ægidius; *Sp.*, Gil.

Giorgio. See George.

Giovanni. See John.

Giulia. See Julia.

Giuseppe. See Joseph.

Gladys. Most probably a Welsh form of Claudia. It is derived from the Welsh *gwlad*, which now means "of country," but formerly signified "a prince, a sovereign," a meaning which still survives in several of its derivations.

Glasgow (*glăs'-gō*). The second city in the British Isles was called *Glas-gu* in 1301. Numerous etymologies have been proposed, such as *clais-dhu*, the "black ravine," *glaise-dhu*, "the black brook," or *glas-coed*, the "gray wood," but the most probable is that given by Professor Rhys, who holds that the name is from one of the Gaelic pet-names of St. Kentigern, or St. "Mungo," around whose cell the place grew up.

Glastonbury (*glăs'-tŭn-bẽr-ĭ*). A town in Somerset, England, twenty-one miles south of Bristol. Its abbey, founded in Roman times, was refounded under Ine in the Eighth Century. Glastonbury is

associated in legend with Joseph of Arimathea, who is said to have visited it, and, in sign of possession, planted his staff, which took root and became the famous Glastonbury thorn that bursts into leaf on Christmas eve. The Isle of Avalon, where King Arthur was buried, is also here.

Godfrey (*gŏd'-frĭ*). From the Teutonic, meaning "God's peace." *Danish*, Gottfried; *Dutch*, Godfried; *Fr.*, Godefroi; *Ger.*, Gottfried; *It.*, Goffredo; *Lat.*, Godfridus.

Godwin (*gŏd'-wĭn*). From the Teutonic, meaning "divine friend," or "victorious in God." *Dutch*, Godewijn; *Lat.*, Godwinus.

Golconda (*gŏl-kŏn'-dȧ*). A place in India, seven miles northwest of Hyderabad. It is noted for its fort, for the mausoleums of the ancient kings, and for the diamonds which were cut and polished here. It was the capital of a kingdom from 1512 until its overthrow by Aurungzebe in 1687.

Gold Coast. That portion of Guinea on the west coast of Africa where gold is found.

Golden Gate, California. Strait in California, named by Colonel Frémont, before the discovery of gold in the country, because of the brilliant effect of the setting sun on the cliffs and hills.

Golden Gate, Constantinople. A gate in the wall of Theodosius, now walled up because of a Turkish tradition that the conqueror of Constantinople is destined to enter through it. It consists of three arches between two huge towers of white marble. The great central arch was reserved for the passage of the emperor.

Golden House. Palace of the Emperor Nero in ancient Rome, which occupied the valley between the Palatine and the Esquiline, and connected the palaces of the Cæsars with the gardens of Mæcenas. It was built after the great fire of 64 A. D., and was so large that it contained porticos 2,800 feet long and inclosed a lake where the Colosseum now stands. The forecourt contained a colossus of Nero 120 feet high.

Gotham (*gō'-thăm*). At one time the term was applied to a parish of Nottingham, England. The people here were famed for their stupidity and simplicity, which obtained for them the satirical appellation of the "wise men of Gotham." Many nations have designated some particular locality as the paradise of fools; for example, Phrygia was the fools' home in Asia, Abdera of the Thracians, Bœotia of the Greeks, Swabia of the modern Germans, etc. To Americans it is chiefly significant as a colloquial term for the city of New York. Thus applied, it first appeared in "Salmagundi," by Washington Irving and James K. Paulding, and is supposed to hint sarcastically at the worldly wisdom of its inhabitants.

Gothland (*gŏth'-land*). Indicated a settlement of the Goths.

Gottlieb. See Theophilus.

Governor's Island. From its former Dutch owner, Governor Van Twiller; previously called *Nutten Island*, Indian name *Paggauck*.

Grace. A feminine form of the Roman *Gratius*; from *gratia*, "grace, favor, good-will, kindness." *Dutch*, Gratia; *Fr.*, Grace; *It.*, Grazia; *Lat.*, Gratia.

Graham (*grā'-ăm, grām*). From the Gaelic *gruama*, "surly, stern, morose, dark, gloomy."

Granada (*grȧ-nä'-dȧ*). The capital of the province of Granada, Spain, situated on the Jenil, on spurs of the Sierra Nevada. It is famous for the Alhambra (which see). The name is from the Spanish, *Granada*, "pomegranate," because the city is built on four hills divided somewhat like the divisions of a pomegranate.

Grand Canal. The principal canal of Venice. It runs in the form of the letter S through the center of the city, from the railway station to Santa Maria del Salute.

Grand Manan Islands, Me. A compound word meaning "great island." English, *grand*; Indian, *munnohan*, "the island." Also spelled *Menan*.

Grand Prix (*grȧN prē'*), **The.** The great horse-race at Longchamps, Paris, established by Napoleon III. (prize 20,000 francs), run by three-year-olds. Longchamps is a very good course situated in the Bois de Boulogne, first used for racing in the reign of Louis XVI. Races have been run here since 1859. The Grand Prix is run on the Sunday of Ascot week.

Grand Prix de Rome (*grȧN prē' dŭ rōm*). A prize given by the Academy of Fine Arts in Paris to the most successful competitor in painting, sculpture, engraving, architecture, or music. The examinations are held annually, and the successful candidates become pensioners of the government for four years. They are sent to reside at Rome, where Louis XVI. founded the Academie de France in 1666.

Grasmere. One of the group of English Lakes, meaning "the lake of swine."

Great Barrington. Town in Berkshire, Massachusetts, named for William, Lord Barrington.

Great Bear Lake. So called owing to its northern situation, and on account of the northern constellation of the Great and Little Bear.

Great Mogul. An extinct title borne by the chief of the Moguls of the empire founded in Hindustan by Baber, Fifteenth Century.

Great Salt Lake. Received its name on account of the saline character of its waters.

Great Tom. A bell, weighing about 17,000 pounds, in the tower of the Tom Gate of Christ Church, Oxford. Every night at ten minutes past nine (closing time) it is tolled.

Great Wall of China. A wall begun by the Emperor Tsin about 214 B. C., as a defense against northern tribes, and completed in its present form about 1350-1400. It extends along the northern frontiers of Chihli, Shansi, Shensi, and Kansu for nearly 1,500 miles.

Greece. The modern form of the Latin *Græcia*, from the Greek *Graikoi*, a name originally bestowed upon the inhabitants of Hellas.

Greeley. City in Colorado, county and city in Kansas, and county in Nebraska, named for Horace Greeley.

Green Bay, Wis. Located on its shores were a tribe of Indians, whose mode of life was so filthy, when first met by the French, they designated them as the Puans (*puans*, "stinkards"). To the bay they gave the name of Baye de Puans, and transposition through pronunciation carried it to *Grand Bay* and *Grun Bay* to *Green Bay*.

Greenland. The name given by Eric the Red in 983 to the sheltered nook where he founded his colony from Iceland, thinking that "much people will go thither if the land has a pleasant name." The name is not altogether unsuitable, as the place chosen by Eric for the settlement which he named Greenland is the pleasantest spot in the country, a smooth grassy plain at the head of Igaliko fiord, near the modern Julianshaab. The name was afterwards inappropriately extended to the whole ice-clad country.

Green Mountains, Vt. Translation of the adaptation of the French name "*vert-monts*."

Green River, Ky. In honor of General Nathaniel Greene of the Revolution. The letter *e* was originally added to the name of the river.

Greensboro, N. C. Compliment to General Nathaniel Greene, he having had a victorious skirmish at this locality, during his famous retreat in 1781.

Green Sea. Otherwise the Persian Gulf, owing to a peculiar strip of green always discernible along the Arabian shore.

Gregory (*grĕg'-ō-rĭ*). From the Latin name *Gregorius*, from the Greek *Gregorios*, "to watch." The name means "watchful." *Danish*, Gregor;

Dutch, Gregorius; *Fr.*, Gregoire; *Ger.*, Gregor; *Gr.*, Gregorios; *It.*, Gregorio; *Lat.*, Gregorius; *Sp.*, Gregorio; *Sw.*, Gregorius.

Griffith. The English form of the Welsh name *Gryffydd*. *Danish*, Griffith; *Dutch*, Rufinus; *Lat.*, Griffithius; *Sw.*, Rufin.

Grisons (*grē-zôn'*). From the German *Graubünden*, "the gray league," so called from the dress worn by the Unionists in 1424.

Grosvenor (*grōv'-nēr*) **Gallery.** A gallery for the exhibition of paintings of the modern æsthetic school, established by Lord Grosvenor in New Bond Street, in 1876. Pictures were received only by invitation. The exhibitions have been for some time discontinued.

Grosvenor Square. A fashionable square in London, east of Hyde Park. It was laid out before 1716 and has been the residence of many famous men. There is great variety of styles in its architecture, and it is noted for the old ironwork and flambeau extinguishers before many of the doors.

Guatemala (*gō-tē-mā'-lā*. Spanish, *gwā-tā-mā'-lā*). Is a European rendering of the Mexican *quahtemali*, signifying "a decayed log of wood"; so called by the Mexican Indians who accompanied Alvarado into this region, because they found an old worm-eaten tree near the ancient palace of the kings, or *Kachiquel*, which was thought to be the center of the country.

Guglielmo (*gōō'-yĕl'-mō*). See William.

Guido (*gwē'-dō*). See Guy.

Guildhall (*gĭld'-hôl*). The council hall of the city of London, founded in 1411, and restored after the fire of 1666. The great hall measures 153 by 48 feet, and is 55 feet high; it has a handsome open-framed roof, modern colored glass windows, and the two legendary colossal wooden figures of Gog and Magog. Along the walls are placed statues of famous men. The crypt, with its cloistered columns, is of the original construction and is interesting.

Guillaume (*gē-yōm'*). See William.

Guinea (*gĭn'-ē*). A native West African term, meaning "abounding in gold."

Guinea, English. The English *guinea* was first coined in 1673. It derived its name from the fact that the gold of which it was first composed came from *Guinea*.

Gulf of Carpentaria. This gulf preserves the memory of a Dutch captain named Carpenter, who discovered it in 1616.

Gulf of St. Lawrence. Was first explored, and the navigation of the long river of the same name commenced, on the Feast of St. Lawrence, 1500.

Gustavus (*gŭs-tā'-vŭs*). From the Swedish name *Gustaf*, which some translate "Goth's staff"; others derive it from the Su-Goth *God*, "God" or "good," and *staf*, "staff." Gustaf is more probably corrupted from Augustus. *Dutch*, Gustavus; *Fr.*, Gustave; *Ger.*, Gustav; *Lat.*, Gustavus; *Sw.*, Gustaf.

Guy (*gī*). Probably derived from French *gui*, "mistletoe," or from Guillaume (William), whence the diminutives, Guyot and Guion. *Danish*, Guido; *Dutch*, Guido; *Fr.*, Guy; *Ger.*, Veit; *It.*, Guido; *Lat.*, Guido; *Sw.*, Guido.

Gwendolen (*gwĕn'-dō-lĕn*). A Welsh female name. Sometimes translated "the lady of the bow"; others translate the name "white-browed."

Hackensack, N. J. From the river of same name, which is a corruption of its Indian name *haucquansauk*, "hook mouth," from its shape near the mouth, from its many windings before it empties into Newark Bay.

Hadrian's (*hā'-drĭ-an*) **Villa.** Now simply an assemblage of ruins, about fifteen miles from Rome, near Tivoli, perhaps the most impressive in Italy. It included the Greek and Latin theaters, so called, an odeum, thermæ, a stadium, a palace, several temples, spacious structures for guards and attendants, and many subsidiary buildings and devices. Of most of these there are extensive remains; and here were found many of the fine statues now in Roman museums.

Hadrian's Wall. One of the most noted Roman antiquities of Great Britain, constructed by Hadrian between the Solway Firth and the mouth of the Tyne, for purposes of defense. The work has been ascribed to Severus and others, "but after a long debate the opinion now prevails that the whole system of defense bears the impress of a single mind, and that the wall and its parallel earth-works, its camps, roads, and stations, were designed and constructed by Hadrian alone."

Hagar (*hā'-gär*). From the Hebrew *Haghar*, which some translate "flight"; others render the name "stranger," from *gur*, "to tarry, to be a sojourner." *Arabic*, Hajar, or Hagar; *Fr.*, Agar; *Lat.*, Hagar.

Haidee (*hī-dē'*). A female name which Stephanus renders "sempiternus," i. e., "perpetual, eternal."

Halifax, Nova Scotia. Named for the Earl of Halifax.

Hamlet. From the Old German *amal-laut*, "distinguished for spotlessness." According to some the name in Hamlet's country was pronounced Amlet, and signified "madman," but no etymology has been suggested for such rendering.

Hampden. County and town in Massachusetts and a town in Penobscot County, Maine, named for the English patriot, John Hampden.

Hampton (*hămp'-tŭn*) **Court.** A royal palace on the Thames twelve miles from Charing Cross, built by Cardinal Wolsey. Hampton Court is most intimately associated with James I. and William III., and was a place of imprisonment of Charles I.

Hampton Roads. A channel connecting the estuary of James River with Chesapeake Bay, situated south of Fort Monroe, Virginia. Here, March 8, 1862, the Confederate ironclad "Virginia" ("Merrimac") destroyed the Federal frigates "Cumberland" and "Congress"; and the following day there was a contest between the "Virginia" and the ironclad "Monitor," the former retiring. This was the first engagement between ironclads in our history.

Hannah (*hăn'-nȧ*). From the Hebrew *Hannah*, which Simonis translates "gratuitous gift," i. e., "grace, mercy." *Danish*, Hanne or Hanna; *Dutch*, Hanna; *Fr.*, Anna; *Lat.*, Hanna; *Sw.*, Hanna.

Hannibal (*hăn'-nĭ-bal*). From the Punic, meaning "grace of Baal," or, more freely, a "gracious lord." *Fr.*, Hannibal; *It.*, Annibale; *Lat.*, Hannibal.

Hanover Island. In honor of the house of Hanover.

Hanover (*hăn'-ō-vēr*) **Square.** A square in the West End of London, south of Oxford Street and west of Regent Street. It received its name in the days of the early popularity of George I. St. George's, Hanover Square, is noted as a fashionable church for marriages in London. The square was built about 1731, when the place for executions was removed from Tyburn, lest the inhabitants of the "new square" should be annoyed by them. It contains a bronze statue of William Pitt by Chantrey.

Hans. See John.

Hapsburg (*hăps'-bŭrg*), or **Habsburg.** In Canton Aargau, the stamm-schloss of the Austrian dynasty, appears in an Eleventh Century document as Habechisburc, "hawk's castle." According to the well-known legend, Radbot, an ancestor of Rudolf of Hapsburg, while hunting in the Aargau lost his favorite hawk, and found it sitting on the ridge of the Wulpelsberg. He was so delighted with the view from the spot that he chose the site for the erection of a castle, which he built about 1020 and called Habichtsburg.

Hapsburg Castle. See Hapsburg.

Harlem or **Haarlem.** In Holland, called *Haralem* in a Ninth Century document, is a name of doubtful meaning. In Old Saxon we have *lemo*, "clay" or "mud," and *hara*, "an estuary," and the dialect-word *har* or *haar* denotes a rising ground or small eminence. Harlem, now a suburb of New York, stands on the Harlem River, a tidal channel. With Brooklyn and Hoboken it is one of the few names surviving from the time of the Dutch occupancy.

Harold (*hăr'-ŭld*). The same with the Middle High German names *Ariold*, *Harhold*, etc., which Wachter translates "powerful in battle," "a champion." *Danish*, Harald; *Dutch*, Herold; *Fr.*, Harold; *It.*, Araldo; *Lat.*, Haroldus.

Harper's Ferry, Va. Robert Harper of Oxford, England, an architect, en route to Winchester, saw this pass, bought land here and formed a settlement in 1734. Later he established a ferry at this point, known as "Harper's Ferry."

Harriet (*hăr'-rĭ-ĕt*). From the German *Henriette*, "head of the house." *Danish*, Henriette; *Dutch*, Henrietta; *Fr.*, Henriette; *It.*, Enrichetta; *Sp.*, Enriqueta; *Sw.*, Henrietta.

Harrisburg, Pa. From its first settler, John Harris of Yorkshire, England, founded in 1785, subsequently changed to Louisbourg; in 1791, changed back to Harrisburg.

Hartford. Name transferred from Hertford, England, to many places in the United States, the capital of Connecticut being one of these.

Harvey. A masculine name, from Old German *her-wig*, "noble," "noble soldier or warrior."

Harz (*härts*) or **Hartz Mountains.** In German *Harzgebirge*, were called in the Eighth Century *Hart* (Old Saxon *hard*, Old High German *hart*, "wood" or "forest"). The present spelling, Harz, is supposed to be due to a folk etymology which has made the name into Harzwald, the "forest of resin" (harz). The Hardt, a wooded range of hills near Carlsruhe, is the "wood."

Hatteras, Cape, N. C. Application to the headland made by early English navigators, from a tribe of Indians inhabiting its shores, the *Hatterask* or *ash*.

Havana (*hà-văn'-à*). Capital city of Cuba, city in Mason County, Illinois, named for former. The word is Spanish, meaning "harbor."

Havre (*hä'-vĕr*). The "haven" at the mouth of the Seine was, before 1515, merely a fishing village with a chapel dedicated to Notre Dame de Grace, whence the official name Le Havre de Grace. The French *havre*, "a harbor," is descended from the Old French *havle*, originally *hable*, which is derived from the Low-Latin *habulum*, a word of Teutonic origin related to the English *haven*.

Hawarden (*här'-dĕn*). A town in Flintshire, North Wales, sixteen miles south of Liverpool. Near it is Hawarden Castle, once the residence of Gladstone, the British statesman.

Hawthornden (*hô'-thôrn-den*). A picturesque glen or valley in Edinburghshire, Scotland, eight miles south of Edinburgh. The estate of Hawthornden was the property of the poet William Drummond.

Haymarket, The. A London market, established in 1644 on the site now partly covered by the Criterion restaurant and theater and Lower Regent Street. It was abolished in 1830. The place is called Haymarket Square, or the Haymarket.

Hayti (*hā'-tĭ*. French, *ä-ē-tē'*). A native name, meaning "mountainous country."

Hebe (*hē'-bē*). A female name, derived from Hebe, daughter of Jupiter and Juno, or of Juno only; and who, being fair and always in the bloom of youth, was called "the goddess of youth."

Hebrides (*hĕb'-rĭ-dēz*). Anciently referred to by Ptolemy as the *Ebudæ*, and by Pliny as the *Hebudes*, denoting the "Western Isles."

Hector (*hĕk'-tŏr*). From the Greek name *Hektor*. The name signifies "anchor," literally, "what holds"; also translated a "defender." *Fr.*, Hector; *It.*, Ettore; *Lat.*, Hector.

Heinrich (*hīn'-rĭch*). See Henry.

Helen (*hĕl'-ĕn*), or **Helena** (*hĕl'-ē-nà*). From the Greek *Helene*, signifying "a lamp, a torch," hence "brightness." *Danish*, Helena; *Dutch*, Helena; *Fr.*, Hélène; *Ger.*, Helene; *It.*, Elena; *Lat.*, Helena; *Sp.*, Elena.

Helena (*hĕl'-ē-nà*), **Mont.** From the Latinized Greek word Helen. John Somerville suggested it at a meeting of several hundred miners, in 1864, as a name for the settlement. Opinions differ, however, as to the origin of the name, for by some it is supposed to be named for Helen of Troy. The Helena Historical Directory of 1879 says it was named by John Somerville, of Minnesota, St. Helena, from the resemblance in its location to that of the original St. Helena. It was then voted to drop the prefix Saint, and that was done.

Heligoland (*hĕl'-ĭ-gō-lànd*). Now a German island, expresses the Danish for "holy land settlement."

Helsingfors (*hĕl-sĭng-fŏrs'*), **in Finland.** From the tribal name of the Helsings, and *fors*, "a waterfall." We have cognate names Helsingland and Helsingborg in Sweden, and Helsingor in Denmark.

Helvetia (*hĕl-vē'-shĭ-à*). The old Latin name of Switzerland; often used as a poetical appellation in modern literature. The country is often mentioned as the "Helvetian Republic," and that is still the official name.

Henderson, Ky. After the county, which received its name in honor of Col. Richard Henderson.

Henlopen (*hĕn-lō'-pĕn*), **Cape, Del.** From a Dutch expression, *en lofen*, meaning "to run in," as indicating the place of entrance to a bay. Previously named Cornelius by the Dutch commander, Mey, after his Christian name.

Henri (*ăn-rē'*). The French form of Henry.

Henrietta (*hĕn-rĭ-ĕt'-tà*). A name formed from Henry.

Henry. Usually rendered "home-ruler," or "chief of the house." The Gothic name is *Heinric*, the Anglo-Saxon *Henric* and *Cynric*, and the North High German, *Heinrich*; but all these names are the same as the old Hunoricus, from *kunreich*, "illustrious for strength." The English name Henry, formerly also Henrie, Henri, Herry, now Harry, is derived from the Old French and French *Henri*. *Danish*, Hendrik; *Dutch*, Hendrik; *Ger.*, Heinrich; *It.*, Enrico, or Errico; *Lat.*, Henricus; *Port.*, Henrique; *Sp.*, Enrique; *Sw.*, Henrik.

Henry, Cape, Va. Named by Admiral Newport in April, 1607, in honor of Henry, Prince of Wales, son of James I. of England.

Herat (*hĕr-ät'*). Anciently *Aria-Civitas*, the town on the Arius, now the River Heri.

Herbert (*hĕr'-bĕrt*). A name derived from the Alemannic Heribert, Heribret, Heripreht, Old German *Aribert*, which Wachter derives from *aerbert*, "illustrious lord." *Lat.*, Herbertus; *Sw.*, Herbert.

Herculaneum (*hĕr-kū-lā'-nē-ŭm*). An ancient city of Campania, Italy, near the coast, six miles southeast of Naples, directly at the foot of Mount Vesuvius. The ancient Greek name was *Herakleion*, "city of Hercules."

Hercules (*hĕr'-kū-lēz*). From the Greek *Hera* and *Kleos*, "glory or fame"; hence the "glory of Hera." *Fr.*, Hercule; *Ger.*, Hercules; *Gr.*, Herakles; *It.*, Ercole; *Lat.*, Hercules.

Herman (*hĕr'-man*). From the Teutonic, meaning the "leader of an army." *Danish*, Hermann; *Dutch*, Herman; *Fr.*, Armand or Armant; *Ger.*, Hermann; *Lat.*, Arminius; *It.*, Ermanno; *Sw.*, Herman.

Hermione (*hĕr-mī'-ō-nē*). A name derived from *Hermione*, a daughter of Mars and Venus, and who married Cadmus.

Hermitage, The. A palace at St. Petersburg, Russia, founded by Catharine II., originally in the form of a pavilion of moderate size, but rebuilt in the Nineteenth Century in a neo-Greek style of excellent effect, and forming one of the best-designed museums existing. Also the name of the home of President Jackson, near Nashville, Tenn.

Hero. Female name, so called after the celebrated Greek name *Hero*, "one raised or elevated."

Herold. See Harold.

Hester. See Esther.

Hetty, Hettey. Female names derived from Henrietta; perhaps also from Harriet.

Hezekiah (*hĕz-ē-kī'-ä*). From the Hebrew *Hhizkeyyah*, from *hhezek-Yah*, "the strength of Jehovah," or "cleaving to the Lord." *Dutch*, Hiskia; *Lat.*, Hezekias.

Hieronymus (*hī-ē-rŏn'-ĭ-mŭs*). See Jerome.

Highlands, The. A district in northern and western Scotland, of vague limits. It includes the Hebrides, the counties of Argyll, Inverness, Ross and Cromarty, Sutherland and Caithness, and parts of Nairn, Elgin, Banff, Aberdeen, Kincardine, Forfar, Perth, Stirling, Dumbarton, and Bute. The inhabitants are mainly of Keltic stock. The Highlands are celebrated for romantic scenery; they contain the highest mountains in Great Britain.

Highlands of the Hudson. A range of hills and low mountains in eastern New York, in Orange, Putnam, Dutchess, and Rockland counties. Prominent points are Fishkill Mountain, Storm King, Crow's Nest, Donderberg, Anthony's Nose, and West Point.

Hilary (*hĭl'-ä-rĭ*). Derived from the Latin name *Hilarius*, signifying "pleasant, cheerful, merry." *Danish*, Hilarius; *Dutch*, Hilarius; *Fr.*, Hilaire; *It.*, Ilario; *Lat.*, Hilarius; *Sw.*, Hilarius.

Hilda. A female name abbreviated from Everhilda; or derived from the Lombardian word *hild*, "noble."

Hildebrand (*hĭl'-dē-brănd*). The same as Teutonic names *Hildebrand* and *Hiltiprant*. Translated "very fervent," "hero," "leader," etc. Watcher claims the name to be the same as Childebrand, from *child-brand*, which might be translated either "distinguished youth," or "distinguished warrior."

Himalaya (*hĭ-mä'-lä-yä*). From the Sanskrit, *hima*, "snow," and *alaya*, "abode, dwelling." Hence, "the abode of snow."

Hindustan (*hĭn-dō-stän'*, *hĭn-dō-stăn'*). A Persian term signifying the country or place of the Hindus or Indians. *Hindu* is the Persian form of the Sanskrit *Sindhu*, "a dweller on the Indus," which means the river.

Hoang-Ho (*hō-äng-hō'*). In China, this is the "yellow river," which borders Ho-Nan, the province "south of the river," and flows into the Hoang-Hai, or "yellow sea," so called because discolored by the yellow mud brought down by the Hoang-Ho.

Hoboken (*hō'-bō-kĕn*). In New Jersey, opposite New York, often said to be a native name meaning "the smoked pipe," marking the spot where the first colonists smoked the pipe of peace with the Indian chiefs. It is more likely, however, a reminiscence of the Dutch village of Hoboken, three miles from Antwerp.

Hohenzollern (*hō'-ĕn-tsŏl-ĕrn*) **Castle.** A castle situated in the Swabian Alp, near Hechingen, southern Germany, belonging to the present Prussian royal family. It is the ancestral home of Emperor Wilhelm II. of Germany.

Holland. Supposed to be derived from *ollant*, or *holtland*, "marshy ground." Taylor gives the translation of *holtland* as "woodland," that is, the forest around Dordrecht.

Holyoke (*hōl'-yōk*). City in Hampden County, Mass., and mountain in same county, named for Rev. Edward Holyoke, an early president of Harvard College.

Holyrood (*hŏl'-ĭ-rōōd*) **Palace.** An ancient royal palace of Scotland, situated in Edinburgh. It was originally an abbey, founded in 1128; was several times burned and was the scene of the murder of Rizzio, 1566. It was once the place of residence of Mary, Queen of Scots.

Homer. An English baptismal name at the present time. From the classical name, in Greek, *Homeros*, signifying a "pledge, security, hostage."

Honduras (*hŏn-dōō'-räs*). Spanish for "deep water."

Hong Kong (*hŏng'-kŏng'*). The place of fragrant streams.

Honora. An Irish female name derived from the Latin name Honor.

Honoria. A female name derived from the Roman name *Honoria*, the feminine of Honorius; from root of Honor.

Hoosac. River in Massachusetts, New York, and Vermont. Derived from the Mohican Indian *wudjoo*, meaning "a mountain," and *abic*, "a rock." Spelled also *Hoosic* and *Hoosick*.

Hopatcong (*hō-păt'-kŏng*). Lake in New Jersey. An Indian name, meaning "stone over water," because of an artificial causeway of stone which connected an island of the lake with the shore.

Hope. Found frequently as a female name. From the Anglo-Saxon, meaning "expectation."

Horace. From the classical name, *Horatius*, which Littleton translates, "worthy to be looked upon, or becoming in appearance." *Danish*, Horats; *Dutch*, Horatius; *Fr.*, Horace; *Ger.*, Horaz; *It.*, Orazio; *Lat.*, Horatius; *Port.*, Horacio; *Sp.*, Horacio.

Horatio (*hō-rā'-shĭ-ō*). From the root of Horace.

Horatius (*hō-rā'-shĭ-ŭs*). See Horace.

Horse Latitudes. So called because situated between the trade winds and the westerly winds of higher latitudes, and distinguished for tedious calms. It received this name because it was in this portion of the Atlantic the old navigators often threw overboard the horses which they had undertaken to transport to the West Indies.

Hotel des Invalides (*ō-tĕl'-dā zăn-vä-lēd'*). Freely translated, "Soldiers' Home." A great establishment founded in 1670 at Paris for disabled and infirm soldiers. The interior possesses halls adorned with interesting military paintings, and contains the Musee d'Artillerie, which includes a remarkable collection of medieval and Renaissance armor. It contains also the tomb of Napoleon I.

Hotel de Ville (*ō-tĕl'-dŭ vēl*), **Paris.** A celebrated building of great size, burned by the French Commune in 1871, but carefully restored and much enlarged. The exterior is richly adorned with sculpture. The rooms of state display splendid sculptures and wall-paintings by the most distinguished contemporary artists.

Hottentot. The early Dutch settlers at the Cape of Good Hope were much struck with the *click* which forms such a distinct feature of the Caffre languages, and which sounded to them like a perpetual repetition of the syllables *hot* and *tot*. From these sounds they gave the natives the name of *Hott-en-tot*; *en* in the Dutch language meaning "and."

Housatonic (*hōō-sä-tŏn'-ĭk*). River of Massachusetts and Connecticut. From the Indian words *wussi*, "beyond," and *adene*, "mountain," meaning "beyond the mountain." According to other authorities from the Indian words *wassa*, "proud," *aton*, "stream," and *ick*, from *azhubic*, meaning "rocks," the whole meaning "proud river flowing through the rocks."

Houston (*hūs'-tŏn*), **Texas.** In honor of General Samuel Houston, the first president of the Texan Republic. This name is borne by many places in the United States, generally given in honor of Gen. Houston, among them being counties in Minnesota, Tennessee, and Texas; city in Chickasaw County,

Mississippi, and the city in Texas County, Missouri.

Hubert (*hū'-bĕrt*). From the German name *Hugobert*, which Wachter derives from *hug-bert*, "distinguished for memory or prudence." *Danish*, Hubertus; *Dutch*, Hubertus; *Fr.*, Hubert; *Lat.*, Hubertus; *Sw.*, Hubertus.

Hudson River, N. Y. Named in honor of Henry Hudson, an English navigator in the Dutch service who ascended the river in 1607. He called it "the Great River," or "Great River of the Mountains," from the extraordinary circumstance of such a body of water flowing through the mountains without a cataract. The Dutch gave the name of *Mauritus River*, in honor of Prince Maurice, to the section above New York Island.

Hudson's Bay and Hudson's Strait. So named after their rediscovery by Captain Henry Hudson, while searching for the northwest passage in 1610. Prior to this date the Bay and the Strait had not been navigated since their original discovery by Cabot in 1512.

Hugh (*hū*). Derived from the Teutonic *hoog*, or *hugr*, "high, tall, elevated"; also translated as "mine," "thought." *Danish*, Hugo; *Dutch*, Hugo; *Fr.*, Hugues; *It.*, Ugo; *Lat.*, Hugo; *Sw.*, Hugo.

Hulda. A female name, from the Hebrew *Hhuldah*, signifying "a mole or weasel."

Humboldt (*hŭm'-bōlt.* German, *hōōm'-bōlt*) **River, Nev.** Named by General John C. Frémont in honor of Baron von Humboldt, prior to which it was known as "Mary's River," also "Ogden River."

Humphrey (*hŭm'-frĭ*). The same as *Cundfrid*, which Wachter translates "illustrious protector," or "support of peace." *Dutch*, Humfried; *Fr.*, Onfroi; *It.*, Onofredo; *Lat.*, Humphredus or Onuphrius; *Sw.*, Humfrid.

Hungary (*hŭng'-gȧ-rĭ*). Because originally inhabited by the Huns, who were first heard of in China, in the Third Century B. C., as *Hiong-nu*, "giants."

Huron (*hū'-rŏn*). One of the Great Lakes of North America. Opinions differ as to the classification of the name, whether French or Indian, and to its meaning. According to some authorities it is a corruption of the name "Hure," given a tribe of Indians by the French, the word meaning "head of a wild boar," applicable on account of their unkempt appearance; another authority says it is derived from the Indian words *Ohkwe honwe*, "true man"; by others to have been corrupted by the French from the Indian *Irri roron*, "cat-tribe."

Hyde Park. A park in Westminster, London, situated two and one-fourth miles south by west of St. Paul's. This was originally the manor of Hyde, belonging to the Abbey of Westminster. It became Crown property at the dissolution of the monasteries in 1539. It contains about 400 acres.

Iceland. Was called *Snæland*, the "land of snow," by the Viking, Naddodd, who discovered it in 868. On account of the ice-floes which then beset the northern coast, Floki, who followed him, called it *Island*, of which Iceland is the English translation.

Ichabod (*ĭk'-ȧ-bŏd*). From the Hebrew *Iykhabhodh*, which Simonis renders "inglorious."

Idaho. From the Indian words *Edah hoe*, descriptive of the sheen on the mountains, occasioned by the light on the snowy summits, expressed in English "gem of the mountains," or, literally, the first appearance of the sun after sunrise on the mountain tops.

Iddo. Male name from the Hebrew *Iddo*, signifying "love of Him," i. e., of the Lord.

Ignatius (*ĭg-nā'-shĭ-ŭs*). From the Greek *Ignatios*, "ardent, fiery." *Dutch*, Ignatius; *Fr.*, Ignace; *Ger.*, Ignaz, or Ignatius; *Gr.*, Ignatios; *It.*, Ignacio; *Lat.*, Ignatius; *Sp.*, Ignacio, or Inigo.

Ile de France (*ēl-dŭ-frȧns'*), "Isle of France." An ancient government of France. It was the portion of the country about Paris that was most completely under the control of the kings, i. e., the royal domain.

Ilium (*ĭl'-ĭ-ŭm*). In ancient geography, a place in Mysia, Asia Minor, identified by the Greeks with the legendary Troy. It was frequently destroyed in prehistoric times; was rebuilt by Greek colonists in the Sixth Century B. C., and continued (as New Ilium) to late Roman times. Its site has been identified by Schliemann at Hissarlik, about 100 miles north by west of Smyrna.

Illinois (*ĭl-lĭn-oi'*, *ĭl-lĭn-oiz'*). State of the United States. One authority gives it as a combination of the Indian word *Illini*, meaning "men," and the French suffix *ois*, meaning "tribe," "band of men."

India. Means the country traversed by the Indus, or rather the *Hindu*, which name is a Persianized form of the Sanskrit *Sindhu*, "a great river," rendered *Hindos* in the Greek.

Indiana. From the word Indian, first applied in 1768 to a grant of land north of and near the Ohio River, which was obtained that year by a company of traders from the Indians.

Indianapolis, Ind. Literally, the City of Indiana, from *Indiana* and *polis*, "city." This name was proposed by Judge Jeremiah Sullivan of Jefferson County, Ind., being preferred to *Tecumseh* and *Suwarrow*, which were suggested.

Indian Ocean. Indicative of its geographical position.

Inigo (*ĭn'-ī-gō*). Another spelling of Innigo or Enneco, and derived probably from *Ignatius*, or corrupted from *Heinrich*.

Innocent (*ĭn'-nō-sĕnt*). From the Latin, meaning "harmless." *Dutch*, Innocentius; *Fr.*, Innocent; *Ger.*, Innocenz, or Innocentius; *It.*, Innocente; *Lat.*, Innocentius; *Sp.* Inocencio.

Innsbruck (*ĭns'-prōōk*). Means "at the bridge," on the River Inn.

Inns of Court. Legal societies in London which have the exclusive privilege of calling candidates to the bar, and maintain instruction and examination for that purpose; also the precincts or premises occupied by these societies respectively.

Iowa. A French form of the Indian word *Ayuhba*, signifying "the drowsy or the sleepy ones." Written at first *Aioues*, and applied to a tribe of Indians, would seem to be simply *Ajawa*, "across, beyond," as if to say, "the tribe beyond the river."

Ira (*ī'-rȧ*). A male name, from the Hebrew, *Ira*, "watchful."

Ireland. Was the Roman *Hibernia*, the Greek *Ierne*, and the Keltic *Erin*. The usual explanation of the name is from the Keltic *iar*, "behind," and hence "to the west," or "western isle."

Irene (*ī-rē'-nē*, or *ī-rēn'*). A female name. From the Greek *Eirene*, "goddess of peace," literally, peace. *Fr.*, Irène; *Ger.*, Irene; *It.*, Irene.

Irish Sea. So named from its geographical position.

Irmgard or **Ermgard** (*irm'-gȧrd*). Anglicised form of the Teutonic *Ermengarde* or *Irmgarde*, meaning a "public benefactor."

Isaac (*ī'-zȧk*). From the Hebrew *Yitschhak*, which some translate "laughing"; others "sporting." *Arabic*, Ishak; *Danish*, Isak; *Dutch*, Izaak; *Fr.*, Isaac; *Ger.*, Isaak; *Hungarian*, Izsak; *It.*, Isacco; *Lat.*, Isaacus; *Polish*, Izaak; *Sw.*, Isak.

Isabel (*ĭz'-ȧ-bĕl*), **Isabella** (*ĭz-ȧ-bĕl'-lȧ*). According to some this name is the same as Jezebel, which Tregelles thinks may mean "without cohabitation," i. e., "chaste," "modest." Another derivation is that it is the same as Elizabeth; but Isabella is rather from Isabel, the Spanish rendering of Elizabeth. *Dutch*, Isabelle; *Fr.*, Isabelle; *Ger.*, Isabelle; *It.*, Isabella; *Lat.*, Isabella; *Sp.*, Isabel; *Sw.*, Isabella.

Isaiah (*ī-zā'-yȧ*). From the Hebrew *Y'shayahu*; from *yesha-Yahu*, "the salvation of Jehovah."

Danish, Isaias; *Dutch,* Jezajas; *Fr.,* Isaie; *Ger.,* Esaias; *It.,* Isaia; *Lat.,* Esaias; *Port.,* Isaias; *Sp.,* Isaias.

Ischl (*ĭsh'l*). A famous watering-place in Upper Austria, situated at the junction of the rivers Ischl and Traun, twenty-seven miles east by south of Salzburg. It is the favorite resort of the Austrian royal family and nobility, and contains salt and other baths. It is the central point in the Salzkammergut.

Ishmael (*ĭsh'-mā-ĕl*). Hebrew for "God hath heard." *Arabic,* Ismaeel, or Ismail; *Fr.,* Ismael; *It.,* Ismaelc; *Lat.,* Ishmael.

Isidore (*ĭz'-ĭ-dōr*). From the Latin, *Isidorus,* which some translate "strong gift." The name signifies "gift of Isis." *Dutch,* Isidorus; *Fr.,* Isidore; *Gr.,* Isodoras; *It.,* Isidoro; *Lat.,* Isidorus.

Island of Desolation. Was so designated by Captain Cook owing to the absence of all signs of life.

Isle of Bourbon (*bōōr'-bŭn. Fr. bōōr-bôn'*). When settled by the French, it was so named for the Bourbon family.

Isle of Man. Is the modern designation of Mona Island, by which was meant, agreeably to the Keltic *maen,* "a stone," rocky island.

Isle of St. Helena (*hĕl'-ē-nȧ*). Discovered on the Feast of St. Helena, 1502.

Isle of Wight (*wīt*). It originally denoted the island of the Wyts, or Jutes.

Israel (*ĭz'-rā-ĕl*). From the Hebrew, meaning "prevailing with God." *Fr.,* Israel; *Ger.,* Israel; *Lat.,* Israel.

Italy. Was so called after Italus, one of the early kings of the country.

Itasca. County and Lake in Minnesota, into which flows the head waters of the Mississippi, and named on this account, Itasca, from the two Latin words *veritas caput,* "the true head." Schoolcraft notes derivation from *ia,* "to be," and *totosh,* "the female breast," signifying source of the river.

Ithaca (*ĭth'-ȧ-kȧ*). City in Tompkins County, New York, and village in Gratiot County, Michigan, named for one of the Ionian Islands, supposed to be the one celebrated in the Homeric poems as the Kingdom of Ulysses.

Ivan (*ē-vän'*). See John.

Jabez. From the Hebrew *Yabets,* which Simonis renders, "he will cause pain," i. e., to his mother.

Jackson, Miss. So named in honor of General Andrew Jackson.

Jacksonville, Fla. In honor of President Andrew Jackson, named in 1822.

Jacob (*jā'-kŏb*). From the Hebrew, *Yaakob,* which Tregelles translates, "taking hold of the heel, supplanter, layer of snares." *Arabic,* Yakoob, or Ya'kūb; *Danish,* Jakob; *Dutch,* Jacob, or Jakob; *Fr.,* Jacob; *Ger.,* Jakob; *Hungarian,* Jakob; *It.,* Giacobbe; *Lat.,* Jacobus, or Jacob; *Polish,* Jakob; *Sw.,* Jakob.

Jaffa (*jăf'-fȧ, yäf'-fȧ*) or **Joppa** (*jŏp'-pȧ*). From the Semetic, Yapho, "beauty."

Jamaica (*jȧ-mā'-kȧ*). A corruption of Xaymaco, a native West Indian name signifying "the country abounding in springs."

James. A name corrupted from Jacobus. *Danish,* Jakob; *Dutch,* Jacobus; *Fr.,* Jacques; *Ger.,* Jakob; *Hungarian,* Jakab; *It.,* Giacomo; *Lat.,* Jacobus; *Polish,* Jakub; *Port.,* Diogo, or Jacobo; *Russ.,* Yakof; *Sp.,* Jaime; *Sw.,* Jakob. See Jacob.

James' Bay. Named in honor of the memory of James I., in whose reign it was completely explored.

James River, Va. In honor of James I. of England, prior to which it was named the *River of the Holy Ghost.* The Indian name was *pawathanne,* "river of pregnancy." To this stream Captain John Smith gave the spelling of "Powhattan," stating the chief took his name from the stream.

Jamestown. Town in James City County, Virginia, named for King James I., and the first English settlement in America.

Jan (Dutch, *yän*). An Anglo-Norman form of John.

Jane. From the French name Jeanne, from root of John. *Dutch,* Hanna; *Fr.,* Jeanne; *Ger.,* Johanna; *It.,* Giovanna; *Lat.,* Johanna, or Joanetta; *Sp.,* Juana; *Sw.,* Johanna.

Janesville. Town in Lassen County, California, and city in Rock County, Wisconsin, named for Henry F. Janes.

Janet (*jăn'-ĕt,* or *jā-nĕt'*). A diminutive of Jane.

Janiculum (*jăn-ĭk'-yū-lŭm*), or **Mons Janiculus** (*monz ja-nik'-u-lus*). Highest of the hills of Rome; situated on the right bank of the Tiber, extends south from the Vatican, and is opposite the Capitoline and the Aventine.

January. In honor of Janus, a deity who presided over the beginning of everything.

Japan. A European modification, brought about through the Portuguese *Gepuen,* or Japao, of the native *Nippon,* or *Niphon,* compounded of *ni,* "sun, fire," and *pon,* "land," literally "sun-land," or "land of the rising sun," and signifying "the fountain of light."

Jaqueline (*jăk'-we-lĭn*). The feminine of James. *Fr.,* Jacqueline (*zhäk-lēn'*); *Ger.,* Jakobine; *It.,* Giacomina, or Giacobba.

Jasper (*jăs'-pĕr*). A male name derived from the Arabic *yashm,* or Persian *yashb,* the precious stone jasper; hence, "treasure master." *Danish,* Jesper; *Dutch,* Jasper, or Kasper; *Fr.,* Gaspard; *Ger.,* Caspar, or Kaspar; *It.,* Gasparo; *Lat.,* Gaspar; *Port.,* Gaspar; *Sp.,* Gaspar; *Sw.,* Kasper.

Java. A native Malay word signifying "the land of nutmegs."

Jean. A female name derived from the French name *Jeanne,* the feminine form of Jean; from root of John.

Jeanne. See Jane.

Jeannette (*jē-nĕt'*). See Jenet.

Jedidiah (*jĕd-ē-dī'-ȧ*). The Hebrew *Y'dhiydhyah,* from *yadhaydh,* "beloved of Jehovah."

Jefferson City, Mo. In honor of President Thomas Jefferson.

Jenet (*jē-nĕt'*). The diminutive of Jane. *Fr.,* Jeannette; *It.,* Giovannetta; *Lat.,* Joanetta.

Jephthah (*jĕf'-thȧ*). From the Hebrew, meaning, a "discoverer." *Fr.,* Jephté; *Lat.,* Jephtha.

Jeremiah (*jĕr-ē-mī'-ȧ*), or **Jeremy** (*jĕr'-ē-mi*). From the Hebrew *Yirm-Yah,* which Simonis renders "elevated of the Lord." *Danish,* Jeremias; *Dutch,* Jeremias; *Fr.,* Jerémie; *Ger.,* Jeremias; *It.,* Geremia; *Lat.,* Jeremias; *Sw.,* Jeremias.

Jerome (*jĕr'-ŏm* or *jē-rōm'*). A name corrupted from Hieronymus, "holy law," or "sacred name." *Danish,* Jeronymus; *Dutch,* Hieronymus; *Fr.,* Jerome; *Ger.,* Hieronymus; *It.,* Geronimo, or Girolamo; *Lat.,* Hieronymus; *Port.,* Hieronimo; *Sp.,* Geronimo; *Sw.,* Hieronymus.

Jerry. A male name, corrupted from Jeremiah.

Jersey. Was originally *Czar-ey,* meaning "Cæsar's Island," so called by the Romans in honor of Julius Cæsar.

Jersey City, N. J. Originally incorporated, 1829, and named after the State as the "City of Jersey." In 1851, under a new charter, the name was transposed.

Jerusalem (*jē-rū'-sā-lĕm*). This name means, "foundation of peace." It is derived from the Hebrew, *yarah,* "a foundation," and *shalaim,* or *shalem,* "peace, perfect, whole."

Jesse (*jĕs'-sē*). From the Hebrew *Yishay,* from *yesh,* "wealth". Others render the name "graft." If so, it comes from *yash,* "being, existence."

Jessica. A female name, probably a diminutive of Jessie.

Jessie. A female name. Like the French

masculine name Joan, formerly from root of John.

Job (*jōb*). From the Hebrew *Iyyobh*, "the persecuted" (man), hence, "sorrowing." *Arabic*, Aiyoob, or Ayyub; *Fr.*, Job; *Ger.*, Hiob; *Gr.*, Iob; *It.*, Giobbe; *Lat.*, Job, or Jobus; *Sw.*, Job.

Joel (*jō'-ĕl*). Means, "acquiescing." *Fr.*, Joel; *Lat.*, Joel.

Johanna. A female name derived from John.

John. From the Hebrew, *Y'hohhanan*, variously translated, "the Lord gave graciously"; "whom Jehovah gave"; "whom Jehovah bestowed." *Danish*, Johann, or Hans; *Dutch*, Jan; *Fr.*, Jean; *Ger.*, Johann (familiarly Hans, a contraction of Johannes); *Gr.*, Ioannes; *Hungarian*, Janos; *It.*, Giovanni; *Lat.*, Joannes, or Johannes; *Pol.*, Jan; *Port.*, João; *Russ.*, Ivan; *Sp.*, Juan; *Sw.*, Johan, or Hans.

Johnstown, Pa. City and borough in Cambria County, Pennsylvania, named for an early settler, Joseph Jahns or Yahns.

Johnstown, N. Y. City in Fulton County, New York, named for its founder, Sir William Johnson.

Joliet (*jō'-lĭ-ĕt*), **Ill.** Named after the French explorer, Louis Joliet.

Jonah (*jō'-nȧ*), or **Jonas** (*jō'-nas*). From the Hebrew *Yonah*, "a dove"; perhaps given as a term of endearment. *Fr.*, Jonas; *Ger.*, Jonas; *Lat.*, Jonas.

Jonathan (*jŏn'-ȧ-than*). From the Hebrew *Y'honathan*, "the Lord gave, or given by Jehovah." *Fr.*, Jonathan; *Lat.*, Jonathan.

Jordan. The Hebrew name is *yarden*, which Robinson translates "the flowing," "the river," like the German, Rhein, from *rinnen*.

Joseph (*jō'-sĕf*). From the Hebrew *Yosheph*, signifying "he shall add." *Fr.*, Joseph; *Ger.*, Joseph; *Hungarian*, Jozsef; *It.*, Giuseppe; *Lat.*, Josephus; *Polish*, Jozef; *Port.*, José; *Sp.*, José; *Arabic*, Yūsuf.

Josephine (*jō'-zĕf-ĭn*). The feminine of Joseph. *Fr.*, Josèphe, or Joséphine; *Ger.*, Josephe, or Josephine; *It.*, Giuseppa, or Giuseppina; *Lat.*, Josepha.

Joshua (*jŏsh'-ū-ȧ*). From the Hebrew *Y'hoshua*, "whose help or salvation is Jehovah," hence, a "saviour." *Dutch*, Josua; *Fr.*, Josué; *Ger.*, Josua; *It.*, Giosue; *Lat.*, Josua; *Sw.*, Josua.

Josiah (*jō-sī'-ȧ*), or **Josias** (*jō-sī'-as*). From the Hebrew *Y'shiyyahu*, "whom the Lord gives." *Danish*, Josias; *Dutch*, Jozias; *Fr.*, Josias; *It.*, Giosiade; *Lat.*, Josias.

Juan (*jū-ăn'*. Spanish, *hōō-ăn'*). See John.

Juan de Fuca (*jū'-ăn dĕ fū'-kȧ*), **Strait of, Wash.** After Juan de Fuca, an old Greek sailor who navigated its waters in 1592; name applied by Apostulus Valerianos.

Juan Fernandez (*jū'-ăn fĕr-năn'-dĕz*. Spanish, *hōō-ăn'-fĕr-nän'-dĕth*). Also known as Selkirk's Island, after Alexander Selkirk, its solitary inhabitant from September, 1704, to February, 1707; perpetuates the name of its discoverer in the year 1567.

Judah (*jū'-dȧ*), **Judas** (*jū'-das*), **Jude** (*jūd*). Hebrew, meaning "confession." *Fr.*, Juda, or Jude; *Ger.*, Judas; *Hungarian*, Juda; *It.*, Giuda; *Lat.*, Judas; *Polish*, Judas; *Sw.*, Judas.

Judith (*jū'-dĭth*). From the Hebrew *Y'hudhiyth*, "in the Jewish tongue," also, "praising." *It.*, Giuditta; *Lat.*, Juditha.

Julia (*jū'-lĭ-ȧ* or *jūl'-yȧ*). The feminine of Julius. *Dutch*, Julia; *Fr.*, Julie; *Ger.*, Julie; *It.*, Giulia; *Lat.*, Julia; *Sp.*, Julia; *Sw.*, Julia.

Julian (*jū'-lĭ-an* or *jūl'-yăn*). A name derived from the *Latin* Julianus, formed from Julius. Julian is a feminine as well as a masculine name. *Dutch*, Julianus; *Fr.*, Julien; *Ger.*, Julian; *It.*, Giuliano; *Lat.*, Julianus; *Port.*, Julião; *Sp.*, Julian, or Juliano; *Sw.*, Julian.

Juliana (*jū-lĭ-ăn'-ȧ*). A female name derived from Julian. *Dutch*, Juliana; *Fr.*, Julienne; *Ger.*, Juliane; *It.*, Giuliana; *Lat.*, Juliana; *Port.*, Juliana; *Sp.*, Juliana; *Sw.*, Juliana.

Julien. See Julian.

Julienne. See Julia.

Juliet (*jū'-lĭ-ĕt*). A diminutive formed from Julia.

Julius (*jū'-lĭ-ŭs*). The Roman name, said to be derived from Julius or Iulus, "sprung from Iulus." *Dutch*, Julius; *Fr.*, Jules; *Ger.*, Julius; *It.*, Giulio; *Lat.*, Julius; *Port.*, Julio; *Sp.*, Julio.

July. The name given to this month by Marc Antony in honor of Julius Cæsar, who was born in it.

June. From Juno, the queen goddess.

Jungfrau (*yŏŏng'-frow*) **Mountain.** A noted Alpine peak, "the maiden, or the fair one," so called from its spotless white.

Juniata (*jū-nĭ-ăt'-ȧ*) **River, Penn.** Named from a tribe of Indians inhabiting its banks, extinguished by the Iroquois. The root of the word means "a stone." *Onajutta-haga*, "the Juniata people," is the name found on early maps.

Justin (*jŭs'-tĭn*). A masculine name derived from the Roman, Justinus, formed from Justus.

Justina (*jŭs-tī'-nȧ*). A feminine name formed from Justin.

Jutland. Means the land of the Jutes.

Kaaba, or **Caaba** (*kä'-ȧ-bȧ*). A cube-shaped, flat-roofed building in the center of the Great Mosque at Mecca; the most sacred shrine of the Mohammedans.

Kaffraria (*kȧf-frā'-rĭ-ȧ*). Country of the Kaffirs, or "unbelievers."

Kalamazoo (*kăl-ȧ-mȧ-zōō'*). City, river, and county in Michigan. According to one authority, derived from the Indian word *Negikanamazo*, meaning, "otter-tail"; "beautiful water" and "boiling water" are other versions.

Kanawha (*kȧ-nō'-wȧ*) **River, W. Va.** From a tribe of Indians (branch of the Nanticokes), evoluting in its spelling through *Conoys, Conoise, Canawese, Cohnawas, Canaways*, to *Kanawha*. The stream is called "the Great Conoway or Wood's River" in Wyman's map of the British Empire, 1770.

Kansas. From its principal river, adopted in 1854. The river named from a tribe of Indians, formerly in that locality, known as the *Konsos* or *Kows*, the word meaning "smoky water."

Kansas City, Mo. The name given in the spring of 1839, at a meeting of the "Town Company," an organization for starting towns and locating steamboat landings on the Missouri River; the name for adoption was considered in connection with the Kaws or Kansas tribe of Indians. When first adopted the name was City of Kansas.

Karnak (*kär'-năk*). A village in Egypt, on the eastern bank of the Nile, on the site of Thebes, famous for its remains of antiquity.

Katahdin (*kä-tä'-dĭn*). Mountain in Maine. An Indian word, *Ktaadn* or *Katahdu*, meaning, according to different authorities, "highest land," "big mountain," "greatest or chief mountain."

Kathleen (*kăth-lēn'*). An Irish diminutive of Catharine.

Kearsarge (*kēr'-särj*), **Mt.** Corruption of the Indian *keas*, "high," *auke*, "a place," "a high place"; another derivation traces it from the Indian *Koowassadchu*, "pine or peaked mountain."

Kenilworth (*kĕn'-ĭl-wērth*). A town in Warwickshire, England, five miles north of Warwick. The castle is one of the most admired of English feudal monuments, and was long of note as a royal residence. It has been immortalized by Sir Walter Scott.

Kennebec (*kĕn-ē-bĕk'*) **River, Me.** From the Indian *quinninippiohke*, "long place of water." This was the Indian name of Moosehead Lake.

Kennebunk (*kĕn-ē-bŭnk'*), **Me.** Similar to Kennebec, an adaptation of another pronunciation.

Kenneth (*kĕn'-nĕth*). The English form of the Gaelic name *Coinneach*; perhaps from *caoin-neach*, a "kind, gentle, or mild man."

Kenosha (*kē-nō'-shȧ*), **Wis.** Algonquin derivation from *kenose*, "long," meaning "a long fish" (the pike).

Kensington (*kĕn'-sĭng-tŭn*). The town of the Kensings, the old form of which was the proper name *Cynesige*.

Kent. This is probably derived from the ancient British word *chent* or *cant*, "a corner," because, says Camden, "England at this point stretched itself out in a corner to the northeast." The Roman name was *Cantium*.

Kentucky. From its principal river, adopted in 1782. Derived from an Indian word, *Kain-tuk-ee*, "at the head of the river."

Keokuk (*kē'-ō-kŭk*). City and county in Iowa, named for an Indian chief, the word meaning "running or watchful fox."

Kew (*kū*). The name of this place has undergone many transitions. In a court roll of the manor of Richmond, in the reign of Henry VII., it is written *Kayhough*, and in subsequent entries it is varied to *Kayhowe, Kayhoo, Keyhowe, Keye, Kayo*, and *Kewe*. The name is probably derived from the word *quay*, a landing place.

Keweenaw (*kē'-wē-nô*) **Point, Mich.** So named from a portage called by the Indians *Kewauenau*, meaning the "place where we cross by land carrying the canoe."

Kew Observatory. The central meteorological observatory of Great Britain. It is at Old Richmond Park, between Kew and Richmond, and was built by George III. for the observation of the transit of Venus in 1769, and called the "King's Observatory." In 1842, it was handed over to the British Association, under the name of "Kew Observatory." In 1871, it became the central station of the British meteorological office.

Key West. City in Monroe County, Florida. A corruption of *Cayo Hueso*, a Spanish word, meaning "a bone reef or island"; the place was so named because of the number of bones found upon the reef.

Keziah (*kē-zī'-ȧ*). A feminine name derived from Kezia, daughter of Job, from the Hebrew, *Kt'siya*, signifying "cassia," a bark similar to cinnamon.

Khedive (*kā-dēv'*). This word, from the Persian *Khidiw*, according to the best authorities, means "Prince."

Kiskiminetas (*kĭs-kē-mĭn'-ē-tas*) **River, Pa.** From an Indian phrase, *Kithanne*, translated, "place of the largest stream."

Kittatinny (*kĭt'-tȧ-tĭn-nĭ*) **Mountains, Pa.** The Indian word *Kitadini*, that is, "largest mountain."

Kittery (*kĭt'-tĕr-ĭ*) **Point, Me.** From the small hamlet of Kittery, England. Kittery Point was settled in 1623, and it is claimed was the first settled and the oldest town in the State.

Knoxville, Tenn. After Gen. Henry Knox of Massachusetts, secretary of war during Washington's administration. First applied as Fort Knox, subsequently to the settlement.

Kokomo (*kō'-kō-mō*), **Ind.** An Indian word meaning "a young grandmother."

Konrad. See Conrad.

Kremlin (*krĕm'-lĭn*). A citadel of Moscow, Russia. A highly picturesque and interesting inclosure, about one and one-half miles in circuit, fortified with battlemented walls from which project cylindrical and square towers, many of them terminating in spires behind which rise the multiform domes and belfries of the churches, brilliant with gold and colors. It was walled in 1492.

Kurdistan, or **Koordistan** (*kōōr-dĭs-tăn'*). Means the country of the Koords.

Kyrle (*kĕrl*). A masculine name derived from Karl or Carl, from root of Charles.

Laban (*lā'-ban*). A masculine name, from the Hebrew *Labhan*, signifying "white."

Labrador (*lăb-rȧ-dôr'*). Bears a name which is believed to testify to the early maritime enterprise of the Portuguese. Hence the country seems to have acquired the name of *Terra de Lavradores*, the "land of the laborers." According to another explanation, Bradore Bay, formerly called Labrador Bay, acquired that name from the visit of a Basque whaler called the *Labrador*, the name of the bay being subsequently extended to the whole coast.

Labyrinth (*lăb'-ĭ-rĭnth*). From the Greek *labyrinthos*, "a maze of intricate passages"; especially, a subterranean structure having many intricate passages. Several such mazes were famous in antiquity. The greatest was that which lay near Lake Mœris, in the Fayum, Egypt, and was probably built by Amenemhat III., about 2300 B. C. According to Herodotus, it had 3,000 halls and chambers, half of them above ground and half below, and twelve covered courts.

Lackawanna (*lăk-ȧ-wŏn'-nȧ*) **Creek, Pa.** From the Delaware Indian words *lechau-hanne*, "the stream that forks."

La Crosse (*lȧ krŏs'*). City and county in Wisconsin. A French name given to the town because before its settlement the ground was a favorite place for ball playing with the Indians, the game being called by the French "la crosse."

Ladrone (*lȧ-drōn'*) **Islands.** So designated from the circumstance that when Magellan touched upon one of the lesser isles of the group, in 1520, the natives stole some of his goods; whereupon he called the islands the Ladrones, which is Spanish for "thieves."

Lake District, English. A region in Westmoreland and Cumberland, England, which abounds in lakes inclosed by mountains. The district is a celebrated tourist center, and is associated with the poetry of Wordsworth. The lakes include Windermere, Ullswater, Derwentwater, and Bassenthwaite Water; and Skiddaw, Helvellyn, and Scafell Pike are the principal mountains.

Lake Huron. See Huron.

Lake Michigan. See Michigan.

Lake of the Woods. Lake in Minnesota. Originally named *Lac des Bois* by the French, "lake of the woods," because of the heavily wooded islands in the lake.

Lake Ontario. See Ontario.

Lake Superior. Denotes the uppermost and chief of the Great Lakes.

Lake Winnipeg. See Winnipeg.

Lambert (*lăm'-bĕrt*). Corrupted from the Old German name Lamdbert, Lantprecht; from *landbrecht*, "one distinguished among the people." *Dutch*, Lambert, or Lambertus; *Fr.*, Lambert; *Ger.*, Lambert; *Lat.*, Lambertus.

Lambeth (*lăm'-bĕth*) **Palace.** The London residence of the Archbishop of Canterbury, situated in Lambeth, near the Thames, one and one-half miles southwest of St. Paul's. It was acquired by the archbishops in 1197. The present building was commenced in the Thirteenth Century. It contains a valuable library.

La Moille (*lȧ moil'*) **River, Vt.** Discovered and named by Champlain as *la mouette*, "the mew or gull," they having been seen in great numbers on its waters. The present spelling, a corruption easily traceable to not crossing the *t's* and absence of a perfect *e*.

Lancelot (*lăn'-sē-lŏt*). Sometimes rendered "servant," or "little lance"; if so, the bearer was so called from carrying a lance or pike. The name seems to be a diminutive formed from Latin *lancea*, "a lance, javelin," a word which Varro thinks of Spanish origin. *Fr.*, Lancelot; *Lat.*, Lancelottus.

Languedoc (*lăn'-gwē-dŏk*. French, *läN'-gŭ-dŏk*). An ancient government of southern France. It

was named from the language of the South of France; the *langue d'oc*, or Provençal.

Laporte (*là-pōrt'*). County in Indiana. A French word meaning "door" or "opening" between two stretches of forest connecting two prairies.

Las Vegas (*läs vā'-gȧs*). City in San Miguel County, New Mexico. A Spanish name meaning "the plains," or the "meadows," and given this city on account of its situation in the midst of a fertile meadow.

Launcelot. Another spelling of Lancelot.

Laura (*lô'-rȧ*). A feminine name derived from Latin *laurus*, "a laurel or baytree," dedicated to Apollo, used in triumphs, and worn by emperors and poets in garlands. Laura corresponds to the Greek name Daphne.

Laurence, Lawrence. From the Latin name *Laurentius*, formed from *laureo*, "to crown with laurel."

Lauterbrunnen (*lou'-tĕr-brŏŏn-nĕn*). A valley and parish in the Bernese Oberland, Switzerland, thirty-three miles southeast of Bern. It is noted for the Staubbach, Trummelbach, and other falls.

Lavinia (*lā-vĭn'-ĭ-ȧ*). Formed as a feminine name from Latinus, mythical Roman King.

Lawrence. See Laurence.

Lazarus (*lăz'-ȧ-rŭs*). From the Hebrew *Elazar*, "God aids," i. e., whom God aids. Fr., *Lazare*; Gr., *Lazaros*; It., *Lazzaro*; Lat., *Lazarus*.

Leah (*lē'-ȧ*). From the Hebrew *Leah*, signifying "wearied."

Leander (*lē-ăn'-dĕr*). From the Greek *Leiandros*, translated "man of renown."

Leavenworth, Kan. In 1820, a fort was established at this place by the United States Government under the charge of Col. Henry H. Leavenworth of the 3d U. S. Regiment, and named Fort Leavenworth, about which a town formed and the fort's name was applied.

Lehigh River, Pa. Corruption of the Delaware word *lechau*, "a fork," a reference to this stream being one of the forks of the Delaware; also traceable as applied to the forked piece of land over which the Indians made a portage when coming down the river.

Lemberg (*lĕm'-bĕrg*). The capital of the Austrian crownland of Galicia. About 1259 the Ruthenian prince Daniel is said to have built it for his son Leo, in whose honor it was named Leopolis, whence the present name Lemberg and the Polish Lvóv. In 1914 the city, with immense stores, was captured by the Russians who were forced to yield it later when defeated by the Teutonic armies.

Lemuel (*lĕm'-ū-ĕl*). From the Hebrew *L'muel*, from *l'mu-El*, "by God," i. e., created by God.

Lens (*lăn*). A town in the department of Pas-de-Calais, northern France, 9 miles northeast of Arras, in the center of important coal-fields. During the European War, beginning in 1914, Lens with the surrounding region was almost a continual battlefield.

Leo (*lē'-ō*), or **Leon** (*lē'-ŏn*). Latin, "a lion." Fr., *Léon*; It., *Leone*; Lat., *Leo*.

Leonard (*lĕn'-ard*). From the Old German name *Leonhard*, "as strong as a lion."

Leonora. See Eleanor.

Leopold (*lē'-ō-pōld*). Wachter renders this name "bold as a lion." It is doubtless the same name as the Old German *Leopold*, *Leupold*, *Leodpold*.

Levant (*lē-vănt'*). Levant means simply "the east," though it is generally confined in its use to the eastern parts of the Mediterranean, as the coasts of Egypt, Syria, and Asia Minor. The word is Italian, and signifies *rising*, alluding to the sun rising in the east.

Lewellin (*le-wel'-lin*). Means "like a lion." Lat., *Leolinus*.

Lewis or **Louis** (*lōō'-ĭs*). Like the French name, *Louis*, corrupted from Ludovicus, from the Old German name *Ludwig*, "illustrious warrior," or the "fortress or defence of the people."

Liberia (*lī-bē'-rĭ-ȧ*). Means "the country of the free." It was colonized by emancipated slaves.

Licking, Ky. An application of the translation of its Indian name *mahonink*, "the place of the lick," referring to buffalo licks on its banks, now the noted Blue Lick Springs.

Liége (*lē-ĕzh'*). The capital of the province of Liége, center of the Walloon country, and important manufacturing city of Belgium, situated on both banks of the Meuse. The city is supposed to have had its origin in a Roman colony; Latin name, *Leodium*. The French name goes back to *Legia*, possibly derived from a small stream which runs through the town. Walloon, *Lige*; Flemish, *Luik*; German, *Lüttich*. Liége was the scene of the first real battle of the European War which began in 1914. After costly attempts by the Germans to take it by frontal attacks, its protecting forts were finally reduced by heavy siege guns.

Light Brigade, Charge of the. A celebrated charge made by the Light Brigade of 670 men, under Lord Cardigan, the British commander, on a Russian battery at Balaklava, October 25, 1854.

Lille (*lēl*), formerly **L'Isle**; Flemish, *Ryssel*. The capital of the department of Nord, and one of the chief cities of France. Lille grew around the castle of Buc in the eleventh century, was fortified by Baldwin IV about 1030, and in the twelfth century had become one of the chief cities of Flanders. Almost from the beginning of the great European struggle of 1914, Lille suffered the rigors of war. During German occupation it was forced to pay a large war tribute. Name derived from *L'Isle*, "the island."

Lillian. A feminine name, from the Latin *lilium*, "a lily."

Lima (*lī'-mȧ*. Spanish, *lē'-mä*). Probably from *Lomnech*, "a barren spot." Taylor says it is a corruption of *Rimac*, the Indian name of the plain on which the city stands.

Limoges (*lē-mōzh'*). From *Lemovicum*, "the dwelling of the Lemovici," or "dwellers among the elms."

Lincoln, Neb. At the time it was made the capital city it received the name Lincoln as a compliment to President Abraham Lincoln, having been previously named Lancaster.

Lincoln Highway. An ocean-to-ocean thoroughfare, named in memory of Abraham Lincoln. It extends from New York to San Francisco by way of Philadelphia, Pittsburgh, Chicago, Omaha, Cheyenne, Reno, and Sacramento. Connecting twelve states, it has a total length of about 3,400 miles, the longest hard-surfaced road in the world.

Lincoln's Inn Fields. The largest square in London. It is near the junction of High Holborn and Chancery Lane, and is surrounded by lawyers' offices, Lincoln's Inn, the Royal College of Surgeons, and the Soane Museum. It was laid out by Inigo Jones, the celebrated architect.

Linda. A feminine name — abbreviated from Belinda.

Lionardo. Same as Leonardo. See Leonard.

Lionel (*lī'-ō-nĕl*). A name formed from a word, *leonellus*, a diminutive of the Latin *leo*, "a lion."

Lion of Lucerne (*lōō-sĕrn'*). A famous piece of sculpture, by Thorwaldsen, commemorating the heroism and devotion of nearly 800 Swiss guards who died to save Louis XVI., in the attack on the Tuileries, August 10, 1792. The colossal figure of the crouching lion, transfixed and dying but still faithfully defending the lilied shield of France, is carved in the round in a recess in the face of an upright, vine-draped rock, in a little park in Lucerne, Switzerland.

Lisbon (*lĭz'-bŭn*). In Portuguese, *Lisboa*, is derived from the old name *Olisipo*, supposed to contain the Phenician word *hippo*, a "fortress," or "walled town."

Little Rock, Ark. A local application from the

town occupying the top of a rocky cliff, which is much more conspicuous than the other cliffs of the river bank; also said to be traceable from an igneous slate rock in the river bed at this point, visible only at low stages of the water.

Livia (*liv'-i-á*). From the Roman *Livia*. *Fr.*, Livie; *It.*, Livia; *Lat.*, Livia.

Llano Estacado (*lä'-nō ās-tä-kä'-dō*). An elevated plateau in northwest Texas and New Mexico. Spanish words meaning "staked plain," applied to this plateau on account of the stake-like boles of the yucca plant which grows there.

Llewellyn (*lū-ĕl'-lin*). From the Keltic, meaning "lightning."

Lloyd's (*loidz*). A London Underwriters' Association for the furtherance of commerce, especially for marine insurance and the publication of shipping news. It originated in meetings at Lloyd's Coffee House about 1688.

Lodovico or **Lodovic.** See Lewis.

Lombard (*lŏm'-bärd*) **Street.** The name of a street in the city of London, often used figuratively to mean the banking or financial world. It is the quarter wherein the money-lenders from Lombardy settled. The Lombards were an eminently commercial and financial people, and competed with the Jews in the Middle Ages as capitalists and pawnbrokers.

Lombardy (*lŏm'-bär-di*). The country of the *Longobardi*, so called from a kind of weapon which they used.

London. The origin of this name cannot be ascertained with any certainty. Its most probable derivation is from *Llyn-Din*, the "town on the lake." It was the capital of the Saxon kingdom of Essex, and was known in the time of the Heptarchy as *Lundenceaster*.

Long Island, N. Y. Name applied by the Dutch in reference to its long and narrow conformation, "*Lange Eylandt.*" During Governor Fletcher's administration, by act of General Assembly of New York, 1693, the name of *Nassau* was decreed as a Dutch compliment to Prince Maurice of Nassau. It was not favorably received by the settlers and by common consent they used Long Island.

Long Island Sound. From Long Island.

Lookout, Cape, N. C. Traceable to coast captains, that when this land was seen, to be on the "look-out" for the stormy Cape Hatteras and its long shoals.

Lora. A form of Laura, which occurs as early as 1208.

Lorenz or **Lorenzo.** See Laurence.

Loretta. A diminutive of Lora.

Los Angeles (*lōs ăn'-jĕl-ĕz*. Spanish, *lōs äng'-hĕl-ĕs*). Originally called by the Spaniards Pueblo de la Reina de los Angeles (The town of the Queen of the Angels), hence Los Angeles, "the angels."

Lotty. A feminine name corrupted from Charlotte.

Louis. See Lewis.

Louisa (*lōō-ē'-zá*). A comparatively modern name formed from Lewis. *Fr.*, Louise; *Ger.*, Luise; *It.*, Luigia; *Lat.*, Luisa; *Sp.*, Luisa; *Sw.*, Ludovika.

Louise (*lōō-ēz'*). A French name formed from Louis.

Louisiana (*lōō-ē-zē-ă'-ná, lōō-ē-zē-ăn'-á*). Named by La Salle in honor of Louis XIV., king of France.

Louisville (*lōō'-i-vĭl, lōō'-is-vĭl*), **Ky.** Name given by act of the Virginian Legislature in 1780, in honor of Louis XVI. of France, then assisting the American colonies in their revolutionary struggle.

Louvre (*lōō'-vrŭ*). A castle, in Paris, of the kings of France from or before the Thirteenth Century, and the chief royal palace until Louis XIV. built Versailles. The existing palace was begun by Francis I. in 1541, and has been greatly extended until it now forms one of the most extensive and historically interesting buildings in the world. A great part of the interior has been occupied since 1793 by the famous museum, and successive governments have employed the best artists at their command for its decoration.

Lowell, (*lō'-ĕl*) **Mass.** From Francis Cabot Lowell of Boston, who was distinguished by his successful efforts in introducing the cotton manufacture into the States. Indian name of locality, *Wamasit*.

Lucerne (*lōō-sĕrn'*). Named from a lighthouse or beacon, *lucerna*, formerly placed on a tower in the middle of the River Reuss.

Lucian (*lū'-shĭ-an* or *lū'-shan*). From the Latin, meaning "light." *Fr.*, Lucien; *It.*, Luciano; *Lat.*, Lucianus.

Lucile (*lū-sēl'*). A feminine name formed from Lucilius, name of the celebrated Roman satirist; derived no doubt, from Lucius.

Lucius (*lū'-shĭ-ŭs*). The Roman name is said to be derived from *lux, lucis*, "light." *Fr.*, Luce or Lucius; *Ger.*, Lucious; *It.*, Lucio; *Lat.*, Lucius.

Lucknow (*lŭk'-now*. Pop., *lŭk'-nō*). From the native name *Laksneanauti*, "the fortunate."

Lucretia (*lū-krē'-shĭ-á*), or **Lucrece** (*lū'-krēs*). A name derived from Lucretia, a celebrated Roman lady, daughter of Lucretius, and wife of Tarquinius Collatinus; a feminine form of Lucretius, derived from *lucrum*, "gain, profit, advantage." *Fr.*, Lucrèce; *Ger.*, Lucretia; *It.*, Lucrezia; *Lat.*, Lucretia; *Sp.*, Lucrecia.

Lucy or **Lucie** (*lū'-sĭ*). The feminine of Lucius. *Dutch*, Lucie; *Fr.*, Lucie; *Ger.*, Lucie; *It.*, Lucia; *Lat.*, Lucia; *Sp.*, Lucia.

Ludovico or **Ludivicus.** See Lewis.

Ludwig. See Lewis.

Luigi. See Lewis.

Luise. See Louisa.

Luke. From the Latin name *Lucas*, meaning a "light." Some maintain that the original name was Lucius. *Danish*, Lucas *Dutch*, Lucas; *Fr.*, Luc; *Ger.*, Lucas; *Hungarian*, Lucats; *It.*, Luca; *Lat.*, Lucas; *Sw.*, Lucas.

Luxembourg (*lŭks'-ĕm-bûrg*; Dutch, *lŭks'-ĕm-bŭrg*), **Palace of the.** A palace in Paris, built by Debrosse (1615–20) for Maria de' Medici. Since the Revolution this former royal palace has served as the House of Peers or of the Senate, and has long contained a museum of art.

Luxor (*lŭks'-ôr, lōōks'-ôr*). From *El-Kasur*, "the palaces." A village in Upper Egypt, situated on the Nile, on part of the site of the ancient Thebes. It is celebrated for its antiquities.

Lycoming (*lī-kŏm'-ing*) **River, Pa.** Adaptation of the Indian name *legaui-hanne*, i. e., "sandy stream."

Lydia (*lĭd'-i-á*). A Latin name mentioned in Horace; so called as coming from Lydia, in Asia Minor. *Danish*, Lydia; *Dutch*, Lydia; *Fr.*, Lydie; *Gr.*, Ludia; *It.*, Lidia; *Lat.*, Lydia.

Lynchburg, Va. From the original patentee, John Lynch, brother of Charles Lynch, the reputed originator of what is known as "Lynch Law."

Lynch Law. The practice of punishing men for crimes or offences by private, unauthorized persons, without a legal trial. The term is said to be derived from a Virginia planter named Lynch, who thus took the law into his own hands.

Lynn, Mass. From an English town of the same name. The Anglo-Saxon meant, originally, "deep pool."

Mabel, Mabell (*mā'-bĕl*). A feminine name derived from Mabilia, Latinized from Amabel, a corruption of the French *aimable*, "lovely." *Lat.*, Mabilia; or Amabilis.

Macao (*mä-kä'-ō, mä-kow'*). A Portuguese city in China. Anciently there was a temple here sacred to an idol named Ama. The Portuguese made it *Amagoa*, the bay of Ama, corrupted first to Amacao and then to Macao.

Mackinac. County in Michigan and town in

same county. Derived from the Indian word "*michilimackinac*," meaning "island of the great turtle," or in other dialects, "island of the giant fairies."

Mackinaw Straits, Mich. Derived from the same origin as Mackinac.

Macon, (*mā'-kŭn*), **Ga.** In honor of Hon. Nathaniel Macon of North Carolina.

Madagascar. Properly *Malagasy*, the Island of the Malagese, because the natives belong to the Malay race.

Madeira (*mȧ-dē'-rȧ*. Portuguese, *mä-dā'-ē-rä*). A Portuguese term signifying "timber"; the inference being that this island was formerly covered by an immense forest.

Madeline. A feminine name softened down from Magdalen.

Madge. A feminine baptismal name derived from Margaret.

Madrid (*mȧ-drĭd'*. Spanish, *mȧ-drēth'*). Capital of Spain since 1560. The name is usually explained from the Arabic *madarat*, a "town." But the early form *Mazerit* or *Magerit*, given in the Chronicle of Sampiro, points to *materita*, a "small wood" or "copse," a diminutive of *materia*, as the true etymology.

Mælstrom (*māl'-strŭm*). A celebrated whirlpool or violent current in the Arctic Ocean, near the western coast of Norway, between the islands Moskenaso and Varo, formerly supposed to suck in and destroy anything that approached it at any time, but now known not to be dangerous except under certain conditions. Etymologically it is the "grinding stream," from the Norwegian, *male*, "to grind."

Magdalen (*măg'-dȧ-lĕn*), or **Magdalene.** A name derived from Mary Magdalen, meaning "of Magdala," a place in Palestine, *Dutch*, Magdalena; *Fr.*, Madeleine or Madelène; *Ger.*, Magdalena; *It.*, Maddalena or Madalena; *Lat.*, Magdalena; *Sp.*, Magdalena.

Magna Charta or **Magna Carta** (*măg'-nȧ kär'-tȧ*. Pop., *chär'-tȧ*). The great charter of the liberties (Magna Charta Libertatum) of England, granted and sealed by King John in a conference between him and his barons at Runnymede, June 15, 1215.

Mahony (*mȧ-hō'-nĭ*), or **Mahoning River, Pa.** Derived from the Delaware Indian word, *Mahonink*, "at the lick."

Maiden Lane. A street in London, between Covent Garden and the Strand. Andrew Marvell, Turner, the landscape painter, and Voltaire lived here at different times. The name is said to have been given from an image of the Virgin which once stood there.

Maine. A State in the Union said to be named for the private estate of Henrietta Maria, in Maine, a province of France; or, according to another authority, so called because the fishermen of the islands along the coast referred to the mainland as the "main," and in some early documents it was spelled "Mayn."

Malakoff (*mȧ-lȧ-kŏf'*). The Malakoff, near Sebastopol, which was so hotly contested in the Crimean War, was so called from the name of an innkeeper who built a liquor shop on the hill, in 1831. His house was "Malakoff's Inn," and the suburb which arose also received the name, which has since become historical.

Malcolm (*măl'-kŭm*). Derived from the Gaelic *Maol-Cholum*, "the servant of Columba." *Maol* signifies literally, "the brow of a rock, a bald head"; then "a shorn head, a monk."

Malta (*môl'-tȧ*. Italian *mäl'-tä*). Was anciently *Melita*, "the place of refuge."

Malvina (*măl-vī'-nȧ*). A feminine name derived from *Malmhin*, name of the daughter of Toscar; from *maol-mhin*, "smooth brow."

Mamaroneck, (*mȧ-măr'-ō-nĕk*), **N. Y.** From the name of an Indian chief called *Mamaronock*.

Manayunk, (*măn-ȧ-yŭngk'*), **Pa.** From the Delaware Indian *menetunk*, "place of drinking liquor," which was also the Indian name of the Schuylkill River.

Manchester (*măn'-chĕs-tĕr*). This name is derived from the Celtic *maen*, "a stone or rock," and the Anglo-Saxon *ceastre* or *chester*, "a castle or fortification." The name signifies "the fortified rock."

Manchester, N. H. From a manufacturing town of the same name in England.

Manchuria (*măn-chōō'-rĭ-ȧ*). The European name of the region inhabited by the Manchua, a Tungusic tribe, who furnished the dynasty which ruled China for about three centuries. According to Prof. Douglas, *Manchu* means "pure," a name chosen by the founder as a suitable designation for his family. The Mantzu, a wild race on the Upper Kiang, bear a Chinese name meaning, according to Colonel Yule, "sons of the barbarians."

Mandalay (*măn'-dȧ-lā*) or **Mandale.** The capital of Upper Burma, founded in 1860. The usual etymology is from the Pali *mandala*, a "flat plain," but, according to Colonel Yule, the name was that of an isolated conical hill rising high above the alluvial plain of the Irawadi, and crowned by a gilt pagoda. The name of the hill represents, he thinks, that of the sacred mountain called *Mandara*, which in the Hindu mythology served the gods as a churning-staff at the churning of the sea.

Manhattan. An island in New York. An Indian word, said by some authorities to mean "little island"; by others, "the people of the whirlpool," referring to Hell Gate; another authority gives its origin from the word *Manna-ha-ta*, "place of drunkenness," Henry Hudson, as the story goes, in 1609, having taken some chiefs into his cabin and made them drunk.

Manila (*mȧ-nĭl'-ȧ*. Spanish, *mä-nē'-lä*). The capital of the Philippines, was founded in 1571, by Legaspi, the site of a native village of the same name, which is derived from a shrub called *nila*, Manila thus meaning, "Nila is," or "here is Nila."

Manitoba (*măn-ĭ-tō-bä'*, *măn-ĭ-tō'-bȧ*). The central province of the Canadian Dominion, formerly called the Red River Settlement, takes its name from Lake Manitoba, whose islands were believed by the natives to be the habitation of the Manito or great spirit. In the Algonquin language, *manito*, *manitu*, or *Manitou*, means a "spirit, a ghost, or anything supernatural." The last syllable of Manito-ba is a fragment of the Cree word, *waban*, a "strait."

Manitou (*măn'-ĭ-tōō*). County in Michigan, river in Wisconsin, and town in El Paso County, Colorado. An Indian name given to any object of religious reference. It signifies "spirit." (See Manitoba.)

Mankato (*măn-kā'-tō*) **River, Minn.** A Sioux Indian word signifying "green earth."

Mansfield. City in Richland County, Ohio, named for Col. Jared Mansfield, at one time surveyor-general of the United States.

Marathon (*măr'-ȧ-thŏn*). A place abounding in fennel, *marathos*.

Marc. See Mark.

Marcellus (*mär-sĕl'-lŭs*). From the Latin, meaning "of Mars." *Fr.*, Marcellus; *It.*, Marcello; *Lat.*, Marcellus.

March. Named after Mars, the god of War.

Marcus. See Mark.

Marcy, Mount, N. Y. Compliment to Governor W. L. Marcy of New York. The Indian name is *Tahawas*, "he splits the sky," an allusion to its great height, compared with its neighbors.

Margaret (*mär'-gȧ-rĕt*). From the Greek, meaning "a pearl." *Dutch*, Margaretha; *Fr.*, Marguerite; *Ger.*, Margarethe; *Gr.*, Margarites; *It.*, Margarita; *Lat.*, Margarita.

Margaretta. Formed from Margaret.

Margery. A baptismal name from Margaret.

Maria. A name derived from one of the Greek forms of Miriam. Maria is found as a masculine name as well as a feminine name.

Marian (*mā'-rĭ-ăn*). A diminutive of Mary.

Marianne (*mā-rĭ-ăn'*). Sometimes corrupted from Marian; at other times from Mary Anne.

Marie (*mā-rē'*). The French form of Mary.

Marietta (*mā-rĭ-ĕt'-tà*), **Ohio.** A composite word, from Marie Antoinette, queen of Louis XVI. of France, in whose honor it was named.

Marion (*măr'-ĭ-ŏn*). A masculine form of Mary.

Mark. Derived from Mars, meaning "of Mars." *Danish*, Marcus; *Dutch*, Marcus; *Fr.*, Marc; *Ger.*, Marcus; *Gr.*, Markos; *Hungarian*, Mark; *It.*, Marco; *Lat.*, Marcus; *Sp.*, Marcos; *Sw.*, Markus.

Mark, Basilica of St. A famous basilica of Venice, founded in 830 to receive the relics of the evangelist brought from Alexandria; rebuilt in 976, and given its definite form in 1052. It is the most famed Byzantine structure of western Europe.

Marmaduke. From Anglo-Saxon *mara-mihtig*, "very mighty or powerful."

Marmora (*măr'-mō-rà*), **Sea of.** Named from an adjacent island celebrated for its marble, *marmor*.

Marne (*märn*). An important river of France, the chief tributary of the Seine which it joins near Paris. Known to Julius Cæsar and the Romans as the *Matrona*, this stream has become one of the most celebrated historic rivers of France. On and near its banks the French armies under the leadership of Joffre, Foch, and other noted commanders stopped the great German invasion in September, 1914, by a series of engagements known collectively as the Battle of the Marne.

Martha (*măr'-thà*). Littleton derives this name from a Syriac word signifying "lady" (domina). *Dutch*, Martha; *Fr.*, Marthe; *Ger.*, Martha; *Gr.*, Martha; *It.*, Marta; *Lat.*, Martha; *Sp.*, Marta; *Sw.*, Martha.

Martha's Vineyard, Mass. Named by Bartholomew Gosnold, on one of his voyages, but in whose particular honor it is not known. The Indian name was *Capawac*.

Martin (*măr'-tĭn*). From the Latin name, *Martinus*; from Martius; from Mars, "warlike." *Dutch*, Martinus; *Fr.*, Martin; *Ger.*, Martin; *It.*, Martino; *Lat.*, Martinus; *Sp.*, Martin; *Sw.*, Martin.

Martinez (*măr-tē'-nĕth*). Spanish, meaning "the son of Martin."

Martinsburg. Town in Berkeley County, West Virginia, named for Col. Tom Martin, a nephew of Lord Fairfax, a wealthy landowner.

Mary. From the *Hebrew*, meaning "bitter." *Danish*, Marie; *Dutch*, Maria; *Fr.*, Marie; *Ger.*, Maria or Marie; *Gr.*, Maria; *Hungarian*, Maria; *It.*, Maria; *Lat.*, Maria; *Polish*, Marya; *Port.*, Maria; *Sp.*, Maria; *Sw.*, Maria.

Maryland. It was intended that the country granted by the charter of Charles I. in his patent to Lord Baltimore, June 30, 1632, should be called "Crescentia," but when presented to the king for signature, in conformity to his wishes, the name of the province was changed to that of Terra Mariæ, "Mary's land," in honor of his queen, Henrietta Maria, daughter of Henry IV. of France.

Massachusetts. Natick Indian word *Masasuset*, contraction of *Massa*, "great," *adchu*, "mountain," *et*, "near," "the place of the great hills" (reference to the Blue Hills). Roger Williams writes "I have learned the *Massachusetts* were so called from the Blue Hills."

Matanzas (*mà-tän'-zas*. Spanish, *mä-tän'-thäs*) **Inlet, Fla.** From the Spanish, meaning "massacre," applied by Menendes to commemorate his destruction of Ribaut and his followers.

Mathilde (*mà-tēld'*). A French form of Matilda.

Matilda (*mà-tĭl'-dà*), or **Maud.** From the Old German *magd-hild*, "noble virgin or maid."

Matterhorn. The most precipitous peak in the Alps, derives its lowly name from the meadow (*matt*) at its base, on which the village of Zermatt, "at the meadow," is situated. The Piedmontese name, Mont Cervin, is due to its resemblance to a stag's horn.

Matthew (*măth'-ū*). From the Hebrew *mattah-Yah*, "the gift of Jehovah." *Danish*, Matthaeus; *Dutch*, Mattheus; *Fr.*, Mathieu; *Gr.*, Matthaios; *Hungarian*, Mate; *It.*, Matteo; *Lat.*, Matthaeus; *Polish*, Mateusz; *Sp.*, Mateo; *Sw.*, Matthaus.

Maubeuge (*mō-bûzh'*). A fortified town in the department of Nord, France. It is situated on both banks of the Sambre, near the Belgian frontier, and is defended by a girdle of nine forts. Maubeuge was captured by the Germans after a bombardment and siege of a month, during the autumn of 1914 following the outbreak of the European war.

Mauch Chunk (*môk chŭngk'*). Borough and river in Carbon County, Pennsylvania. An Indian word, meaning, according to different authorities, "on the mountain," or "bear's cave."

Maud, Maude. Corrupted from Matilda.

Maurice (*mô'-rĭs*. French, *mō-rēs'*). Some derive this name from Amalric, others from Mauri-ties, but it is rather the reverse, for the island had its name from Prince Maurice. The name is probably from French *du marais*, "from the marsh."

Mauritius (*mô-rĭsh'-ĭ-ŭs*). Named for Maurice, Prince of Orange.

Maximilian (*măks-ĭ-mĭl'-yăn, măks-ĭ-mĭl'-ĭ-ăn*). A name said to be compounded of *maximus*, "greatest," and the name Æmilianus.

Maximus (*măk'-sĭ-mŭs*). Latin, meaning "greatest." *Fr.*, Maxime; *It.*, Massimo; *Lat.*, Maximus; *Sp.*, Maximo.

May. After *Maia*, the mother of Mercury, to whom sacrifices were offered on the first day of this month.

Mayfair (*mā'-fâr*). A fashionable locality in London, east of Hyde Park. All streets north of Piccadilly now lead into the district of Mayfair, which takes its name from a fair which used to be held in Shepherd's Market and its surrounding streets.

Medina (*mā-dē'-nà*). A city in Hedjaz, Arabia, the second holy city of the Mohammedans. It is celebrated as the place where Mohammed took refuge at the flight, 622 A. D., and where he died and was buried. The Great Mosque contains Mohammed's tomb.

Mediterranean Sea. Expresses the Latin *medius*, "middle," and *terra*, "earth," for the sea between two continents, viz, Europe and Africa.

Melbourne (*mĕl'-bûrn*). Named after Lord Melbourne in 1837.

Memphis (*mĕm'-fĭs*). In ancient geography, the early capital of Egypt. It was on the western bank of the Nile, south of Cairo. It is said to have been built by Menes. From *Ma-m-Phthah*, "the place of the Egyptian god Phthah."

Memphis, Tenn. An adoption from the ancient name of Memphis, though not from any local similarity.

Memphremagog (*mĕm-frē-mā'-gŏg*), **Lake, Vt.** An application of the Algonquin name *mem-plow-bouque*, "a large expanse of water."

Menasha, Wis. An Indian word meaning "a thorn."

Mendocino (*mĕn-dō-sē'-nō*), **Cape, Cal.** So named by Cabrillo in 1542 (Cabo Mendocino), in honor of the Viceroy of Spain, who had employed him.

Mendota (*mĕn-dō'-tà*), **Minn.** From a tribe of Indians, *mendota*, meaning "the mouth," alluding to their dwelling at the mouth of the Minnesota River.

Menominee (*mē-nŏm'-ĭ-nē*) **River, Wis.** From an Indian tribe, the Malominees or Menominees, their derivative name being Monomonick, "wild rice," or *Monomoniking*, "in the place of wild rice."

Meredith (*mĕr'-ē-dĭth*). The English form of the Welsh name *Meredydd*.

Merlin (*mĕr'-lĭn*). The English form of the

British name *Merddhin.* Probably derived through the French.

Merrimack (*mĕr'-rĭ-măk*). River, county, and town in Hillsboro County, New Hampshire. From the Indian, meaning "sturgeon," or "swift water."

Merthyr-Tydvil (*mĕr'-thĕr tĭd'-vĭl*). Named after the daughter of an ancient British king.

Methuselah (*mē-thū'-sē-lȧ*). Hebrew, "driving away death." *Fr.*, Mathusalem; *Lat.*, Methusela.

Metz. Named from the *Meomatrici*, a tribe.

Mexico. The modern Spanish spelling is *Mejico.* It took its name from a temple of Mexitl, the Aztec war-god.

Mexico, Gulf of. From the name of the Aztec God of war, Mexitl.

Miami (*mī-ăˊ'-mĭ, mī-ăm'-ĭ*). Counties in Indiana, Kansas, and Ohio, cities in Dade County, Florida, and Saline County, Missouri, town in Ottawa Reservation, Indian Territory, and rivers in Florida and Ohio. The French orthography of the Indian word "*Maumee,*" meaning "mother"; or, according to another authority, "pigeon."

Michael (*mī'-kĕl, mī'-kā-ĕl*). From the Hebrew, *Miykhael,* from *miy-k'-El,* "who is like God." *Fr.*, Michel; *Ger.*, Michael; *Hungarian,* Mihaly; *It.*, Michele; *Lat.*, Michael; *Polish,* Michal; *Port.*, Miguel; *Russ.*, Mikhail; *Sp.*, Miguel.

Michigan (*mĭsh'-ĭ-gan*). From the lake on its western border, the Indian word, signifying "a weir of fish," given the lake from its fancied resemblance to a fish-trap. In the Ottawa dialect is the word *Mitchikan,* originally given to Mackinac, and meaning "fences," as if the island were lying fence-like before the upper lake.

Milan (*mĭl'-ăn, mĭl-ăn'*). The French and English form of the Italian Milano, called *Mailand* in German, is a corruption of the Celto-Roman name *Mediolanum,* the capital of the Insubrian Gauls, which signified the town in the "middle of the plain," *lanum* being the equivalent of the Latin *planum.*

Mildred (*mĭl'-drĕd*). A female name, from Anglo-Saxon *mild-red,* "mild in counsel." *Lat.*, Mildreda.

Miles. From Milesius, Latinized from the Irish *mile, milead,* "a soldier, a champion." Gælic, *milidh,* "a hero, a renowned person."

Milicent. A feminine name, which in Latin is found written Melicentia, Melissa, and Mellitta. It comes from the Greek, which signifies both a "bee" and "honey."

Milledgeville, Georgia. After Governor Milledge, a soldier of the Revolution.

Milwaukee (*mĭl-wô'-kē*), **Wis.** From the river, called by the Algonquins *Minnwaukee,* or *Me-ne-wau-kee,* "good earth, good country, rich or beautiful country." The name is also said to be derived from *Man-a-wau-kee,* the Indian name of the medicinal root *mannoan* growing on the river banks.

Mina. Abbreviated from Wilhelmina, or from the English form, Williamina.

Mincing Lane. A street in London connecting Fenchurch Street with Great Tower Street; the center of colonial (wholesale) trade. It received its name from the "minchens" (nuns) of St. Helen's, a part of whose domain it once was.

Minerva (*mĭ-nĕr'-vȧ*). So named from Minerva, goddess of wisdom, war, and all the liberal arts.

Minneapolis, Minn. Dakota Indian words, *Minni,* "water," *ha,* "curling," and the Greek word *polis,* "a city," namely "city of the curling water," alluding to the falls of St. Anthony.

Minnehaha (*mĭn-nē-hȧ'-hȧ*) **River, Minn.** A Dakota Indian compound word *Minne,* "water," *rara,* "to laugh," *Minnerara.* Hennepin, in 1680, from a false pronunciation, gave the present ending, "haha."

Minnesota (*mĭn-nē-sō'-tȧ*). From the St. Peter's River, the Indian name of which was *Minnisotah, minni,* "water," *sotah,* "muddy or slightly turbid."

Minorca (*mĭ-nôr'-kȧ*) **Island.** In accordance with the Latin *minor,* the Lesser Island.

Mira. See Myra.

Miriam (*mĭr'-ĭ-am*). From the Hebrew *Miryam,* the etymology of which is doubtful.

Mississippi. State of the Union, counties in Arkansas and Missouri, and river, one of the largest in the United States. An Indian word, meaning "great water," or "gathering in of all the waters," and "an almost endless river spread out."

Missoula (*mĭ-zōō'-lȧ*). County, river, and city in Montana. The name is said to mean the same as Missouri, "muddy water."

Missouri (*mĭs-sōō'-rĭ, mĭz-zōō'-rĭ.* Pop., *mĭz-ōō'-rȧ*). From river of the same name. *Mis-Souri,* compound word, from two very different languages — *mis* (Algonquin), "great," *souri* (Dakota, commonly called Sioux), meaning "muddy"; in best English, "big muddy."

Mobile (*mō-bēl'*). A town in Alabama from which Mobile Bay takes its name. When, in 1539, Fernando de Soto landed in Florida, and made his wonderful march to the Mississippi, he had a desperate fight with the Creek Indians at a palisaded village called *Mauvila* or *Maubila* (probably the name of the tribe), at the junction of the Tombigbee and Alabama rivers. From this village the united stream acquired the name which in French became the River Mobile, at whose mouth the town of Mobile was built.

Mohawk. River, township, and village in Herkimer County, New York, said by one authority to have been named for a tribe of Indians, the word meaning "eats what lives," indicating that they were cannibals; but another authority states that it is a corruption of *Maquaas,* "muskrat."

Mohegan (*mō-hē'-gan*) **Lake, N. Y.** From a tribe of Indians whose name was from *maingan,* "a wolf."

Moldavia (*mŏl-dā'-vĭ-ȧ*). The country traversed by the Moldau.

Molly. A baptismal name derived from Mary.

Monadnock (*mō-năd'-nŏk*). A mountain in New Hampshire. An Indian word, meaning "spirit place," or, possibly, "bad," as signifying the difficulty of the ascent. Another authority gives the interpretation "at the silver mountain."

Monday. Means the "day of the moon." It was so called from its Latin name, *dies lunæ.*

Money. The first silver money was coined at Rome, A. U. C. 482. The mint was in the temple of June Moneta, and this circumstance occasioned the origin of our word "money."

Monica (*mŏn'-ē-kȧ*) A feminine name. It may be from Italian *monaca,* "a nun," or a feminine formed from its root, Latin, *monachus,* "a monk."

Monocacy (*mō-nŏk'-ȧ-sĭ*) **River, Md.** From the Indian name *menagassi,* "creek of many bends."

Monongahela (*mō-nŏn-gȧ-hē'-lȧ*) **River, Pa.** From the Indian name *menawngihella,* "falling-in bank," "a river without islands."

Montana (*mŏn-tă'-nȧ*). Spanish. *Montana,* "a mountain," literally a hilly country. Name presented to Hon. James M. Ashley in 1864, who was chairman of the Committee on Territories — suggested to the proposer owing to the territory embracing such a large portion of the Rocky Mountains and its spurs.

Montauk (*mŏn-tôk'*) **Point, N. Y.** From the Indian *manati-auke, manati,* "country," *auke,* "island," "the island country."

Mont Blanc (*môn blăN'*). Means, "white mountain." The highest mountain of the Alps, situated on the frontiers of France and Italy, eternally covered with snow.

Monterey (*mŏn-tē-rā'*), **Cal.** An honor by Vizcaino, in 1603, to Monte Rey, viceroy of Spain, who had dispatched the expedition under Vizcaino.

Monte Rosa (*mŏn'-tĕ rō'-sȧ*). Meaning "rosy mountain." The highest mountain of the Alps, next to Mont Blanc.

Montgomery (*mŏnt-gŭm'-ĕr-ĭ*), **Ala.** After General Richard Montgomery, who was killed at Quebec, Canada, 1775.

Montpelier (*mŏnt-pē'-lĭ-ĕr*), **Vt.** From the French, translated a "little or lesser mountain," probably suggested from Montpellier, a town in France.

Montreal (*mŏnt-rē-ôl'*). In 1535, Jacques Cartier, on his second voyage, ascended the St. Lawrence as far as Quebec, where he left his ship, and reached an Iroquois village called Hochelaga, perched on an eminence, which from its splendid position he called *Mont Royal*, the "royal mount," now Montreal.

Moosehead Lake, Me. Indian name *Kennebec*, meaning "long lake," also *Seboomook*, meaning "shape of the moose's head."

Moravia (*mō-rā'-vĭ-ȧ*). The country traversed by the Morava.

Mordecai (*môr'-dē-kā*). From the Hebrew, *Mord'-khay*, which Tregelles derived from the Persian, meaning "little man," or from *Merodach*, "worshiper of Mars."

Morgan. Some translate this name "by the sea," or "sea-dweller," or "seaman"; doubtless from Welsh *mor*, "the sea," *gan*, "bringing forth."

Moritz. See Maurice.

Morocco (*mō-rŏk'-kō*). More correctly Marocco. The European name of the North African Sultanate called by the natives *Maghrib el Aksa*, "the furthest west," or *El Gharb*, "the west."

Moscow (*mŏs'-kō*). Derived from Muscovea or Muscovy, an old name for Russia, now called in Russian Moskva, from the small River Moskva on which it stands. The name of the river is probably Finnic, signifying a "place for washing."

Moses (*mō'-zĕz*). From the Greek *Mosheh*, "outdrawer, deliverer." Salmasius derives the name from the Coptic *moousi*, *moou*, "water," *si*, "from," or "to take or draw." Hones translates the name from the Egyptian *moo*, "water," and *ouie*, "taken or saved out of." *Arabic*, Moosa or Musa; *Dutch*, Moses; *Fr.*, Moïse; *Gr.*, Moses; *Hungarian*, Mozes; *It.*, Moisè; *Lat.*, Moses; *Polish*, Moyzesz; *Sp.*, Moyses; *Sw.*, Moses.

Mosquito (*mŏs-kē'-tō*) **Coast, Nicaragua.** Owes its name to the troublesome insects (Spanish *mosca*), from the Latin *musca*, "a fly," which infest this neighborhood.

Mount Desert (*mownt dē-zērt'*) **Island, Me.** Named by Champlain *Isle de Monts Deserts*, owing to barrenness of its craggy heights. The Indians called it *Pemetig*, "head, or the place which is at the head."

Mount Vernon. Residence of Gen. George Washington, and city in Lawrence County, Missouri, named for the foregoing, which was originally built by Lawrence Washington for Admiral Vernon, for whom it was named.

Mount Zion (*zī'-ŏn*), or **Sion** (*sī'-ŏn*). A hill on which was situated the old city of Jerusalem; the "city of David." The name has been applied to Jerusalem as a whole and symbolically to the Christian church and heaven.

Muncy, Pa. From the creek on which it is located, the water taking the name from the *Minsi* Indians. *Minsink*, "dwelling place of the Minsi."

Munich (*mū'-nĭk*). The English name of the capital of Bavaria, which is called München in German. Both forms have been independently obtained from the old name *Munichen*, found in 1058, which is from Old High German *munich*, "a monk," the town having been built on lands belonging to the monks of the convent of Schaftlarn.

Murfreesboro (*mûr'-frēz-bŭr-ō*). City in Rutherford County, Tennessee, and town in Hertford County, North Carolina, named for Col. Hardy Murfree, an officer of the Revolution.

Muriel, Meriel. From the Greek *Myron*, "myrrh."

Muskegon (*mŭs-kē'-gŭn*) **River, Mich.** From the Indian name, meaning "plenty of fish."

Muskingum (*mŭs-kĭng'-gŭm*). River and county in Ohio. An Indian word meaning "moose-eye river," so called because of the number of moose and elk which inhabited the country.

Myles. Another spelling of Miles.

Myra (*mī'-rȧ*). A feminine name. The termination of some other Christian name; or from the Greek, *Myron*, "myrrh."

Nahant (*nȧ-hȧnt'*, *nȧ-hănt'*). Town and watering-place in Essex County, Massachusetts. According to different authorities an Indian word meaning "at the point," or "two things united," the latter meaning given because the town is formed of two islands connected by a beach.

Nancy (*năn'-sĭ*. French, *nän-sē'*). Name formed from Nan for Ann.

Nantucket. Island and county in Massachusetts. This name appeared upon the maps in 1630, as Natocko and some authorities state that it is derived from an Indian word meaning "far away"; others that its present form is a direct derivation of the Indian *Nantuck*, which means that the sandy, sterile soil tempted no one.

Naomi (*nā-ō'-mī, nā'-ō-mī*). From the Hebrew *Naomi*, signifying "my pleasantness."

Naples (*nā'-plz*). A French corruption of the Italian *Napoli*, which preserves, with little change, the old Greek name *Neapolis*, "the new city," which in spite of its name is one of the oldest cities in Italy, having been founded by colonists from the still older settlement at Cumæ.

Napoleon (*nȧ-pō'-lē-ŏn*. French, *nä-pō-lā-ôn'*). From the French name *Napoleone*, which has been translated "of the new city."

Narcissus (*när-sĭs'-ŭs*). From the Greek, meaning a "daffodil." *Fr.*, Narcisse; *It.*, Narciso; *Lat.*, Narcissus.

Narragansett (*năr-rȧ-găn'-sĕt*). Summer resort in Washington County, Rhode Island. An anglicization of the Indian name of a tribe, *Naiagansett*, which in their language means "people of the point."

Nashua (*năsh'-ū-ȧ*), **N. H.** From the river, its Indian name meaning "between."

Nashville, Tenn. First named, as a settlement, *Nashborough*, in honor of Francis Nash of North Carolina, a brigadier-general in the Continental Army. In June, 1784, changed to *Nashville*.

Natal (*nä-tăl'*). Received its name from Vasco da Gama, because he discovered it on the Feast of the Nativity.

Natchez (*năch'-ĕz*). City in Adams County, Mississippi, named for the Indian tribe, the word meaning "hurrying men," or "one running to war."

Nathan (*nā'-than*). From the Hebrew *Nathan*, signifying "given." *Fr.*, Nathan; *Ger.* Nathan; *Lat.*, Nathan; *Sp.*, Natan.

Nathanael or **Nathaniel** (*nȧ-thăn'-ȧ-ĕl* or *nȧ-thăn'-ĭ-ĕl*). From the Hebrew, meaning the "gift of God." *Dutch*, Nathaniel; *Fr.*, Nathaniel; *Ger.*, Nathaniel; *Lat.*, Nathanael; *Sp.*, Natanael.

Naugatuck (*nô'-gȧ-tŭk*), **Conn.** Indian word expressive of "form of the rivers," "point between two rivers." Another source gives the word as *neguttugk*, meaning "one tree."

Nauvoo (*nô-vōō'*). City in Hancock County, Illinois, named in obedience to a "revelation" made to Joseph Smith, one of its Mormon founders.

Nebraska. State and river in the United States. An Indian word meaning "shallow, or broad water."

Nehemiah (*nē-hē-mī'-ȧ*). From the Hebrew *N'hhemyah*, from *n'hhem-yah*, "whom Jehovah comforts" — that is, "aids." *Danish*, Nehemias; *It.*, Neemia; *Lat.*, Nehemias; *Sp.*, Nehemias.

Nellie, Nelly. Names derived from Ellen, and sometimes from Helen.

Netherlands. Which means "low lands," is the English name of the Dutch Kingdom at the mouth of the Rhine which the French call Les Pays Bas.

Koningrijk der Nederlanden is the official Dutch name of the kingdom as constituted after the war of 1830, when the Belgians acquired their independence.

Nevada (*nē-vă'-dȧ*). State of the Union, counties in Arkansas and California. From the mountain range running through the division, the Sierra Nevada. Spanish words *Serrado*, "serrated or saw-toothed," *Nevada*, "snowy," i. e., "snowy mountains," the application to the mountains taken from the Sierra Nevada Mountains of Granada.

Neversink Highlands, N. J. So called by the sailors of outgoing craft, from the circumstance of their being the highest seashore elevations. They remain above the horizon of their vision a long time after the other shores have disappeared, hence the query, "Will it *never sink?*" and the consequent application.

Neversink River, N. Y. From the Indian *Newa-sink*, "mad river," also stated to be a local application, because the stream is less affected by drought than others.

Nevskii Prospekt (*nĕf'-skĭ-ĭ prŏs-pĕkt'*). The finest and most important street in Petrograd, noted for its fine buildings. Length, about three and one-half miles.

Newark (*nū'-ĕrk*), **N. J.** Suggested by the settlement's first minister, Rev. Abraham Pierson, from Newark-on-Trent, England, where he was "Episcopally ordained." Previously called *Milford*, this being given in 1666, by a band of Puritans from Milford, Connecticut.

New Bedford. City in Bristol County, Mass. The name of the founder was Russell, the family name of the Duke of Bedford, so he called the town Bedford.

New Berne, or Newbern, N. C. From Berne, Switzerland, the native place of Christopher, Baron de Graffenried, who in 1720 emigrated to and settled near this place.

New Brunswick (*brŭnz'-wĭk*). Received its name in compliment to the House of Brunswick.

New England. "That part of America in the ocean sea opposite Nova Albion in the South Sea, discovered by the ever-memorable Sir Francis Drake in his voyage about the world, in regard whereof this is styled New England, being in the same latitude."

Newfoundland (*nū'-fŭnd-lănd*). The earliest of the colonial possessions of Great Britain. The name originally applied to the regions discovered by the two Cabots, and included a great portion of the North American coast. The island to which the name is now restricted is believed to have been the Island of St. John, so called because discovered by John Cabot on St. John's Day, June 24, 1497.

New Hampshire. Name given to the State, in 1629, by John Mason, in compliment to his native county in England.

New Harmony. Town in Posey County, Indiana, settled by the "Harmonists," and named for their sect.

New Haven. County and town in same county, in Connecticut, settled by parties from Boston, who called it a "new haven." Originally *Quinnippac*, from the Indian name of the river *Quinnepyoogha*, "long water place." The present name substituted "by the court," September 5, 1640.

New Holland. The name given to Australia previous to its settlement by the British.

New Jersey. In compliment to Carteret, who had defended the Isle of Jersey (Cæsarea, one of the Channel Islands,) against the long parliament. Originally called *New Sweden* (when a Dutch possession).

New London. City and county in Connecticut, and town in Stanly County, North Carolina, named for the city in England.

New Mexico. A distinguishing name from "*old*" Mexico, it having been a former possession of Mexico; Mexico from the Aztec god, "Mexitli." The territory was called *Nova Mexicana* by Antonio de Espejo at the time of the settlement of Santa Fé.

New Orleans (*nū ôr'-lē-ănz*), **La.** Translation of the French name *Nouvelle Orleans*, given by them in honor of the Duc d'Orleans, then Regent of France.

Newport, R. I. In honor of the English admiral Christopher Newport (under James I.).

News. The plural of the adjective *new* (early modern English *newe*), not a native English idiom but a translation of the French *nouvelles*, news, derived from the Old French *noveles*, or medieval Latin *nova*, plural of *novum* a new thing. Popularly the origin of the term *news* has been explained as information from the four points of the compass—N E W S, north, east, west, south.

New York (State). Denominated in honor of James, Duke of York, afterwards James II.

New York City. Named from the State. The island on which the city is mainly located, known as Manhattan Island. (See Manhattan.)

New Zealand (*zē'-land*). Name given by Dutch navigators, the word *Zeeland* denoting "sea-land," being significant of the low countries.

Niagara (*nī-ăg'-ȧ-rȧ*). From the Indian word *Neagara*, meaning "across the neck," an allusion to a strip of land between lakes Erie and Ontario. The name has passed through many changes in spelling in the last two hundred years. Another derivation given is from *Oniawgarah*, "the thunder of waters."

Nice (*nēs*). A town on the Riviera, is the French form of the Italian Nizza.

Nicholas (*nĭk'-ō-las*). From the Latin name, *Nicolaus*, signifying "conqueror of the people." *Dutch*, Nicolaas (more frequently Klaas); *Fr.*, Nicolas; *Ger.*, Nicolaus; *Gr.*, Nikolaos; *Hun.*, Miklos; *It.*, Niccolo or Nicolo; *Lat.*, Nicolaus; *Port.*, Nicolao; *Russ.*, Nikolai or Nikolas; *Sp.*, Nicolas; *Sw.*, Nils.

Nicodemus (*nĭk-ō-dē'-mŭs*). From the Greek, meaning, "victory of the people," or the "conqueror of the people."

Niel (*nēl*). An Anglo-Saxon form of Nigel.

Nigel (*nī'-gĕl*). A name derived from the Latin *nigellus*, "somewhat black"; a diminutive of *niger*, "black."

Nile. Called in Old Egyptian either *Hapi* or *P-iero*, "the river," of which *Nehar Misraim*, "the river of Egypt," or simply *Nahal*, "the valley" or "stream," were Semitic translations. The Greek name *Nilus* was probably a corruption of the Phenician name *Nahal*. The Arabs now call it *Bahr*, "the sea," the two Niles being distinguished as *Bahr-el-Azrak*, "the turbid" or Blue Nile, and *Bahr-el-Abyad*, the "clear" or White Nile. The Nile was also called *Sihor*, the "blue" or "dark" river, of which Nilus might conceivably be an Aryan translation, like the Nilab or "blue water" in the Punjab.

Niobrara (*nī-ō-brȧ'-rȧ*) **River, Neb.** From the Indian *ni*, "water," *abrara*, "wide," "the broad water."

Nita (*nē'-tȧ*). A feminine name derived from Annita, a diminutive of Ann.

Noah (*nō'-ȧ*). From the Hebrew, *Noah*, signifying "rest." *Arabic*, Nooh or Nuh.

Noel (*nō'-ĕl*). From the French name, *Noel*, so named from Noel, "Christmas," from being born on the day of that festival. *Fr.*, Noël; *Lat.*, Natalis or Noelius.

Nora, Norah (*nō'-rȧ*). Irish feminine names corrupted from *Onora*, from the English name Honora. As an English name Nora may sometimes be an abbreviation of Leonora.

Norfolk, Va. From the county in England of that name. (Anglo-Saxon, *north* "fork.")

Norman (*nôr'-man*). Means "born in Nor-

mandy," or "of Norman extraction." *Lat.*, Normannus.

Normandy (*nôr'-măn-dĭ*). Called Normandie in French. The province was occupied early in the Tenth Century by the Northmen, whose name on French soil gradually changed to Normans. A former government of France.

North Carolina (*kär-ō-lī'-nȧ*). North and South Carolina were originally *Carolina*. The name was given in 1564, at the time of the first colonization by the Huguenots in the reign of Charles IX. of France. The English later preserved the name in honor of Charles II. of England.

North Sea. Indicative of its position geographically.

Norwalk, Conn. From the Indian *nayaug*, "the middle land," "a tract between two rivers."

Nova Scotia (*nō'-vȧ skō'-shĭ-ȧ*) or "New Scotland," was the pedantic name given by James I. to the French colony of Acadia, when he granted it by patent to Sir William Alexander, a Scotchman, on the pretext of its having been discovered by Cabot in the reign of Henry VII.

Nova Zembla (*nō'-vȧ zĕm'-blȧ*). A mixture of the Latin and Slavonic, literally "new land."

November. The ninth month in the Roman calendar. From the Latin *novem*, nine.

Obadiah (*ō-bȧ-dī'-ȧ*). From the Hebrew *Obhadhyah*, "servant or worshiper of Jehovah."

Oberlin (*ō'-bĕr-lĭn*). Village in Lorain County, Ohio, named for Jean Frederick Oberlin, a philanthropist.

Ocklawaha (*ŏk-lä-wä'-hä*) **River, Fla.** The Seminole Indian name, meaning "muddy place."

Ocklockonee (*ŏk-lŏk'-ō-nē*) **River, Fla.** From the Indian (Seminole), meaning "yellow water."

Ocmulgee (*ŏk-mŭl'-gē*) **River, Ga.** From the Creek Indian name, *Oko-mulgi*, "the turbulent stream."

Oconee (*ō-kō'-nē*) **River, Ga.** From the Seminole Indian word *eknoni*, "a water course," "a small river."

Octave. See Octavius.

Octavia (*ŏk-tā'-vĭ-ȧ*). Feminine of Octavius. *Fr.*, Octavie; *It.*, Octavia; *Lat.*, Octavia.

Octavius. (*ŏk-tā'-vĭ-ŭs*). Latin name signifying "the eighth," i. e., the eighth son in order of birth. *Fr.*, Octave; *It.*, Octavio; *Lat.*, Octavius; *Sp.*, Octavio.

October. Means "the eighth month." From the Latin *octo*, eight.

Odd Fellows. A fanciful name assumed by the original founders of the society.

Ogdensburg, N. Y. Named from Samuel Ogden, the first proprietor.

Ohio. State in the Union, river and counties in Indiana, Kentucky, and West Virginia. An Indian word meaning "the beautiful river."

Okeechobee (*ō-kē-chō'-bē*) **Lake, Fla.** Seminole Indian word meaning "grassy lake," also spelled *Okitchobi*.

Okefinokee (*ō-kē-fĭn-ō'-kē*) **Swamp, Ga.** A Choctaw word, *okefinocau* "quivering water."

Oklahoma (*ōk-lȧ-hō'-mȧ*). A Choctaw word signifying "red people," *okla*, "people," *homa*, "red." Another word is given meaning "home for all Indians."

Old Bailey, The. The principal criminal court of England, situated on the street named Old Bailey, which runs from Newgate to Ludgate Hill, not far from St. Paul's, London. It was the site of the Roman *vallum*, forming part of the city's fortifications external to the Wall, hence Ballium and Bailey. A *vallum* was a rampart of palisades, so called from *vallus*, a stake, and was planted on the top of the *agger*, or mound, thrown up for the purposes of defense.

Old Dominion (*dō-mĭn'-yŭn*). A name popularly given to the State of Virginia. Its origin is variously explained. Perhaps the best account is that Captain John Smith called Virginia "Old Virginia" to distinguish it from "New Virginia," as the New England colony was called. The colony of Virginia was alluded to in documents as "the colony and dominion of Virginia"; hence the phrase, "the Old Dominion."

Old Jewry. One of the localities allotted in olden times as a residence for the Jews. The terminal *ry* is the Old English *ru* or *ra*, having a collective signification, as in rookery, eyry (eggery), poultry, etc.

Old Point Comfort. Town in Elizabeth County, Virginia, so named by Capt. Christopher Newport, because he found it a safe haven after a severe storm; the "Old" added to distinguish it from New Point Comfort a few miles away.

Olive. Derived, perhaps, through the French, from the Latin *olivia*, the "olive tree," an emblem of peace.

Oliver (*ŏl'-ĭ-vĕr*). From French *olivier*, an olive-tree, from the Latin *olivia*. *Dutch*, Olivier; *Fr.*, Olivier; *It.*, Oliviero or Uliviero; *Lat.*, Olivarus or Olivarius; *Sp.*, Oliverio; *Sw.*, Olivier.

Olivia (*ō-lĭv'-ĭ-ȧ*). The feminine of Oliver. *Danish*, Olivia; *Dutch*, Olivia; *Fr.*, Olivie; *Ger.*, Olivia; *Sw.*, Olivia.

Olympia (*ō-lĭm'-pĭ-ȧ*). In ancient geography, a valley in Elis, Peloponnesus, Greece, situated on the Alpheus. It is famous as the seat of a celebrated sanctuary of Zeus and the Olympic Games, the most important of the great public games of classical antiquity.

Olympia (*ō-lĭm'-pĭ-ȧ*), or **Olympias** (*ō-lĭm'-pĭ-as*). From the Greek, meaning "belonging to Olympus," "divine." *Fr.*, Olympe; *Gr.*, Olympias; *Lat.*, Olympias or Olympia.

Omaha (*ō'-mȧ-hô*). City in Douglas County, Nebraska. An Indian word, meaning "up-stream," also the name of a tribe designated as "upstream people."

Oneida (*ō-nī'-dȧ*) **Lake, N. Y.** The name of an Indian tribe, the word signifying "the people of the beacon stone," so named from a tradition concerning a certain stone which followed them in their wanderings, finally resting on the summit of one of their highest hills, from which their beacon fires could be seen the greatest distance, and upon which they afterwards assembled to hold council or prepare for war.

Onondaga (*ŏn-ŏn-dô'-gȧ*) **Lake, N. Y.** From a tribe of Indians, the *On-ti-ah-an-taque*, the word meaning "the place of the hills,"also translated as "the marsh at the foot of the hill."

Ontario (*ŏn-tā'-rĭ-ō*). One of the Great Lakes, county in New York, and a village in Vernon County, Wisconsin. An Indian word, said by one authority to mean "beautiful lake"; by another, "beautiful prospect of rocks, hills, and water." Still another derives the word from the native *Onontac*, "the village on the mountain," and chief seat of the Onandagas.

Opelika. (*ŏp-ē-lī'-kȧ*), **Ala.** Taken from the swamp's name, the Seminole name of which was *opilualaikata*, "a large swamp."

Ophelia (*ō-fē'-lĭ-ȧ, ō-fēl'-yȧ*). From the Greek, meaning "help," "usefulness." *Fr.*, Ophélie; *Gr.*, Ophelia; *Lat.*, Ophelia.

Orange Free State. So called because the original settlers were emigrants from the principality of Orange, in Holland. Now called Orange River Colony.

Orangemen (*ôr'-ĕnj-mĕn*). Irish Protestants. The name was given about the end of the Seventeenth Century by Roman Catholics to the Protestants of Ireland, on account of their support of the cause of William III. of England, prince of Orange.

Oregon (*ŏr'-ē-gŏn*). State of the Union, and a county in Missouri. The name said to have been derived from *Origanum*, a species of wild sage found along the coast in the State, but another

authority states that it is derived from the Spanish *Oregones*, which name was given the Indian tribes inhabiting that region, by a Jesuit priest, the word meaning "big-eared men."

Origen (*ŏr'-ĭ-jĕn*). Meaning, "descended from Horus," an Egyptian deity. *Fr.*, Origene; *Gr.*, Origenes; *Lat.*, Origenes.

Orkney (*ŏrk'-nē*) **Isles.** Expresses the Gaelic for the "isles of whales, or porpoises."

Orlando (*ôr-lăn'-dō*). A form of Roland. *It.*, Orlando; *Lat.*, Orlandus.

Orleans (*ôr'-lē-ănz.* French, *ôr-lā-äN'*). Means "Aurelian's city," from Aurelianum, named after the Emperor Aurelian.

Orson. A masculine name, derived, like the Italian Orso, from the Latin *ursus*, "a bear."

Osage (*ō-sāj'*, *ō'-sāj*) **River, Mo.** From the Indian, translated "the strong."

Osawattomie (*ŏs-à-wŏt'-ō-mē*), **Kan.** A composite word, *Osa* and *Wottomie*, formed from the names of the rivers Osage and Pottawottomie.

Oscar. From the Old German name *Oskar*, "very renowned."

Oskaloosa (*ŏs-kà-lōō'-sà*) **Kan.** A compound word, *Oska*, name of an Indian chief, *Loosa*, his wife.

Osmund. Some translate this name "house-peace." Wachter renders it "excellent, gallant, brave man."

Oswald (*ŏz'wald*). From Old German *os-walt*, "illustrious magistrate, prefect or administrator."

Oswego (*ŏs-wē'-gō*), **N. Y.** From the river, the Iroquois name being *oswageh*, "flowing out."

Otho (*ō'-thō*), or **Otto** (*ŏt'-tō*). Some translate Otho "happy," and Otto "rich," but they would seem to be the same name. It comes from Old German *od*, "excelling, happy, fortunate." *Dutch*, Otto; *Fr.*, Othon; *Ger.*, Otto; *It.*, Ottone; *Lat.*, Otho; *Sp.*, Otonio; *Sw.*, Otto.

Ottawa (*ŏt'-à-wà*). The capital of the Dominion of Canada, stands on the River Ottawa, which preserves the name of the *Ottawa* or *Otaua* tribe, an Algonquin term meaning "traders," literally, "he trades."

Ottoman (*ŏt'-tō-man*) **Empire.** The official title of the realm subject to the Sultan, takes its name from Othman, the Emir under whom the Turks first advanced into Europe. Othman is the Tartar word *ataman*, which we have in the title of the Hetman of the Don Cossacks, and means a "commander of horse," *at*, "a horse."

Ovid (*ŏv'-ĭd*). From the Latin, meaning "goat," or "sheep," or both. *Dutch*, Ovidius; *Fr.*, Ovide; *Ger.*, Ovidius; *It.*, Ovidio; *Lat.*, Ovidius.

Owego (*ō-wē'-gō*), **N. Y.** Delaware Indian word, *ahwaga*, "where the valley widens."

Owen. Probably from the Irish name *Eogan*, signifying "youth."

Oxford. Anglo-Saxon *Oxnaford*, the "ford of the oxen," is a name of the same class as Shefford, the "sheep ford," Hertford and Swinford in England, or Ochsenfurt and Schweinfurt in Germany.

Ozark (*ō-zärk'*). County and city in Christian County, Missouri, and village in Dale County, Alabama. A corruption of the French name *auxarcs*, meaning "with bows," a term descriptive of the Indians who inhabited the country. It is also claimed, especially for the mountains, that the name is a provincial composite of the river Osage and Arkansas, lying between the *Oz* and *Ark*, i. e., *osark*.

Pacific Ocean. Is the English translation of *Mar Pacifico*, or *Oceano Pacifico*, the somewhat inappropriate name bestowed by Magellan, in 1521, on the great ocean which he was the first to traverse.

Paducah (*pà-dū'-kà*), **Ky.** From the name of an Indian chief, "Paducah."

Palestine (*păl'-ĕs-tīn*). From the Greek *Palæstina*, a name indicating that the Greek mariners first knew Canaan as the land of the Philistines inhabiting the coast. The latter arrived, probably from Cyprus, after the Hebrew conquest and before the time of Rameses III., on whose monuments they appear as *Pulista*.

Palisades (*păl-ĭ-sādz'*), **The.** A basaltic bluff extending along the western shore of the Hudson in the States of New Jersey and New York. It commences opposite the northern part of New York City, and continues northward about eighteen miles. Height, 200–500 feet.

Pall Mall (*pĕl-mĕl'*). A fine street in London, leading from Trafalgar Square to the Green Park. Its name is a modern spelling of *paille maille*, the title of a French game of ball somewhat similar to croquet, first played in this London thoroughfare about 1621.

Palo Alto (*pä'-lō äl'-tō*). Town in Santa Clara County, California. A Spanish phrase meaning "high stick."

Pamlico (*păm'-lĭk-ō*) **Sound, N. C.** From a tribe of Indians called the Pamlicoes.

Pamphlet. This word is derived from the name of a Greek authoress, Pamphylia, who compiled a history of the world in thirty-five little books.

Panama (*păn-à-mä'*. Spanish, *pä-nä-mä'*). Was the native name of a village on the Pacific Coast of the Gulf and Isthmus of Panama. Here, in 1519, Avila founded the oldest existing city in America. Panama is believed to be a Guarani word meaning a "butterfly," and also, according to Wullerstorf, signifying a "mudfish," perhaps because the flaps of the mudfish resemble the wings of a butterfly. From the town of Panama the name was extended to the Isthmus, the Gulf, and the Republic.

Panama Bay. The bay of "mudfish."

Paolo. See Paul.

Papua (*pä'-pōō-à*). A Portuguese term for "frizzled," in alluding to the enormous frizzled heads of hair worn by the natives.

Paraguay (*păr'-à-gwā*). River and republic of South America, meaning "the river of waters," referring to its numerous tributaries.

Paris (*păr'-ĭs.* French, *pà-rē'*). From the name of the Keltic tribe *Parisii*. It was called by the Romans *Lutetia Parisiorum*, the "bright city of the Parisii," from the white stone used in building.

Parkersburg. City in Wood County, West Virginia, named for Alexander Parker of Pennsylvania.

Parnell (*pär'-nĕl*). A feminine name corrupted from Petronilla.

Parry Islands. Named for the famous Arctic navigator, Sir W. E. Parry, to whom their discovery was due.

Pasadena (*păs-à-dē'-nà*). City in Los Angeles County, California. An Indian word meaning "crown of the valley."

Paschal (*păs'-kăl.* French, *päs-käl'*). Means "belonging to Easter," or "born at Easter." *Gr.*, Pascal; *It.*, Pasquale; *Lat.*, Paschalis; *Sw.*, Pascual.

Passaic (*păs-sā'-ĭk*). County, city, and river in New Jersey; derived either from the Indian word Passaic or Passajeek, "a valley," or from the Indian equivalent of "peace."

Passamaquoddy (*păs-sà-mà-kwŏd'-dĭ*). Bay on coast of Maine. An Indian word meaning "pollock ground," or "pollock-plenty space."

Passumpsic (*păs-sŭmp'-sĭk*) **River, Vt.** Indian word meaning "much clear river."

Patagonia (*păt-à-gō'-nĭ-à*). So styled by Magellan in accordance with the Spanish word *patagon*, meaning a "large, clumsy foot." It was from the fact of seeing the impressions of the large shoes of the aborigines that he at once concluded the country must be inhabited by giants.

Patapsco (*pà-tăps'-kō*) **River, Md.** From the Indian name *patapsqui*, "black water."

Paternoster Row (*pā′-tẽr nŏs′-tẽr rō*). A street in London, north of St. Paul's, long famous as a center of book publishing. It is said to be so named from the prayer books or rosaries sold in it.

Paterson. City in Passaic County, New Jersey, named for William Patterson, an early governor.

Patience. Found as a masculine as well as a feminine name. The name explains itself.

Patrick (*păt′-rĭk*). From the Latin *Patricius*, meaning "patrician," "noble." *Dutch*, Patricius; *Fr.*, Patrice; *It.*, Patrizio; *Lat.*, Patricius; *Sp.*, Patricio.

Paul (*pôl*. French, *pōl*. German, *powl*). A name derived from the Hebrew, signifying "small in stature." *Danish*, Paul or Paulus; *Dutch*, Paulus; *Fr.*, Paul; *Ger.*, Paul; *Gr.*, Paulos; *Hungarian*, Pal; *It.*, Paolo; *Lat.*, Paulus; *Polish*, Pawel; *Port.*, Paulo; *Russ.*, Pavel; *Sp.*, Pablo; *Sw.*, Paul.

Paulina (*pô-lē′-nȧ, pô-lī′-nȧ.*) The feminine of Paul. *Fr.*, Pauline; *Ger.*, Pauline; *It.*, Paolina; *Lat.*, Paulina.

Pauline (*pô-lēn′*. French, *pō-lēn′*). A French name derived from the Roman name Paulina.

Payette (*pā-ĕt′*) **River, Idaho.** Named by a French trapper, Jose Payette.

Peabody Institute. An institute at Baltimore, founded by George Peabody, and containing a library, conservatory of music, art gallery, etc.

Pearl River, Miss. The Indian name was *Tallahatchie*, signifying "river of pearls," of river stones, obtained from a peculiar shell taken from the bottom of the canoes; supposed to be a kind of oyster.

Pecos (*pā′-kōs*) **River, Tex.** Named by the Spaniards, from *pecoso*, "freckled," a local suggestion in the appearance of its waters.

Pedro. See Peter.

Peekskill. Village in Westchester County, New York, named for Jan Peek, a Dutch mariner of the Seventeenth Century.

Pekin (*pē-kĭn′*), or **Peking** (*pē-kĭng′*), Chinese, *Peh-king*. The "north court" or "northern capital," has been so called since 1421, when the third Ming Emperor transferred hither the residence of the court from Nanking, the "southern court."

Pembina (*pĕm′-bē-nȧ*), **Dak.** Contraction of Ojibway Indian word *anepeminan*, a red berry growing in that vicinity, which Michaux regards as a variety of the cranberry of the East.

Pend Oreille (*pĕnd-ō-rĕl′*) **Lake, Idaho.** From the French, meaning "ear-ring," suggested by its shape.

Penelope (*pē-nĕl′-ō-pē*). The Greek name which some render "female weaver"; others define it "a web," and "a garment," because the wife of Ulysses was the best weaveress. *Fr.*, Pénélope; *Gr.*, Penelope; *Lat.*, Penelope.

Pennsylvania. William Penn originally designed calling the territory "New Wales," but afterward suggested the word *Sylvania*, as suitable for a land covered with forests. The King of England, in 1681, prefixed the word "Penn" in honor of William Penn; literal translation, "Penn's woods."

Pennsylvania Ave. The principal avenue of Washington, D. C. Its most important section lies between the capitol and the treasury.

Penobscot (*pē-nŏb′-skŏt*). Derived from the Indian word *penobskeag*, meaning "rocky place," or "river of rocks." Also said to be the name of an Indian tribe.

Pensacola (*pĕn-sȧ-kō′-lȧ*). Bay and city in Escambia County, Florida. Said to be derived from the Indian word *Pan-sha-okla*, meaning "hair people." The French gave to the bay the name of *Port-de-Aucloss*, also *Bai de St. Mariette*.

Peoria (*pē-ō′-rĭ-ȧ*). County and city in Illinois and nation in Indian Territory. An Indian word meaning "place where there are fat beasts."

Percival (*pẽr′-sĭ-val*). An old masculine baptismal name, derived from a local name in Normandy. It probably means "companion of the chalice."

Percy. A name derived from Perci, a parish and canton near St. Lo, in Normandy.

Peregrine (*pĕr′-ē-grĭn*). From the Latin, meaning "foreign," "pilgrim," "traveler." *Danish*, Peregrinus; *Dutch*, Peregrinus; *It.*, Peregrino; *Lat.*, Peregrinus; *Sw.*, Peregrinus.

Père-la-Chaise or **Père Lachaise** (*pâr lȧ-shāz′*). The French cemetery so named is the site of a great monastery founded by Louis XIV., of which Père la Chaise, a favorite confessor of that luxurious monarch, was the first superior. He died in 1709. After the Revolution, the grounds were laid out for a cemetery.

Pernambuco (*pẽr-năm-bōō′-kō*). An important city of Brazil. Means "the mouth of hell," in allusion to the violent surf always distinguished at the mouth of its chief river, the Amazon.

Persepolis (*pẽr-sĕp′-ō-lĭs*). In ancient geography, one of the capitals of the Persian Empire, situated not far from the Kur, about thirty-five miles northeast of the modern Shiraz.

Persia (*pẽr′-shĭ-ȧ, pẽr′-shȧ, pẽr′-zhȧ*). Name given by the Greeks to the region, the capital of which was Persepolis, originally overrun by a wild branch of the Ayrian race called the *Parsa*, meaning in the native tongue "the tigers." The Persian name for the country is Iran.

Perth Amboy, N. J. One of its landed proprietors was James Drummond, the Earl of Perth, who named the original settlement *Towne of Perth*; the point of land at the mouth of the Raritan was known as Ambo Point, and early attachment or consolidation gave its present name.

Peru (*pē-rōō′*). Received its name from its principal river, the Rio Paro, upon which stands the ancient city of Paruru. The Brazilian term *Para*, however modified, is at all times suggestive of a river.

Peter (*pē′-tẽr*). From the Greek, signifying a "rock," properly, a "stone." *Danish*, Peder; *Dutch*, Pieter; *Fr.*, Pierre; *Ger.*, Peter; *Gr.*, Petros; *Hungarian*, Peter; *It.*, Pietro; *Lat.*, Petrus; *Polish*, Piotr; *Port.*, Pedro; *Russ.*, Piotr; *Sp.*, Pedro; *Sw.*, Peter.

Petersburg, Va. Originally named Peter's Point, after the trader Peter Jones, who opened a depot here.

Petrograd, formerly **St. Petersburg.** The capital of Russia, founded by Peter the Great, who, having in 1702 taken the Swedish forts on the Neva, in the following year laid the foundations of a fort which he called Peterburg (Fort Peter), on an island in the Neva, the nucleus and now the most densely populated portion of the city. In 1914, by Russian imperial decree, the name St. Petersburg was changed to Petrograd.

Pharaoh (*fā′-rō, fā′-rā-ō*). A title given to the Egyptian kings. From the Hebrew *Paroh*, which has been variously translated "son of the sun," "mouth of the sun," "voice of God," and "sun" only. The proper meaning of the word is "the king" or "great house."

Phebe. See Phœbe.

Philadelphia (*fĭl-ȧ-dĕl′-fĭ-ȧ*), **Pa.** From two Greek words meaning "loved or friendly," and "brother," applied as "brotherly love." The Indian name of the locality was *Coaquannok*, "grove of tall pine trees."

Philemon (*fĭ-lē′-mŏn*). Means "saluting." *Fr.*, Philémon; *Gr.*, Philemon; *It.*, Filemone; *Lat.*, Philemon.

Philetus (*fĭ-lē′-tŭs*). From the Greek, meaning "beloved." *Gr.*, Philetos; *It.*, Fileto; *Lat.*, Philetus.

Philibert (*fĭl′-ē-bẽrt*), or **Philebert.** From the Teutonic, signifying "famously bright." *Danish*,

Philibert; *Fr.*, Philibert; *It.*, Filiberto; *Lat.*, Philebertus.

Philip (*fĭl'-ĭp*). From the Greek name signifying, "fond of horses." *Dutch*, Philippus; *Fr.*, Philippe; *Ger.*, Philipp; *Gr.*, Philippos; *Hungarian*, Filep; *It.*, Filippo; *Lat.*, Philippus; *Polish*, Filip; *Port.*, Felippe; *Russ.*, Philipp or Filip; *Sp.*, Felipe; *Sw.*, Filip.

Philippa (*fĭ-lĭp'-pȧ*). A feminine name formed from Philip. *Dutch*, Philippa; *Ger.*, Philippine; *Gr.*, Philippa; *It.*, Filippa; *Lat.*, Philippa; *Sp.*, Felipa; *Sw.*, Filippina.

Philippi (*fĭl-lĭp'-ī*). Named after Philip of Macedon.

Philippines (*fĭl'-ĭp-ĭnz*). Were discovered by Magellan on the Feast of St. Lazarus, 1521, and hence called by him *Archipelago de San Lazaro*, a name changed in 1542 to Islas Filipinas in honor of Philip II., in whose reign the Spanish colonization of the islands was begun.

Phillis. Derived from the Greek *Phyllis*, name of a country woman introduced in Virgil's Eclogues, and of a nurse of Lycurgus, King of Thrace, and of a nurse of the Emperor Domitian. It means "a green branch covered with leaves, a leaf, foliage, a heap of leaves."

Phineas (*fĭn'-ē-ȧs*). From the Hebrew *Piynhhas*, "mouth of brass." *Fr.*, Phinéas; *It.*, Fineo; *Lat.*, Phineas; *Sp.*, Phineos.

Phœbe (*fē'-bē*). From the Greek name, meaning "clear, pure, bright." *Fr.*, Phébé; *Gr.*, Phoibe; *It.*, Febe; *Lat.*, Phœbe.

Phyllis. See Phillis.

Piccadilly (*pĭk'-kȧ-dĭl-lĭ*). The great thoroughfare in London between Hyde Park Corner and the Haymarket. The street was named from a house of entertainment (Piccadilly House) which stood in the Haymarket in the time of Charles I. The name originally comes from the picardils or small stiff collars once worn by English gallants.

Pierre. See Peter.

Pieter. See Peter.

Pietermaritzburg (*pē-tĕr-mȧr'-ĭts-bŭrg*). Named after two Boer leaders.

Pietro. See Peter.

Pike's Peak. One of the highest summits of the Rocky Mountains, situated in Colorado, seventy miles south by west of Denver. It was discovered and ascended in 1806, by Lieutenant (afterwards General) Zebulon Montgomery Pike, a surveying officer of the United States, for whom it was named.

Pillars of Hercules. In ancient geography, the two opposite promontories Calpe (Gibraltar) in Europe and Abyla in Africa, situated at the eastern extremity of the Strait of Gibraltar, sentinels, as it were, at the outlet from the Mediterranean into the unknown Atlantic.

Pincian (*pĭn'-chăn*) **Hill.** A hill in the northern part of Rome, extending in a long ridge east from the Tiber. One of the famous "Seven Hills."

Pin Money. Catharine Howard, wife of Henry VIII., introduced pins into England from France. As they were expensive at first, a separate sum for this luxury was granted to the ladies by their husbands. Hence the expression "pin-money."

Piscataqua (*pĭs-kăt'-ȧ-kwȧ*) **River, N. H.** From the Indian *Piscataquanke*, "a great deer place."

Pittsburgh. In Pennsylvania, was originally called Fort Du Quesne, after a French Governor of Canada, and afterward, in 1758, when the French had been driven out by Washington, it was renamed Fort Pitt, after William Pitt, Earl of Chatham, the name Pittsburgh being adopted in 1769.

Pius. From the Latin, meaning "pious." *Fr.*, Pie; *Ger.*, Pius; *It.*, Pio; *Lat.*, Pius.

Plantagenet (*plăn-tăj'-ē-nĕt*), **House of.** A line of English kings (1154–1399) founded by Henry II., son of Geoffrey, count of Anjou, and Matilda, daughter of Henry I. of England. It is said to have been assumed by the first count of that name from his having caused himself to be scourged with branches of broom (*planta genesta*) as penance for some crime he had committed.

Plata, Rio de la (*rē'-ō dā lä plä'-tä*). Literally, "river of the silver," was named by Sebastian Cabot, in 1526, by reason of a few gold and silver ornaments, the earnest of the wealth of Peru, which he obtained by barter from the natives, and which he hoped were an indication of an El Dorado in the interior.

Platte (*plăt*). River in Nebraska, Colorado, and Wyoming. A French word meaning "dull, flat, shallow," singularly applicable to this stream.

Pliny (*plĭn'-ĭ*). From the Roman naturalist Caius Plinius. *Fr.*, Pline; *Ger.*, Plinius; *It.*, Plinio; *Lat.*, Plinius.

Plymouth (*plĭm'-ŭth*). Town in Plymouth County, Massachusetts, the landing place of the Pilgrims, which was named for the town in England where they were most hospitably entertained before sailing for America. The English town was so called because built at the mouth of the River Plym.

Pocomoke (*pō'-kō-mōk*) **River, Md.** From its Indian name *pockhammokik*, "broken by knobs, small hill."

Poets' Corner. A space in the east side of the south transept of Westminster Abbey, containing the tablets, statues, busts, or monuments of Shakespere, Ben Jonson, Chaucer, Milton, Spenser, and other British poets, actors, divines, and great men. Some of them are buried near or under their monuments.

Point Comfort, Va. Given to the locality in 1607 by the first colonists on their voyage of exploration up the James River, called "*Poynt Comfort* on accounte of the goode channel and safe anchorage it offered."

Point Judith, R. I. From Judith Quincy, wife of John Hull, the coiner of the rare old pine-tree shillings of 1652.

Point Pinos (*pē'-nōs*), **Cal.** Named Pinta de Pinos by Vizcaino, in 1603, from the prevalence of the pine-tree.

Point Reyes (*point rā'-ēs*), **Cal.** From *Tres Reyes*, name of the vessel commanded by Aguilar of Vizcaino's Spanish expedition, 1603.

Poitiers or **Poictiers** (*poi-tĕrz'*. French, *pwȧ-tĭ-ā'*). Town in France, so named from the *Pictones*, or *Pictavi*, a Keltic people.

Poland. An inversion of Land-Pole, the Slavonic for "men of the plains," who first overran this territory. It is called *Polen* or *Pohlen* in German, *Pologne* in French, and *Polska* in Polish.

Pompey (*pŏm'-pĭ*). From the Latin meaning "of Pompeii," i. e., the city of Pompeii. *Danish*, Pompejus; *Dutch*, Pompejus; *Fr.*, Pompee; *It.*, Pompeo; *Lat.*, Pompeius.

Pompey's Pillar. A Corinthian column of beautifully polished red granite at Alexandria, standing on a pedestal or foundation of masonry.

Pontchartrain (*pŏnt-chär-trān'*). Lake in Louisiana, named for a French count who was an early explorer of the Mississippi Valley.

Ponte Vecchio (*pŏn'-tĕ vĕk'-kē-ō*). A bridge in Florence, over the Arno; a picturesque structure with three wide arches, rebuilt in 1345. The roadway is bordered on both sides by quaint little shops, except over the middle arch, where there is an opening. Over the south row of shops is carried a gallery, built by Vascari, connecting the Pitti Palace with the Uffizi and the Palazzo Vecchio.

Popocatepetl (*pō-pō-kā-tā-pĕt'l*). A lofty volcano in Mexico. The name means "smoking mountain," from the Aztec *popoca*, "he smokes," and *tepetl*, a "mountain."

Porta Maggiore (*pōr'-tä mäd-jō'-rĕ*). The finest and most imposing ancient gate in the walls of Rome.

Portland, Me. In 1786, "an act for erecting that

part of the Town of Falmouth in the County of Cumberland commonly known as the Neck into a town by the name of Portland." The name was recommended from its being the oldest English name in that section, given to a large island in the harbor, the name of the main channel (Portland Sound) and the mainland opposite (Portland Head).

Portland, Oregon. Named in compliment to Portland, Me. F. W. Pettygrove and Gen. A. L. Lovejoy, in 1843, were the purchasers of what was afterward Portland, and of which ground they were the first occupants. As a native of Maine, Pettygrove desired to compliment Maine in naming the locality, and similar motives prompted his partner to call it Boston (his native place). The controversy settled by tossing an old American red cent; the one who threw the most heads in three flips should name the town. The score is recorded; Lovejoy, tails, two, heads, one; Pettygrove, heads, two; and so we have *Portland* instead of Boston, Oregon.

Portland Vase. A famous urn of blue transparent cameo-cut glass, ten inches high. It was discovered about 1630 in a sarcophagus in a tomb in the Monte del Grano, near Rome. It is so called from its possessors, the Portland family.

Porto Rico (*pōr′-tō rē′-kō*). Spanish for "rich port."

Port Royal, S. C. From the bay, called Royale by Ribaut, "because of the fairnesse and largnesse thereof" of its waters.

Portsmouth, N. H. From Portsmouth, England; the governor of which, Captain John Mason, was the original proprietor of its namesake.

Portugal (*pōr′-tū-gal.* Portuguese, *pōr-tōō-gäl′*). The *Portus Galliæ* of the Romans, literally, "the gates of Gaul," as approached from the Mediterranean and Atlantic Seas.

Potomac (*pō-tō′-mak*). River forming the boundary line between Maryland, Virginia, and West Virginia. Indian *Patowmek* or *Potowmak*, "they are coming by water"; another translation, "place of the burning pine," allusion to a council fire.

Potsdam (*pŏts′-dăm.* German, *pōts′-dām*). Prussian city situated at the junction of the Nuthe with the Havel, sixteen miles southwest of Berlin. It is an imperial residence, and contains many palaces. The name is a corruption of the Slavonic *Poddubami*, "under the oaks."

Poughkeepsie (*pō-kĭp′-sĭ*). City in Dutchess County, New York. Derived from the Delaware Indian word, *apokeepsingk*, meaning "safe and pleasant harbor," or "shallow inlet, safe harbor for small boats."

Prado (*prä′-dō*). The chief fashionable promenade of Madrid.

Prague (*präg*). The capital of Bohemia, is the English form of the German *Prag*, or *Praha*, which in Czech means the "threshold," referring, it is supposed, to a reef of rocks in the bed of the Moldau. The suburb of Warsaw on the right bank of the Vistula similarly goes by the name of Praga, the "threshold."

Prairie du Chien (*prā′-rē dū shēn.* French, *prā-rē′ dü shē-ăn′*), **Ia.** French words, translated "dog prairie"; from the local habitations of the prairie dogs.

Prater (*prä′-tĕr*). A noted public park in Vienna.

Prescott, Ariz. In compliment to the American historian, William H. Prescott.

Pretoria (*prē-tō′rĭ-ȧ*). The capital of the Transvaal, was named in honor of Andries Pretorius, a Boer leader, whose son became the first President of the Republic.

Prince Edward Island. In the Gulf of St. Lawrence, was formerly called *St. John's Island.* In 1798, the local legislature passed an Act, confirmed in 1799 by the king in council, changing the name to Prince Edward Island, in compliment to Prince Edward, afterward Duke of Kent, and father of Queen Victoria, who was then commander of the forces in British North America.

Prince of Wales Island. Named after the Prince Regent, afterwards George IV. of England.

Printer's Devil. The youngest apprentice in a printing-office, whose duty it is to do all the dirty jobs. The early printers were by many believed to practise the black art; Aldus Manutius had a negro boy for a body servant, and the superstitious townsfolk nicknamed this boy "the devil."

Priscilla (*prĭs-sĭl′-lȧ*). A diminutive of the Latin *priscus*, "old, ancient." *Dutch*, Priscilla; *Fr.*, Priscille; *It.*, Priscilla; *Lat.*, Priscilla.

Protestant. The second Diet of Spires, in 1529, decided that the religious differences could only be decided by an ecclesiastical council, thus disallowing the right of private judgment. A solemn protest was made against this decision by the Lutheran princes of Germany, April 19, 1529, in consequence of which the members of the Reformed Churches have since been known as Protestants. The protest was drawn up by Luther and Melanchthon.

Provence (*prō-väns′*). An ancient government of southeastern France. The *Provencia* of Cæsar, a name reminding us that it was the first province acquired by Rome beyond the Alps.

Providence, R. I. Given by Roger Williams in recognition of "God's merciful providence to me in my distress." The Indian name of the locality was *Mooshansick.*

Prudence. A feminine name given by Puritans. From the Latin *prudentia*, "wisdom, prudence, discretion, knowledge."

Prussia. Is the Latinized form of the German name *Preussen*, itself a corruption of an older Lithuanian name. Old Prussia was the Duchy formed in the eastern corner of the modern kingdom out of the possessions of the Teutonic knights, whose inhabitants in the Tenth Century were called Prutheni or Pruzzi, which, according to Zeuss, is a Lettish name meaning "neighbors."

Ptolemy (*tŏl′-ē-mĭ*). From the Greek, meaning "war-like," or "mighty in war." *Dutch*, Ptolemeus; *Fr.*, Ptolémée; *Ger.*, Ptolemaus; *Gr.*, Ptolemaios; *It.*, Tolomeo; *Lat.*, Ptolemaeus.

Pueblo (*pwĕb′-lō*). County and important manufacturing city, in same county, in Colorado. A Spanish word meaning "a collection of people, a town or village."

Punch and Judy. A contraction for Pontius and Judas. It is a relic of an old miracle play in which the actors were Pontius Pilate and Judas Iscariot.

Punjab or Punjaub (*pŭn-jäb′*). This great northwest Indian territory derives its name from two Persian words, signifying "five rivers." The five affluents of the Indus which give rise to the name are the Jhelum, the Chenab, the Ravi, the Beas, and the Sutlej.

Pyrenees (*pĭr′-ē-nēz*). The chain separating France from Spain is the *Mons Pyrenæus* of the Greek and Roman geographers. The name first appears in Herodotus, who supposed *pyrene* was the name of the place where the Danube flowed. The etymology is unknown, being probably pre-Aryan. Many guesses have been made from Basque, Keltic, and Greek sources, explaining the name as the "high," "steep," "pine-clad," or "burnt" mountains. The most probable derivation is from *biren* or *pyren*, a local word, doubtless ultimately Basque or Iberian, which signifies a "summit" or "ridge."

Quakers. This name was originally applied by a Derby, England, magistrate to the members of the Society of Friends, because George Fox, the founder, admonished him and those present to tremble at the name of the Lord.

Quebec (*kwē-bĕk′*). The former capital of Canada, arose around a blockhouse built by Champlain in 1608. The name is believed to refer to the "narrowing" of the river at this point

to which Champlain alludes. Another account says it was named after Quebesq in Brittany, "the village on the point"; while a third derives it from an Algonquin term signifying "take care of the rock."

Queen Charlotte Island. Named in compliment to the Queen of George III.

Queensland and Queenstown. Both named after Queen Victoria.

Quentin. See Quintin.

Quinsigamond (*kwĭn-sĭg'-ȧ-mond*) **Lake, Mass.** Indian word meaning "fishing place for pickerel."

Quintin, Quintyne (*kwĭn'-tĭn*). From the Latin name Quintinus, formed from the name Quintus.

Quintus (*kwĭn'-tŭs*). The Roman name signifying "the fifth," i. e., the fifth son in order of birth.

Quirinal (*kwĭr'-ĭn-ăl* or *kwĭr-ī'-năl*). The farthest north and the highest of the seven hills of ancient Rome, lying northeast of the Capitoline and northwest of the Viminal. It has its name from an old Sabine sanctuary of Quirinus (Mars). On the hill stands the palace of the Quirinal, the former summer palace of the pope.

Quiz. It is said that Daly, the manager of a Dublin play-house, laid a wager that a new word of no meaning should be the common talk and puzzle of the city in twenty-four hours. In consequence of this the letters *q u i z* were chalked by him on all the walls of Dublin, with an effect that won the wager.

Rachel (*rā'-chĕl*). From the Hebrew *Rahhel*, usually translated "a ewe." Fuerstius translates the name "mutterschaft," i. e., motherhood, maternity. *Fr.* Rachel; *Ger.*, Rahel or Rachel; *It.*, Rachele; *Lat.*, Rachel; *Sp.*, Raquel; *Sw.*, Rachel.

Rafael. See Raphael.

Rafaele or **Raffaelle.** See Raphael.

Rahway (*rô'-wā*), **N. J.** From the river; its name traditionally traced to a Raritan chief named Rahwack, who had his habitation near the river's mouth.

Rainier (*rā'-nēr*). Town in Columbia County, Oregon, and mountain in Washington, named for Rear-Admiral Rainier.

Raleigh, (*rô'-lĭ*), **N. C.** In honor of Sir Walter Raleigh, who located a colony on Roanoke Island, July 23, 1587.

Ralph. From the Teutonic, meaning "warrior-wolf." *Dutch*, Rudolf; *Fr.*, Raoul; *It.*, Raolfo; *Lat.*, Radulphus; *Sp.*, Rodolfo; *Sw.*, Rudolf.

Randolph. Properly Radolph, the same as the German names Radulph, Radolf, Rudolph; from Old German *rad-ulph*, "help or counsel."

Rangeley. Town and plantation in Franklin County, Maine, and one of the Androscoggin lakes in the same State, named for an Englishman, an early settler and large landowner.

Rangoon (*răn-gōōn'*). The chief town and port of Burmah is called in Burmese *Ran-kun*, the "end of the war," literally, enmity exhausted. A name given in 1763, by Alompra, the founder of the Burmese dynasty, who, after the destruction of the city of Pegu, established the capital of the kingdom near the famous golden pagoda called Shwé Dagon, with which Ran-kun may probably be connected by assonance.

Raoul. See Ralph.

Raphael (*răf'-ȧ-ĕl, rä'-fä-ĕl, rā'-fȧ-ĕl*). From the Hebrew *R'phael*, "healed of God, or whom God healed." *Fr.*, Raphael; *Ger.*, Raphael; *It.*, Rafaele or Raffaelle; *Lat.*, Raphael; *Sp.*, Rafael.

Rapidan (*răp-ĭ-dăn'*) **River, N. C.** Corruption of *Rapid Anne*. The suffix being given in honor of Queen Ann of England.

Rappahannock (*răp-pȧ-hăn'-nŭk*) **River, Va.** Indian *lappihanne*, "river of quick, rising water," also noted as *toppehannock*.

Raritan (*răr'-ĭ-tan*) **River, N. J.** From a local tribe of Indians, the Raritans.

Raymond. A name derived from the Teutonic, *ram-mund*, "a strong man." *Fr.*, Raymond; *It.*, Raimondo; *Lat.*, Raymundus; *Sp.*, Raymundo or Ramon.

Rebecca, Rebekah (*rē-bĕk'-kȧ*). From the Hebrew *Ribhkah*, signifying a "rope with a noose"; from Arabic *rabkat*, which Tregelles says means "one who ensnares men by her beauty." *Fr.*, Rebecca; *It.*, Rebecca; *Lat.*, Rebecca; *Sp.*, Rebeca.

Red-letter Day. A day that is fortunate or auspicious; so called in allusion to the custom of marking holy days, or saints' days, in the old calendars with red letters.

Red River. From the color of its waters it was called by the French *Rivière Rouge*, "Red River"; called by the Spaniards *Rio Roxo de Natchitoches*.

Red Sea. Translates the unexplained classical names *Erythrasan Sea* and *Mare Rubrum*. To the early Portuguese mariners the name *Mar Vermelho* seemed to be appropriate, because of the red streaks of water, due probably to floating infusoria.

Regents (*rē'-jents*) **Park.** One of the largest parks of London, situated in the northwestern part of the city. It is 472 acres in extent, and contains the Zoölogical Gardens.

Regent Street. One of the principal streets of the West End of London, extending from Portland Place to Waterloo Place.

Regina (*rē-jī'-nȧ*). A feminine name, probably signifying "queen," from the Latin. Arthur translates it "queenlike."

Reginald (*rĕj'-ĭ-nald*). From the Old German name *reginald*, "noble hero."

Reims or **Rheims** (*rēmz*. French *răns*). A famous French city, was named for the *Remi*, a tribe.

Reinhold. See Reynold.

Rene (*rē-nā'*). From the French. Like the Italian name *Renato*, derived from the Latin, *renatus*, "renewed, born, risen or begun again." *Fr.*, René; *It.*, Renato; *Lat.*, Renatus.

Renee. Feminine of Rene. Sometimes Anglicised in pronunciation as ren'ne. *Fr.*, Renée; *It.*, Renata; *Lat.*, Renata.

Retta. A feminine name derived from Margaretta.

Reuben (*rū'-bĕn*). From the Hebrew, *R'ubhen*, which St. Jerome translates "son of vision"; Tregelles, "see"; i. e., "behold a son."

Reynold (*rĕn'-ŏld*). From the Teutonic, meaning "power of Judgment." *Danish*, Reinhold; *Dutch*, Reinold; *Fr.*, Renaud; *Ger.*, Reinhold; *Lat.*, Reynaldus or Reginaldus; *Sp.*, Reynaldo; *Sw.*, Reinhold.

Rhine (*rīn*). Is the English spelling of the German name *Rhein*, which was the Latin *Rhenus* and the Keltic *Renos*. It means, to "flow."

Rhoda (*rō'-dȧ*). A feminine name derived from the Latin *rhoda*, "a rose." *Gr.*, Rhode; *Lat.*, Rhoda.

Rhode (*rōd*) **Island.** One of the original Thirteen States, said to have received its name from a small island in Narragansett Bay named *Roode Eylandt*, "red island"; according to another authority, named for the island of Rhodes.

Rhodes (*rōdz*). Means an "island of roses," in conformity with the Greek *rhodon*, a "rose."

Richard. From the Teutonic *reich-hart*, "very powerful, strong, or rich." *Dutch*, Richard; *Fr.*, Richard; *Ger.*, Richard or Reichard; *It.*, Ricardo; *Lat.*, Richardus; *Port.*, Ricardo; *Sp.*, Ricardo.

Richmond, Va. From Richmond-on-the-Thames, a suburb of London; the name suggested owing to analogy in situation.

Rio Grande (*rī'-ō-grănd*. Spanish, *rē'-ō grän'-dā*). River rising in the Rocky Mountains and emptying into the Gulf which gives name to a county in Colorado. A Spanish phrase meaning "great river."

Rita (*rē'-tä*). A feminine name of Italian origin: abbreviated from Margarita.

Roanoke (*rō-a-nōk'*). County and city in same county in Virginia, river in Virginia and North Carolina, town in Huntington County, Indiana, and village in Woodford County, Ill. From the island of same name, *Roenoke* or *Rawnoke*, equivalent to *peag*, "sea-shell," or "wampum."

Robert. Is red-beard, from *ro* or *ro*, "red," and *bert* or *bart*, a "beard." Dr. R. S. Maitland gives no fewer than two hundred different methods of spelling this name. Rupert and Robert are identical, and were used occasionally for the same person. *Danish*, Robert; *Dutch*, Robert; *Ger.*, Robert; *It.*, Roberto; *Lat.*, Robertus; *Sp.*, Roberto; *Sw.*, Robert.

Robertina. A feminine name derived from Robert.

Robin. A diminutive of Rob, the nickname of Robert.

Rochester. A city in the State of New York, derives its name from Colonel Nathaniel Rochester, who projected the settlement in 1818.

Rockaway, N. Y. Named from the Indian *ackewek*, "bushy."

Rocky Mountains. Were first called *Montagnes de Pierres Brillantes*, "mountains of brilliant stones," from the sparkling of the summits in the sunshine. Then came the more prosaic *Montagnes Rocheuses*, or "Rocky Mountains"; and our present still more prosaic "The Rockies."

Roderick (*rŏd'-ĕr-ĭk*). From the Old German name Roderic or Roderich, from *rad-reich*, "rich or powerful in counsel." *Fr.*, Rodrigue; *Ger.*, Roderich; *It.*, Rodrigo; *Lat.*, Rodericus; *Russ.*, Rurik; *Sp.*, Rodrigo, Roderigo, or Ruy.

Rodrigo. See Roderick.

Rodriguez (Spanish. *rō-drē'-gĕth*). The "son of Roderick."

Roger (*rŏj'-ĕr*). Some translate this name "spear of fame," others "spear-red." It comes from *rat-gar*, "a war counsellor," or *ratgar*, "prompt in counsel." *Dutch*, Rutger; *Fr.*, Roger; *It.*, Ruggiero; *Lat.*, Rogerus; *Sp.*, Rogerio.

Roland or **Rowland** (*rō'-land*. French, *rō-lăN'*). Derived from the old Frankish name signifying "illustrious countryman." *Danish*, Roland; *Dutch* Rœland; *Fr.*, Roland; *Ger.*, Roland; *It.*, Orlando or Rolando; *Lat.*, Rolandus; *Port.*, Rolando; *Sp.*, Rolando.

Romanoff (*rō-mä'-nŏf*) **Cape, Alaska.** Compliment to the prominent Russian statesman Romanoff.

Rome. The French name of the city called Roma in Latin and Italian. Among the various guesses as to the meaning of the name, the most probable refers it to the word *gruma* or *groma*, "cross roads," spreading themselves at their junction into a sort of forum.

Rosa. See Rose.

Rosalia. A feminine name formed from the name Rose.

Rosalin (*rŏz'-a-lĭn*), **Rosalind** (*rŏz'-a-lĭnd*). A feminine diminutive formed from the name Rose.

Rosamond (*rŏz'-a-mŭnd*). Probably from *rosa mundi*, "rose of the world," corrupted to "rose of peace." *Dutch*, Rozamond; *Fr.*, Rosemonde; *It.*, Rosmonda; *Lat.*, Rosamunda.

Rose. A feminine name derived from the Latin *rosa*, a "rose." The Romans sometimes called their sweethearts "rose mea." *Danish*, Rosa; *Dutch*, Rosa; *Fr.*, Rose; *Ger.*, Rose; *It.*, Rosa; *Lat.*, Rosa; *Sp.*, Rosa; *Sw.*, Rosa or Rosina.

Rosemary. A feminine name formed from the Latin *rosmarinus*, "dew of the sea."

Rosetta (*rō-sĕt'-ta*). A diminutive derived from the name Rose, or from the Italian form Rosa.

Ross. Either as a name of a place by itself, or as a portion of a name, always means "a headland." It is a Celtic word, and is frequent in Scotland, as in Rosslyn, Culross, Rossberg, Ardrossan, etc.

Rotten Row. The popular name corrupted from *Route du Roi*, "the way of the king," for a famous driveway and promenade in Hyde Park, London, much frequented by fashionables during the season.

Roumania (*rōō-mā'-nĭ-a*). A modern kingdom on the Lower Danube, comprising the former Turkish principalities of Wallachia and Moldavia. The kingdom was so named because the people, who speak a Neo-Latin dialect derived from the colonists settled by Trajan in Dacia, designate themselves as Rumeni or Romani (Romans).

Rouse's Point, N. Y. From Jacques Rouse, a Canadian who settled on this point in 1783.

Rowena (*rō-ē'-na*). A feminine name, which some consider to be of Saxon origin. Mr. Arthur derives it from *D. rouw*, "peace"; Anglo-Saxon *rinnan*, "to acquire"; others derive it from the Welsh *rhonwen*, "white shirt."

Ruben. See Reuben.

Rudolph (*rōō'-dŏlf*). From root of Randolph and Radolph. *Dutch*, Rudolf; *Fr.*, Rodolphe; *Ger.*, Rudolf; *It.*, Rodolfo or Ridolfo; *Lat.*, Rudolphus.

Rufus (*rū'-fŭs*). From the Latin, meaning "reddish," "having red hair." *Lat.*, Rufus.

Rupert (*rōō'-pĕrt*). Etymologically the same name as Robert. *Ger.*, Ruprecht; *Lat.*, Rupertus.

Rurik. See Roderick.

Russia (*rŭsh'-a, nō'-shä*). Named from the *Roosi*, or *Russ*, a tribe of Norsemen in the Ninth Century.

Ruth. From the Hebrew *Ruth*, from *r'uth*, "appearance, vision, fig, beauty."

Sabina (*sā-bī'-na*). A feminine name derived from Sabina, wife of Adrian, celebrated for her private as well as her public virtues; one as chaste as a Sabine. *Dutch*, Sabine; *Fr.*, Sabine; *It.*, Sabina; *Lat.*, Sabina; *Sp.*, Sabina; *Sw.*, Sabina.

Sabine (*sa-bēn'*) **River, La.** Some allege that it was so named by French voyagers, who applied the name *Sabina* because of a lively skirmish with the Indians on its banks, for wives. More likely it means "cypress," from the French word.

Saco (*sō'-kō*). River, and city in York County, Maine. Derived from an Indian word *sohk* or *sauk*, "pouring out"; hence the outlet or discharge of a river or lake.

Sacramento (*săk-ra-mĕn'-tō*). River, city, and county in California, named by the Spaniards, the word meaning "the sacrament."

Sag Harbor. Village in Suffolk County, New York. Derived from the Indian word *saggaponack*, "place where the ground nuts grow."

Saginaw (*săg'-i-nō*). River, county, bay, and city in Michigan. Said to derive its meaning from an Indian word, *sauk-sahcoon*, "pouring out at the mouth," or "an outlet."

Sahara (*sa-hä'-ra*). Is simply an Arabic term for "desert."

St. Anthony, Minn. Named St. Anthony by Hennepin in July, 1680; a reference to his being a Recollet of the Province of St. Anthony in Artois, France. Indian name, *Owahmenah*, "falling water."

St. Augustine (*sānt ô'-gŭs-tēn*). A town in Florida, is the oldest European settlement in the United States. Don Pedro Menendez de Aviles, sent by Philip II. of Spain in 1565 to drive out the French Protestant refugees, who, three years before, had reached Albemarle Sound, arrived off the coast of Florida on St. Augustine's Day, August 28th, and gave the name of the Saint to the city which he founded shortly afterwards.

St. Bernard (*sānt bĕr-närd'*), **Great.** An Alpine pass leading from Martigny, Valais, Switzerland, to Aosta, Italy, and connecting the valleys of the Rhone and the Dora Baltea. It was traversed by armies in Roman and medieval times. The passage by the French army under Napoleon in May, 1800, is especially noteworthy.

St. Clair River, (*sānt klâr'*), **Mich.** Also the lake, was named in honor of the founder of the Franciscan nuns, from the fact that La Salle reached it on the day consecrated to her (August 12th). He, therefore, named it *Sainte Claire* (St. Clara).

St. Croix (*sānt kroi'*) **River, Me.** Means "Holy Cross," and was named by De Monts, from a circumstance in the two rivers of its mouth forming a cross.

St. Croix River, Wis. Le Seur says, it was originally named *Madelaine* after Madelaine Radisson; then changed to St. Croix, after Monsieur St. Croix, who was drowned at its mouth, while exploring, about 1700. Indian name *hogan-wauke-kim*, "the place where the fish lies."

Saint Elias. Mountain in Alaska, named for the saint upon whose day it was discovered.

St. George's Channel. Named after the patron saint of England.

St. Helena (*sānt hĕ-lē'-nȧ*). An island in the South Atlantic belonging to Great Britain. Napoleon was exiled there, and resided at Longwood from 1815 until his death in 1821.

St. James's Palace. A palace in London, adapted as a royal residence by Henry VIII., enlarged by Charles I., damaged by fire in 1809, and since restored. Though no longer occupied by the sovereign, it gives its name officially to the British court.

St. John River, Me. Given by Pierre de Monts; Indian name *looshtook*, "long river."

Saint Johnsbury. Town in Caledonia County, Vermont, named for St. John de Creve-coeur, French consul at New York, and a benefactor of Vermont.

St. John's River, Fla. Indian name, *Yeacas* or *Walaka*, "river of many lakes." French named the stream *Rivière Mai*, Ribaut having entered its waters in that month. The Spaniard, Francisco Gordillo, called it *Rio San Juan*, having reached it on June 24, 1521, "the day as set apart to honor the precursor of Christ." The word was afterward anglicized by the English to St. John's River.

St. Lawrence River, N. Y. Named from the gulf; which received its name *St. Lawrent* or *St. Lawrence* from the French navigator Jacques Cartier, who entered its water August 10, 1535 (St. Lawrence's Day).

St. Louis (*sānt lōō'-is* or *lōō'-ĭ*), **Mo.** In honor of Louis XV. of France; the name originally applied to a depot established at this point February 15, 1764, by Pierre Laclede Siguest.

St. Marie, Sault (*sōō sānt mā'-rĭ.* French, *sō sănt mä-rē'*), **Mich.** The French call a cascade, says Schoolcraft, a *leap* or *sault*, but *sault* alone would not be distinctive; therefore, in conformity with their general usage, they added the name of a patron saint to the term by calling it *Sault de Sainte Marie*, that is, "Leap of St. Marie," to distinguish it from other *leaps* or *saults*.

St. Paul. From the Chapel of St. Paul, a log chapel erected here by Roman Catholics. Prior to the adoption of St. Paul, it was known as *Pig's Eye*, from the nickname applied to a corpulent "one-eyed" Frenchman who located a "saloon-shanty" at this point. Indian name, *imnijaska*, "white rock," a reference to the sandstone bluff on which the city stands.

St. Petersburg. See **Petrograd.**

Salem (*sā'-lĕm*). City in Essex County, Massachusetts, so named by its early settlers because they hoped to enjoy peaceful security there. A Hebrew word meaning "peace."

Salome (*sȧ-lōm'*, *sȧ-lō'-mē*). A feminine name, from the Hebrew *Solomon*, "peaceful."

Salt Lake. County and city in same county, in Utah, named for the famous lake of that State.

Samson or **Sampson** (*săm'-sŏn* or *sămp'-sŏn*). From the Hebrew *Shimshon*, "illustrious sun; solar, like the sun; one who resembles the sun." *Danish*, Samson; *Dutch*, Samson; *Fr.*, Samson; *Lat.*, Samson; *Port.*, Sansao; *Sp.*, Sanson; *Sw.*, Simson.

Samuel (*săm'-ū-ĕl*). From the Hebrew *sh'mu-El*, "heard of God." *Danish*, Samuel; *Dutch*, Samuel; *Fr.*, Samuel; *Hungarian*, Samuel; *It.*, Samuele; *Lat.*, Samuel; *Sp.*, Samuel.

San Antonio (*săn ăn-tō'-nĭ-ō*). City in Bexar County, Texas, named for the Roman Catholic mission, San Antonio de Velero, otherwise the Alamo.

San Diego (*săn dē-ā'-gō*), **Cal.** From the bay, which was named by Sebastian Vizcaino, Spanish navigator, who entered it November 12, 1603, in honor of the day saint, San Diego d'Alcala. A coincidence being that Vizcaino's vessel also was named San Diego.

Sandusky (*săn-dŭs'-kĭ*). Town in Illinois, county, river, and city in Ohio, whose name by some authorities is said to be derived from the Indian word *Outsandouke*, "there is pure water here"; or *Saanduste*, "large bodies or pools of water." Another authority states that it was named for Jonathan Sandousky, a Polish trader of the vicinity.

Sandwich Islands. Named by Captain Cook in compliment to Lord Sandwich, First Lord of the Admiralty.

Sandy. A Scottish name corrupted from Alexander.

Sandy Hook, N. Y. Namely, "sandy point," *Hook* being applied from the Dutch *haak*, "point."

San Francisco. Bay, county, and city in same county, in California, said by some to have been named for the old Spanish mission of San Francisco de Assisi, by others to have been named for the founder of the order to which Father Junipero, the discoverer of the bay, belonged.

San Joaquin (*săn hō-ä-kēn'*). County and river in California. A Spanish phrase meaning "whom Jehovah has appointed."

San Jose (*săn hō-sā'*). City in Santa Clara County, California, named for the patron saint of Mexico, St. Joseph.

San Salvador (*săn săl-vä-dōr'*). Means "Holy Saviour." This was the first land sighted by Columbus (October 11, 1492); he, therefore, gave it this name as a token of thanksgiving.

Sanskrit (*săn'-skrĭt*). From the Sanskrit *samskrta*, "polished," the learned language of the Hindustan and of the Brahmins, which was current at the time of Solomon. It is the parent of most modern languages. It contains the roots of Greek, Latin, Celtic, Slavonic, and German, and as it contains no exotic terms must be one of the primitive tongues.

Santa Barbara. County and city in same county, in California, named for an old Spanish mission, which, in turn, probably received its name from the Santa Barbara Channel, designated by Vizcaino as *Canal de Santa Barbara*, he having sailed through its water, December 4, 1603, the day being St. Barbara's.

Santa Claus (*săn'-tȧ klôz*) or **Santa Klaus.** A modern adaptation of the Dutch, Sant Nikolaas (St. Nicholas). As is now very well known, St. Nicholas was the patron saint of children and dispensed gifts to them on Christmas eve.

Santa Cruz (*săn'-tȧ krōōs'*). Counties in Arizona and California, city and island in the latter State. A Spanish word meaning "holy cross."

Santa Fé (*săn'-tȧ fā'*). County and city in same county, in New Mexico; and city in Haskell County, Kansas, and town in Monroe County, Missouri. A Spanish phrase meaning "holy faith." The name originally given by Antonio de Espejo, in 1582, was *La Ciudad de la Santa Fe de San Francisco*, "the City of the Holy Faith of St. Francis."

Santiago (*săn-tē-ä'-gō*). The capital of Chile, was founded in 1541 by Pedro de Valdivia, and placed under the protection of the patron saint of

Spain. Iago is a form of Jacobus, and Santiago of Spain was St. James the Great, the elder brother of St. John.

Sara. A feminine name derived from the Italian form of Sarah.

Saracen (*săr'-ă-sĕn*). Is a term loosely used by Medieval writers to denote the Moslem races, and especially the foes of the Crusaders. It is a Greek corruption of the Arabic *sharqin*, "eastern" people, as opposed to the *maghrabī* or "western" people.

Saragossa (*să-ră-gŏs'-să*). From Cæsarea Augusta; its Basque name was *Saluba*, "the sheeps' ford."

Sarah or **Sara** (*sā'-ră*). From the Hebrew *Sarah*, variously rendered "female ruler, governor"; "princess, noble lady"; "leader, commander." *Dutch*, Sara; *Fr.*, Sara; *Ger.*, Sara; *It.*, Sara; *Lat.*, Sara; *Port.*, Sara; *Sp.*, Sara; *Sw.*, Sarah.

Saranac (*săr'-ă-năk*) **Lake.** Village in Franklin County, New York. An Indian word meaning "river that flows under a rock."

Saratoga (*săr-ă-tō'-gă*), **N. Y.** Uncertain. Termination *oga* or *aga* said to signify "place," the first part of the word thought by some to imply "hillside"; by others, a reference to the springs, *soragh* in some Indian dialects being the name for "salt"; *seitake* is given, meaning "on the heel," but no reason further than a probable corruption in pronunciation of the word. *Assarat*, "sparkling," *oga*, "place," is mentioned by Schoolcraft.

Sarawak (*să-ră'-wăk*). Malay *Sarakaw*, "the cove," or bay.

Sardinia (*săr-dĭn'-ĭ-ă*). Italian *Sardegna*. Bears the name of the *Sardi*, its early inhabitants, who may possibly be identified with the Shardina, or Shardana, one of the northern races who attacked Egypt in the reign of Meneptah. Another view is that it expresses the "land of the Sardonion," a Greek term for a plant indigenous to this island.

Saskatchewan (*săs-kăch'-ē-wŏn*). A river in British North America. The name is derived from the Indian, meaning "swift river."

Saturday. The day of Saturn, one of the planets of the solar system.

Saugatuck (*sô'-gă-tŭk*), **Conn.** Indian *Saukettuck*, "at the mouth of the stream with tides."

Saul. From the Hebrew *Shaul*, which Simonis translates "exoratus," i. e., obtained by entreaty; and others, "asked for, or desired." *Fr.*, Saul; *Lat.*, Saulus.

Sault Ste. Marie, Mich. See St. Marie Sault.

Savannah(*să-văn'-nă*). Town in Wayne County, New York, and city and river in Georgia. The name derived from the Spanish word *savanne*, meaning "grassy plain."

Saxon. Comes from the word *saex* — a short crooked sword; and so "the men of the sword." We can readily understand how, with sword in hand, they became invincible in arms, and how they spread dread and destruction all along the shores which they frequented. By the terror of their name they compelled the Gauls to include in their litany a new petition, "Deliver us, O Lord, from the fury of the Northmen." How could it be otherwise than that the men who affected such grim appellations as "Bloody-ax," "Skull-cleaver," Death's-head,"— and whose deeds did not belie their names should inspire a natural horror.

Saxony (*săks'-ŭn-ĭ*). A modern German kingdom, called Sachsen in German, is the country of the Saxons; derived from the Seax, or short crooked knife with which they armed themselves.

Scandinavia (*skăn-dĭ-nā'-vĭ-ă*). A convenient name for the Swedish and Norwegian Peninsula, adopted from a passage in Pliny where the correct reading is probably *Scadinavia*, which Mr. Bradley refers to the Teutonic *shadino*, "dark." *Scadinavia*, the "land of darkness," was possibly at first a mythical name for the dark North, which was afterwards applied to the Swedish Peninsula.

Schenectady (*skĕn-ĕk'-tă-dĭ*), **N. Y.** Originally spelled Schenectada, from the Indian *Schaunaughtada*, "river valley through or beyond the pine-trees," there being a portage across the woodland neck, from the present site of Albany to the Mohawk River at this point.

Schoharie (*skō-hăr'-ĭ*), **N. Y.** Corruption of the Indian *to-wos-sho'-her*, "drift-wood," from the collecting at this point, where the Line Kil and Little Schoharie flowed into the main stream.

Schönbrunn (*shön'-brōōn*). Near Vienna, the suburban residence of the Austrian Emperors, so called from a "beautiful spring" in the grounds of the palace, was erected in 1744 by Maria Theresa on the site of a former hunting-seat.

Schroon (*skrōōn*) **Lake, N. Y.** Said to be a corruption of Scharon, and to have been applied in honor of the Duchess of Scharon, favorite of Louis XIV. Others advise from an Adirondack Indian word signifying "a child or daughter of the mountain."

Schuylkill (*skōōl'-kĭl*) **River, Pa.** From the Dutch *schuylen-kill*, "hidden creek." The Swedes called it *Skierkillen*. Indian name was *ganshowehanne*, "the roaring stream."

Scioto (*sī-ō'-tō*) **River, Ohio.** Shawnoese Indian word meaning "hairy," its waters at flood in the spring being filled with hairs, attributed to the herds of deer drinking or bathing in the water at the season of shedding their coats.

Scotland. Originally *Caledonia*, meaning, literally, the hilly country of the Caels, or Gaels, signifying "a hidden rover."

Scotland Yard. A short street in London, near Trafalgar Square. Here formerly were the headquarters of the Metropolitan police, now removed to New Scotland Yard on the Thames embankment, near Westminster Bridge.

Scutari (*skōō'-tä-rē*). In Turkey, from *Uskudar*, "a messenger," having been in remote periods, what it is to this day, a station for Asiatic couriers.

Seattle (*sē-ăt'-t'l*). City in King County, Washington, named for the chief of the Duwamish tribe of Indians, *See-aa-thl*.

Sebago (*sē-bā'-gō*) **Pond, Me.** From the Indian, meaning "great water," or "place or region of river lake."

Sebastian (*sē-băs'-chan*. Spanish, *sā-băs-tē-än'*). From the Greek rendering of Augustus, and signifying "to be venerated or reverenced, venerable." *Dutch*, Sebastiaan; *Fr.*, Sebastien; *It.*, Sebastiano; *Lat.* Sebastianus; *Port.*, Sebastiao; *Russ.*, Sevastian; *Sp.*, Sebastian; *Sw.*, Sebastian.

Sebastopol (*sē-băs'-tō-pōl*). The "august" or "imperial city", was founded and named by Potemkin soon after the conquest of the Crimea in 1783.

Selah. A masculine name derived from the Hebrew *Shelah*, signifying a "weapon," "missile."

Seneca (*sĕn'-ē-kă*) **Lake, N. Y.** From a tribe of Indians, the Senecas; known as the "great hill people" from a tradition that they broke out of the earth from a large mountain, on Canandaigua Lake, known as *Ge-nun-de-wah* or "great hill."

Senegambia (*sĕn-ē-găm'-bĭ-ă*). So named because of its situation between the Senegal and Gambia rivers.

September. The seventh month of the Old Roman Calendar, counted from March, which commenced the year previous to the addition of January and February by Numa in the year 713 B. C.

Serena. A feminine name derived perhaps from Serena, a daughter of Theodosius; from the Latin *serenus*, "cheerful, quiet, calm."

Servia (*sĕr'-vĭ-ă*). Known by the Romans as *Suedia*, district peopled by the Suevi, who afterwards settled in the territory now called Sweden.

Seth. From the Hebrew *Sheth*, signifying "ap-

pointed." Fuerstius writes the name *S'et*, and renders it "war bustle or noise."

Sevres (*sāvr*). Named from the two rivers which traverse it; anciently called *Villa Savara*.

Sheboygan (*shē-boi'-gan*) **River, Mich.** From the Indian *showbwawaygum*, "the stream that comes from the ground."

Shenandoah (*shĕn-ăn-dō'-ȧ*). County and river in Virginia, city in Page County, Iowa, borough in Schuylkill County, Pennsylvania, and town in Page County, Virginia. An Indian word said by some to mean "the sprucy stream"; by others, "a river flowing alongside of high hills and mountains"; and still another authority states that it means "daughter of the stars."

Sherwood Forest. A forest in Nottinghamshire, England, fourteen miles north of Nottingham. It was formerly of large extent. It is the principal scene of the legendary exploits of Robin Hood.

Shetland Isles. The Norse for the "Viking Island," conformably with their native prenomen *Hyalti*, "a Viking." The term Viking, meaning pirate, derived from the *Vik*, or creek, in which he lay concealed.

Shiraz (*shē'-räz*), **Persia.** Signifies "lion's paunch," because at one time, like the lion, it consumed much but produced nothing.

Shirvan (*shĭr-vän'*). River and district of Persia, said to have been named after *Nieshirvan*, a king of Persia.

Shrewsbury (*shrūz'-bĕr-ĭ*) **River, N. J.** From a town of England. Anglo-Saxon *scrobbes*, "of a bush," *buhr*, "a fortress," literally, "a fortress near which were many shrubs."

Siam (*sī-ăm'*, *sē-ăm'*). The European corruption of the Malay *Siyam*, which is identical with the name Shian or Shan given by the Burmese to their eastern neighbors.

Siberia (*sī-bē'-rĭ-ȧ*). In Russian, Sibir, is so called from Sibir or Ssibir, a town on the Irtish near Tobolsk, which no longer exists. Sibir was the capital of a Tartar khanate of the same name, which was conquered in the Sixteenth Century by Yermak, the Hetman of the Don Cossacks.

Sibyl (*sĭb'-ĭl*). From the Latin, meaning "wise old woman." *Dutch*, Sibylla; *Fr.*, Sibylle; *Gr.*, Sibulla; *Lat.*, Sibylla.

Sicily (*sĭs'-ĭ-lĭ*). The English form of *Sicilia*, so called from the Siculi, who possessed a great part of the island when the Greek colonists arrived.

Sierra (*sē-ĕr'-rȧ*). This is a Spanish word signifying "a saw." Its application to ranges of mountains, whose peaks rising in succession, as do those of the Sierra Nevada, resemble the teeth of a saw, is peculiarly picturesque and poetical.

Sierra Nevada (*sē-ĕr'-rȧ nē-vä'-dȧ*. Spanish, *sē-ĕr'-rȧ nā-vä'-thȧ*) **Mountains.** Spanish words *Serrado*, "serrated or saw-toothed," *Nevada*, "snowy," i. e., "snowy mountains," the application taken from the Sierra Nevada Mountains of Grenada.

Sigismund (*sĭj'-ĭs-mŭnd*). A masculine name, from *sieg-mund*, "man of victory, triumphant man." *Dutch*, Sigismundus; *Fr.*, Sigismond; *Ger.*, Sigismund or Sigmund; *Lat.*, Sigismundus; *Sp.*, Sigismundo; *Sw.*, Sigismund.

Silas (*sī'-las*). A name corrupted from Silvanus.

Silesia (*sĭl-ē'-shĭ-ȧ*). From *Zlezia*, "the bad land."

Silvanus (*sĭl-vā'-nŭs*). From the Roman name Silvanus or Sylvanus; also the appellation of a god of forests and fields; from *silva*, *sylva*, "a forest, wood." *Dutch*, Silvanus; *Fr.*, Sylvain or Silvain; *It.*, Silvano; *Lat.*, Silvanus; *Sp.*, Silvano.

Silvester, Sylvester (*sĭl-vĕs'-tĕr*). A masculine name derived from the Latin *silvester*, "wild, found in a wood"; from *silva*, "a wood." *Fr.*, Silvestre; *It.*, Silvestro; *Lat.*, Silvester; *Sp.*, Silvestre.

Silvia. See Sylvia.

Simeon (*sĭm'-ē-ŏn*). From the Hebrew *shama*, meaning "obedient," or "hearing with acceptance." *Fr.*, Siméon; *Ger.*, Simeon; *It.*, Simeone; *Lat.*, Simeon; *Port.*, Simeão; *Sp.*, Simeon.

Simon (*sī'-mŏn*). Originally the same as Simeon. *Dutch*, Simon; *Fr.*, Simon; *Ger.*, Simon; *Hungarian*, Simon; *It.*, Simone; *Lat.*, Simon; *Sp.*, Simon; *Sw.*, Simon.

Sinai (*sī'-nā*, *sī'-nā-ī*, *sī'-nī*). Is usually supposed to have been named from the Hebrew *seneh*, the "acacia tree," but is more probably the mountain of Sin, the moon-god of the Babylonians.

Singapore (*sĭng-gȧ-pōr'*). The name of an island and city in the Straits Settlements, means the "lion city." The form Singapore was adopted by Sir Stamford Raffles for the city which he founded in 1819 on an island which since the Middle Ages had been called *Sinhapura*, from a town of that name built in the Fourteenth Century by Malay or Javanese settlers.

Sing Sing, N. Y. Mohegan Indian word *Sin-Sing* or *Sink-Sink*, said to signify "stone upon stone."

Sioux (*sōō*). Many places in the United States bear the name of this tribe of Indians, among them the counties in Iowa and Nebraska. The word means a "species of snake," the appellation of the tribe being "enemies."

Sirloin of Beef. There is a laughable tradition current in Lancashire, England, that King James I., in one of his visits there, knighted at a banquet a loin of beef, which part ever since has been called the Sir-loin.

Sistine (*sĭs'-tĭn*), or **Sixtine** (*sĭks'-tĭn*) **Chapel.** The papal private chapel in the Vatican constructed by Pope Sixtus IV. Whence the name.

Sitka, Alaska. From a tribe of Indians, the *Sitkayans*.

Skager Rack (*skăg-ĕr-răk'*, *skăg'-ĕr-räk*). The channel between Norway and Jutland, means "cape strait." The word *rack* denotes a crooked channel, and the Skager Rack is so called from the town of Skagen, situated on Cape Skagen (*skagi*, a "promontory"), the Skaw of English sailors which forms the northern point of Jutland.

Skaneateles (*skăn-ē-ăt'-lēz*). Lake, town, and village in Onondaga County, New York. An Indian word meaning "long lake."

Skowhegan (*skou-hē'-gan*), **Me.** Indian word meaning "spearing."

Snake River, Idaho. Suggested from its windings and given to a tribe of Indians on its banks.

Society Islands. Received their name from Captain Cook in honor of the Royal Society.

Sofia. See Sophia.

Soissons (*swä-sôN'*). Town in France, was so named from the Suessiones, a Belgic tribe.

Solomon (*sŏl'-ō-mon*). From the Hebrew *Sh'lomoh*, signifying "peaceable." *Arabic*, Soliman or Suleyman; *Dutch*, Salomo; *Fr.*, Salomon; *Ger.*, Salomon; *Gr.*, Solomon; *Hungarian*, Salamon; *It.*, Salomone; *Lat.*, Salomon; *Polish*, Salomon; *Port.*, Salomão; *Sp.*, Salomon.

Sophia (*sō-fī'-ȧ*). A name derived from the Greek *sophos*, "knowledge, wisdom, prudence." *Danish*, Sophie; *Dutch*, Sophie; *Fr.*, Sophie; *Ger.*, Sophie; *Gr.*, Sophia; *It.*, Sofia; *Lat.*, Sophia; *Russ.*, Sofia; *Sp.*, Sofia; *Sw.*, Sofia.

Sophie. The French form of Sophia.

Sophronia (*sō-frō'-nĭ-ȧ*). A feminine of Sophronius, formed from Sophron; means "sober modest, discreet."

Sorbonne (*sŏr-bŏn'*). A famous Parisian school, named from Robert de Sorbonne, almoner of St. Louis.

Soudan (*sōō-dän'*). From the Arabic *Belad-ez-Suden*, the "district of the blacks."

South Carolina. As provinces the two divisions of Carolina were one tract originally.

South Sea Bubble. A financial scheme which originated in England about 1711 and collapsed in 1720.

Spain. The English of Hispania, founded upon the Punic *span*, "a rabbit," owing to the number of wild rabbits found in this country.

Spanish Main. The southern banks of the West India Islands, and the water extending for some distance into the Caribbean Sea, so called from the fact that the Spaniards confined their buccaneering enterprises to this locality.

Spires (*spirz*) or **Speyer** (*spīr*). An historic [illegible] in Bavaria, Germany, so named from the River *Speyer*.

Spitzbergen (*spits-bėrg′-en*). Literal Dutch for "sharp-pointed mountains," referring to the granite peaks of the mountains, which are so characteristic of this group of islands.

Spotsylvania. County in Virginia, named for Alexander Spotswood, early lieutenant-governor.

Springfield, Mass. In honor of the English residence of its founder, William Pynchon (1640). Indian name *Agawam*.

Spuyten Duyvil (*spī′-tėn dī′-vil*). Channel connecting the Hudson and Harlem rivers. So named on account of the oath sworn by a Dutch shipmaster that he would pass the mouth of the creek "in spite of the devil."

Stanislaus (*stăn′-is-lôs*). From the Slavonic *slawa*, signifying "the place of glory or fame." The Bohemian form of the name is Stanislaw.

Staten (*stăt′-n*) **Island, N. Y.** Named by Henry Hudson *Staaten Nylandt*, that is, "island of the State," in compliment to the States-General under whose flag he was sailing. The Indian name was *Monachnong*, "place of the bad woods."

State of Franklin. An old name of Tennessee, under which it was organized in 1785.

States General. The name given to the legislative assemblies of France before the Revolution of 1789, and to those of the Netherlands.

Stella. A feminine name, from the Latin, signifying "a star."

Stephen (*stē′-vėn*). From the Greek name signifying "a crown or garland." *Danish*, Stephan; *Dutch*, Steven or Stephanus; *Fr.*, Etienne; *Ger.*, Stephan; *Gr.*, Stephanos; *Hungarian*, Istvan; *Lat.*, Stephanus; *Polish*, Szczepan; *Port.*, Estevao; *Russ.*, Stepan or Stefan; *Sp.*, Esteban; *Sw.*, Stefan.

Stettin (*stĕt-ēn′*). From Zytyn, "the place of green corn."

Stirling. From *Estrevelyn*, "the town of the Easterlings, from Flanders."

Stockholm (*stŏk′-hōlm*). The capital of Sweden is often said to have been so called because built like Venice on stocks or piles. According to the local legend, a stock or log floating up the Malar Lake from Sigtuna guided the first settlers to the granite rocks on which Stockholm is built. The older form *Stakholm* explains the name as a *holm* or "island," in a *stak* or "sound."

Stockton. Cities in California and Missouri and town in Chautauqua County, New York, named for Commodore R. F. Stockton, who took part in the conquest of California.

Stonington, Conn. From an English town. *Ston*, "stone," *ing*, "field," *ton*, "town," "a town situated in a field of stone." It was first called *Southerton*.

Strait of Gibraltar. See Gibraltar.

Sublime Porte (*sŭb-līm′ pōrt*). The synonym by which is designated the government of the Sultan of Turkey. It is the French equivalent of *Bab-i-Humayun*, "the high gate." The term contains an allusion to the Oriental custom of transacting public business at the principal gate of the city or palace, and from this practice the Sultan's government is popularly styled in Turkey "the Sultan's gate."

Suez (*sōō′-ez, sōō-ez′*). Is a Portuguese corruption of *Bir Suweis*, the Arabic name of a fortified well of brackish water about an hour's journey from the town, where the pilgrims waited to embark for Mecca. From this well, by a curious accident, the Gulf and Isthmus of Suez and the Suez Canal take their names.

Sumatra (*sōō-mā′-trā*). A corruption of *Trimatara*, which means "the happy land."

Sunapee (*sŭn′-a-pē*). Lake in New Hampshire, for which a town in Sullivan County and mountain in the same State are named. From an Indian word, *shehunknippe*, "wild goose pond."

Sunday. Signifying the day upon which the sun was worshiped.

Superior. See Lake Superior.

Susa (*sōō′-sā*). A city of ancient Persia, so called from the lilies in the neighborhood; name derived from *susa*, "a lily."

Susan (*sū′-zan*), or **Susanna** (*sū-zăn′-nȧ*). The Hebrew word, derived from the Arabic *sūsan*, "a lily." *Danish*, Susanna; *Dutch*, Susanna; *Fr.*, Susanne; *Ger.*, Susanne; *It.*, Susanna; *Lat.*, Susanna; *Sp.*, Susana; *Sw.*, Susanna.

Susannah. See Susan.

Susquehanna. River, county, and borough in Pennsylvania. From an Indian word, *suckahanne*, "water."

Suwanee (*sū-wŏ′-nē*). County, town, and river in Florida, creek and town in Gwinnett County, Georgia. Interpretations of this Indian word are various: some stating that it is from Shawnee, the tribe, while others give its derivation as from *sawani*, meaning "echo," or "echo river"; others give it as a corruption of the name *San Juanita*, applied by the Spaniards to the stream, meaning "little St. John," in contradistinction to St. John on the eastern coast.

Sweden (*swē′-den*). A modern term made up of the Latin *Suedia*, signifying the land of the Suevi, a warlike tribe of the Goths, and the Anglo-Saxon *den*, testifying to its occupation by the Danes.

Switzerland (*swĭt′-zėr-land*). An anglicized form of the native *Schweitz*, the name of the three forest cantons whose people asserted their independence of Austria, afterwards applied to the whole country.

Sybil (*sĭb′-il*). An old name corrupted from Isabella.

Sydney. The capital of New South Wales, was founded on January 26, 1788, and so named by Captain Phillip after Thomas Townshend, first Lord Sydney, who, as Home Secretary, drew up, in 1786, a scheme for the transportation of convicts to New South Wales.

Sydney. A personal name corrupted from St. Denis, pronounced in French St. Nie.

Sylvanus. See Silvanus.

Sylvester. See Silvester.

Sylvia or **Silvia** (*sĭl′-vi-ȧ*). A Roman name, feminine of Sylvius. *Fr.*, Silvie; *It.*, Silvia; *Sp.*, Silvia.

Sylvius (*sĭl′-vi-ŭs*). A Roman name, from *sylva*, "a wood." Sylvius was the name of the brother of Ascanius, so called from being born in the woods.

Syracuse (*sĭr′-ȧ-kūs*). The greatest Greek colony in Sicily, is believed to have replaced an older Phenician trading post which obtained its name from a marsh at the mouth of the Anapus called *Syraco*, "to stink."

Syracuse. City in Onondaga County, New York, named for the ancient city of Sicily, after passing through the names of Bogardus Corners, Milan, South Salina, Cossitt's Corners, and Corinth. In 1820, its present name was adopted at the suggestion of John Wilkinson, its first postmaster.

Syria (*sĭr′-i-ȧ*). Now called *Suristan* by the Turks and Persians, is the classical name which replaced the older name *Aram*, "the highlands." The name Syria first appears in Herodotus, and is doubtless a modification of the name Assyria, adopted by the Greeks at the time when Aram was included in the Assyrian Empire. Assyria was

thought to be the land of the diety Assur or Asshur, but it is now believed to have taken its name from the former capital Assur, a city on the Tigris, an Accadian name meaning "the water bank."

Tabitha (*tăb'-ĭ-thȧ*). A female name, from Tabitha, the Aramæan name of a Christian female, Hebrew *zebia*, "a gazelle." Calmet, who translates the name "wild goat or kid," says the Syriac word *tabitha* signifies "clear sighted." *Lat.*, Tabitha.

Tabriz (*tȧ-brēz'*). The commercial capital of Persia, was the classical and medieval Tauris, "the mountain town."

Tacoma (*tȧ-kō'-mȧ*). City in Washington. From the Indian word Tahoma, meaning "the highest," "near heaven."

Tagus (*tā'-gŭs*) or **Tejo** (*tā'-zhōō*). Name of the longest river in the Spanish peninsula, means "the fish river."

Tahlequah (*tä-lĕ-kwä'*). Former capital of Indian Territory, is a Cherokee Indian word and properly spelled according to their pronunciation is *Talikwa*. The word as it stands probably means "place of two large towns."

Taj Mahal (*tȧj mä-häl'*) or **Taj Mehal** (*tȧj mĕ-häl'*). The famous mausoleum erected at Agra, India, by Shah Jehan for his favorite wife. It literally means "gem of buildings."

Talladega (*tăl-lȧ-dē'-gȧ*), **Ala.** A Creek Indian word, *italua-atigi*, "the border town."

Tallahassee (*tăl-lȧ-hăs'-sē*). City in Florida, so named because it is supposed to have been the site of Indian cornfields in remote times. An Indian word meaning "old town."

Tallahatchie (*tăl-lȧ-hăch'-ē*). County in Mississippi, named from the principal branch of the Yazoo River in the same State. An Indian word meaning "river of the rock."

Tallapoosa (*tăl-lȧ-pōō'-sȧ*). River in Georgia and Alabama, giving name to a county in Alabama and a city in Haraldon County, Georgia. An Indian word meaning "swift current," or, according to some authorities, "stranger," "newcomer."

Tampa (*tăm'-pȧ*). Bay and city on the west coast of Florida. From the Indian word *Itimpi*, "close to it, near it." It was called by De Soto *Espiritu Santo*, "Holy Ghost."

Tarragona (*tăr-rȧ-gō'-nȧ*). Name of an important Spanish city, is derived from the ancient Tarraco, "The citadel or palace."

Tarrytown. Village in Westchester County, New York. Modification of its former name of Terwen, "wheat town," given on account of its large crops of that cereal.

Tartary (*tär'-tȧ-rĭ*). The old name, now fallen into disuse, for Turkistan, the parts of Central Asia which are inhabited by the Nomads of Turkic race called Tartars or Tatars. The name is said to have arisen out of the designation *Tha-ta*, "robbers," applied by the Chinese to the mongols.

Tasmania (*tăz-mā'-nĭ-ȧ*). Named after Abel Tasman, who discovered it in 1642. It was called Van Diemen's Land in honor of the Governor-General of the Dutch East India Company. The change of title was effected in 1853.

Tay (*tā*). The largest river of Scotland, flows from Loch Tay, where, probably, was the *Tamia* or *Ptolemy*, a name explained by the Gaelic *tamh*, "tranquil," or "smooth," the equivalent of the Pictish *tau* and the Cymric *taw*, of which an oblique case may be the source of the name *Tava*, given by Tacitus to the Firth of Tay.

Teneriffe (*tĕn-ĕr-rĭf'*). One of the Canaries, is a Portuguese corruption of *Chinerfe* or *Tinerfe*, the name of the last Guanche chief. From its snow-clad peak, the Romans called it *Nivaria*, the "snowy."

Tennessee. Tributary of the Ohio River, which gives name to a State of the Union. Three different derivations are given the name. From *Tanase*, the name of the most important village of the Cherokee Indians; from an Indian word meaning "a curved spoon"; or from *Taensa*, an Indian tribe of the Watchesan family.

Tenochtitlan (*tĕn-ōch-tĕt-län'*). The chief city of the Aztecs, occupying the site of the modern city of Mexico.

Terence (*tĕr'-ĕns*). From the Latin name Terentius. Macrobius says the name of the Terentia Gens is derived by Varro from the Sabine word *terenus*, soft.

Teresa. See Theresa.

Terre Haute (*tĕr'-ĕ hōt.* French, *târ-hōt'*). City in Indiana, built upon a bank sixty feet above the river. French words meaning "high land."

Terry. A masculine name derived, like the French name Thierry, from Theodoric.

Texas. From a small tribe of Indians that inhabited a village called *Tehas*, meaning "friendly." Also, "the place of protection," in reference to the fact that a colony of French refugees were afforded protection here by General Lallemont in 1817.

Thadeus, Thaddeus (*thăd'-ē-ŭs, thăd-ē'-ŭs*). From the Latin *Thaddeus*, in turn from the Hebrew, "one who praises and confesses." *It.*, Taddeo; *Lat.*, Thaddeus; *Sp.*, Tadeo.

Thames. River in England and America. (American, *thāmz*. English, *tĕmz*.) The Tamesis of Cæsar, is a Celtic name meaning the "tranquil" or "smooth" river.

Thebes (*thēbz*). In Boeotia, the Greek *Thebae*, is now Pheba or Phiba. The site of the acropolis was a small hill, and we learn from Varro that *teba* meant a "hill." In the name of the Egyptian Thebes we have a Greek corruption of the popular Egyptian designation of the city, which was called *t'ape*, "the capital."

Theobald (*thē'-ō-bôld, tĭb'-ald*). From the Old German *teut-bald*, "strong or bold leader." *Danish*, Theobald; *Dutch*, Tiebout; *Fr.*, Thibaut; *Ger.*, Theobald; *It.*, Teobaldo; *Lat.*, Theobaldus; *Sp.*, Teobaldo; *Sw.*, Theobald.

Theodora (*thē-ō-dō'-rȧ*). A feminine name derived from Theodore.

Theodore (*thē'-ō-dōr*). From the Greek name Theodorus, signifying "the gift of God." *Danish*, Theodor; *Dutch*, Theodorus; *Fr.*, Théodore; *Gr.*, Theodorus; *It.*, Teodoro; *Lat.*, Theodorus; *Port.*, Theodoro; *Russ.*, Feodor; *Sp.*, Teodorio; *Sw.*, Theodor.

Theodoric (*thē-ŏd'-ō-rĭk*) or Theoderick. An Old German name from *teut-reich*, "powerful lord." *Dutch*, Diederick; *Fr.*, Theodoric; *Ger.*, Theodorich or Dietrich; *It.*, Teodorico; *Lat.*, Theodoricus *Sp.*, Teodorico.

Theodosia (*thē-ō-dō'-shĭ-ȧ*). Feminine of Theodosius. *Gr.*, Theodosie; *It.*, Teodosia; *Lat.*, Theodosia.

Theodosius (*thē-ō-dō'-shĭ-ŭs*). From the Greek, meaning "given by God." *Fr.*, Théodose; *It.*, Teodosio; *Lat.*, Theodosius; *Sp.*, Teodosio.

Theophilus (*thē-ŏf'-ĭl-ŭs*). From the Greek name signifying "a friend of God." *Danish*, Gottlieb; *Dutch*, Theophilus; *Fr.*, Théophile; *It.*, Teofilo; *Lat.*, Theophilus; *Port.*, Theophilo; *Sp.*, Teofilo.

Theresa (*the-rē'-sȧ*). Probably from the Greek Theriso, "to reap or gather in the crop." *Dutch*, Theresia; *Fr.*, Thérèse; *Ger.*, Therese; *It.*, Teresa; *Lat.*, Theresa; *Sp.*, Teresa; *Sw.*, Theresa.

Thermopylae (*thĕr-mŏp'-ĭl-ē*). It means "the defile of the warm springs."

Thian-shan (*tē-än'-shän'*). Chinese, meaning "the celestial mountains."

Thibet or **Tibet** (*tĭb'-ĕt, tĭ-bĕt'*), Supposed to be a corruption of Thupo, "high country," the country of the *Thou*, a people who founded an empire there in the Sixth Century.

Thirty, Battle of the. A fight between thirty Bretons and thirty Englishmen, pitted by Jean de Beaumanoir and Bemborough, an Englishman,

against each other, to decide a contest. The fight is said to have taken place between the castles of Josselin and Ploermel in France in 1351. The English were beaten.

Thomas (*tŏm'-as*). From an Aramaic word meaning "a twin."

Thousand Islands. The. A group of small islands, some 1,700 in number, situated in an expansion of the St. Lawrence river, about 40 miles long and from 4 to 7 miles wide, between the province of Ontario, Canada, and Jefferson and St. Lawrence counties in New York. Noted for picturesque beauty, they are favorite summer resorts.

Thursday. The day of Thor, the son of Odin (or Wodin) and the God of Thunder.

Tiber (*tī'-bēr*. Italian, *Tevere*). Was the Roman *Tiberis*. From the name of the river was derived the Roman name Tiberius.

Ticonderoga (*tī-kŏn-dĕr-ō'-gȧ*), **N. Y.** Indian *Cheonderaga*, signifying "brawling water," from the noise of the rapids in the outlet of Lake George as it falls into Lake Champlain.

Tierra del Fuego (*tē-ĕr'-rȧ dĕl fwā'-gō*). Spanish for "land of fire."

Tigris (*tī'-grĭs*). A name rightly explained by Strabo, who says that it was so called from its "swiftness," for among the Medes *tigris* means "an arrow."

Timothy (*tĭm'-ō-thĭ*). From the Greek name signifying "honoring or worshiping God."

Tippecanoe (*tĭp-pē-kȧ-nōō'*) **River, Ind.** From the Indian name given to a fish living in this stream, "the long-lipped pike," or "buffalo fish."

Titicaca (*tĭt-ē-kā'-kȧ*). An island and a lake near the peninsula of Copacabana, South America. It was a sacred place of the Incas, and "the birthplace of the Sun," according to one of their legends.

Titus (*tī'-tŭs*). From the Greek name signifying "honored."

Tobago (*tō-bā'-gō*) **Island.** So called by Columbus from its fancied resemblance to the *Tobaco*, or inhaling tube of the aborigines, whence the word *tobacco* has been derived.

Tobias (*tō-bī'-as*) or **Toby** (*tō'-bĭ*). From the Hebrew *tobh-mah*, which has been variously rendered "God's goodness" and "distinguished of the Lord."

Tokio or **Tokyo** (*tō'-kē-ō*). The capital of Japan, is the "Eastern Capital," in contra-distinction to *Saikio*, the "Western Capital." Formerly called Yeddo.

Toledo (*tō-lē'-dō*; Spanish, *tō-lā'-thō*). The capital of Gothic Spain, was the Roman *Toletum*, a name of unknown etymology, by some supposed to be of Phenician origin, meaning the city of "generations."

Tombigbee River, Fla. From the Choctaw Indian word *itumbibikpi*; the literal translation would be "an undertaker," it being a name given to the old men of the tribe who were employed in preparing their dead for the "bonehouses."

Tom, Mount, Mass. In honor of a neighboring resident, Rowland Thomas, probably familiarly known as "Tom."

Topeka (*tō-pē'-kȧ*), **Kansas.** An Indian word, *Topeakae*, "a good place to dig potatoes."

Toronto(*tō-rŏn'-tō*), **Canada.** Now the capital of the Canadian province of Ontario. The name at first denoted the country of the Huron tribe to which the Bay of Toronto gives access. Here a French trading post was built on the site of the present city, and called *Fort Toronto*. In 1793, the name was changed to *York* in honor of the Duke of York, but in 1834 the old name Toronto was revived.

Toronto. Many towns and cities in the United States bear this Indian name, meaning "oak tree rising from the lake," which has been transferred to them from the city in Canada, which see.

Torres (*tŏr'-rĕz*) **Strait.** Owes its designation to its position near the equator, the word *torres*, from the Latin toridus, signifying "parched."

Tortugas (*tôr-tōō'-gāz*) **Islands, Fla.** Spanish word meaning "tortoise," the name given by the Spaniards because of the number of tortoise found there.

Toul (*tōōl*). Anciently the Roman *Tullum Leucorum*. A fortified town in the department of Meurthe-et-Moselle. Its bishopric dating from the fifth century was suppressed by Napoleon. From the later Middle Ages until 1552 Toul was a free city of the German empire. The first sector of the Allied line in France to be taken over by American troops during the European War was located near Toul.

Toulon (*tōō'-lŏn*. French, *tōō-lôN'*). French city, is from the ancient *Telonium* or *Telo Martius*, named after its founder.

Tournai (*tōōr-nā'*), or **Tournay.** The chief town of the province of Hainault, Belgium. Anciently it was the *Civitas Nerviorum* or *Turnacum*, and later became the capital of the kingdom of the Franks. A bishopric was founded in Tournai in 484, and in the twelfth century the noted cathedral of Notre Dame was built.

Toynbee (*toin'-bē*) **Hall.** An institution in Whitechapel, London, founded in 1885, as the outcome of plans set on foot by the members of Oxford and Cambridge universities "to provide education and the means of recreation and enjoyment for the people of the poor districts of London."

Trafalgar (*trăf-ăl'-gär*) **Square.** One of the principal squares in London, about one and one-half miles west by south of St. Paul's. It contains the Nelson monument, and the site of Charing Cross and the National Gallery faces on it.

Transvaal (*trȧns-vȧl'*). That territory beyond the River Vaal.

Trebizond (*trĕb-ĭ-zŏnd'*). From the Greek *trapezus*, "the table," so called from its form.

Trenton, N. J. First called *Trent Town*, so named from Col. William Trent of Philadelphia, a speaker of the house of assembly in 1720.

Treviso (*trā-vē'-zō*). The capital of the province of Treviso, Italy. It is situated on the Sile river, 18 miles northwest of Venice. As the Roman *Tarvisium*, it was an important city towards the end of the Roman empire. Its imposing cathedral dates from the twelfth century.

Trianon, Grand (*grȧN trē-ȧ-nôN'*). A small palace at Versailles of only one story but considerable length, built by Louis XIV. for Mme. de Maintenon, and since used by successive French sovereigns as a private residence.

Trianon, Petit (*pte trē-ȧ-nôN'*). A graceful, neo-classical villa in the park at Versailles, built by Louis XV., and closely associated with the memory of Marie Antoinette, whose favorite abode it was.

Trinidad (*trĭn-ĭ-dăd'*. Spanish, *trē-nē-thäth'*). So named by Columbus from its three peaks, emblematic of the Holy Trinity.

Tristram (*trĭs'-tram*). From the Latin, meaning "sorrowful." *Lat.*, Tristramus; *Port.*, Tristao.

Troy, N. Y. Prior to present name known as *Vanderheyden's*; the name Troy adopted at a town meeting, January 5, 1789, on the suggestion of Christopher Hutton.

Tsarskoe Selo (*tsär'-skō-yē syĕ-lō'*). A town in the government of Petrograd, Russia, fifteen miles south of Petrograd. It contains a famous imperial palace, a favorite summer residence of the court.

Tucson (*tū-sŏn'* or *tŭk'-sŭn*), **Arizona.** From the Pima dialect, meaning "black spring."

Tuesday. Devoted to Tiw, the god of war.

Tulare (*tōō-lär'*. Spanish, *tōō-lä'-rā*) **Lake, Cal.** Called by the Spaniards *Lagana Grande de los Tulares*, from a dense growth of "tule," or bulrushes, found in its waters and on the shores.

Tunis (*tū'-nĭs*). Anciently known as *Tunentum*, "the land of the Tunes."

Turin (*tū'-rĭn*). *It.*, Torino. Anciently *Augusta-Taurinorum*, named from the Taurini, i. e., "dwellers among hills."

Turkestan (*tŏŏr-kĕs-tän'*). The country of the Turks. See Turkey.

Turkey. The English name of the Ottoman Empire, appears to have been derived from Turcia, the Latinized form of the Arabic name *Al-Turkiyah*, the "land of the Turks." Turkestan in Central Asia is a Persian form of the same name, denoting the land occupied by the Usbeks, the Kirghis, the Turcomans, and other Turkic races. The name Turk is probably a Tartar word meaning "brave."

Tuscaloosa (*tŭs-ka-lōō'-sa*). County and city in Alabama named for an Indian chief, the name meaning "black warrior."

Tuscany (*tŭs'-ka-nĭ. It.*, Toscana). Bears the name of its ancient inhabitants the *Tusci* or *Etrusci*. The Etruscans were called *Tyrrheni* by the Greeks.

Tuskegee (*tŭs-kē'-gē*). Town in Macon County, Alabama. Probably derived from the Indian word *taskialgi*, "warriors."

Tuxedo (*tŭks-ē'-dō*). A few places in the United States bear this Indian name, which undoubtedly is derived from *P'tauk-seet-tough*, meaning "the place of bears."

Udine (*ōō'-dē-nā*). The capital of the Italian province of Udine, situated in a fertile plain about 80 miles northeast of Venice. Udine, the ancient *Utina*, *Utinum*, or *Vedinum*, was an important city in the Middle Ages. It served as the base of the Italian campaign against Austria in the great European war which began in 1914.

Ukraine (*ū'-krān* or *ōō-krān'*). Russian *Ukraina*, "border land." A region in Russia of indefinite boundaries. The name was formerly applied to a portion of the old kingdom of Poland, embracing parts of the present Russian governments of Kiev, Podolia, Ekaterinoslav, Techernigov, Kherson, all of Poltava, and certain districts of Galicia. In general the Ukraine corresponds to what is called Little Russia, and its Slavic inhabitants are known as Ukrainians or Little Russians.

Ulysses (*yū-lĭs'-ēz*). A masculine baptismal name, the Latin form of the Greek *Odysseus*, "to cause pain."

Umatilla (*ū-ma-tĭl'-la*). River and county in Oregon, said by some to be named for a tribe of Indians. Others state that it is derived from *U-a-tal-la*, meaning "the sand blew bare in heaps," this part of the country having ridges of sand alternating with bare ground.

Umbagog (*ŭm-bā'-gŏg*). Lake lying partly in New Hampshire and partly in Maine. An Indian word, said to mean "doubled up." Other authorities favor "clear lake, shallow," or "great waters near another."

Unter den Linden (*ōōn'-tĕr dĕn lĭn'-dĕn*). A famous street in Berlin which extends from the Brandenburg Gate eastward three-fifths of a mile. Bordering it are the imperial palaces, the university, the academy, and the statue of Frederick the Great. It literally means "under the lindens."

Ural (*yū'-răl*). The chain dividing Europe from Asia, means the "girdle" or "belt," *ural-tau*, being a Turkic word meaning a "mountain chain," while *urr* means a "chain" in Ostiah. The Russians call the Ural Mountains by the translated name Poyas, the "girdle." The mountains have given their name to the River Ural, which flows from them into the Caspian.

Urban (*ûr'-ban*). From the Latin *urbanus*, signifying "civil, courteous, polite, refined"; literally, of or belonging to a city (urbs).

Uriah (*ū-rī'-a*). From the Hebrew, meaning "light of Jehovah," or "fire of the Lord."

Ursula (*ûr'-sū-la*). A feminine name derived from the Latin *ursula*, "a young or small she-bear."

Uruguay (*yū'-rōō-gwā.* Spanish, *ōō-rōō-gwī'*). Name of a river in South America, meaning "the golden water."

Utah (*yū'-tä, yū'-tô*). State in the Union, county and lake in same State, named for the Ute Indians, the word meaning "home, or location, on the mountain top."

Utica (*ū'-tĭ-ka*). City in New York, named for the ancient city in Africa; towns in Livingston County, Missouri, and Hinds County, Mississippi, and village in Macomb County, Michigan, named for the above.

Valencia (*va-lĕn'-shĭ-a. Spanish, va-lān'-thē-a*). City in Spain, was the ancient Valentia, "the powerful."

Valenciennes (*va-lĕn-sĭ-ĕnz'*. French, *va-läN-sē-ĕn'*), also **Valenza** and **Valence.** Said to have been named after the western Roman emperor, Valentinian.

Valentine (*văl'-ĕn-tīn*). A name derived from St. Valentine, from the Latin *Valentinus*, of or belonging to Valentia, one of the ancient names of Rome; also of towns in Spain, Italy, and Sardinia, and the appellation of a goddess worshiped at Oriculum in Italy; originally from *valens*, "puissant, mighty, strong."

Valeria (*va-lē'-rĭ-a*). The feminine of Valerius. *Fr.*, Valérie; *It.*, Valeria; *Lat.*, Valeria.

Valerian (*va-lē'-rĭ-an*). From the Latin *valere*, "to be strong, healthy."

Valerie. See Valeria.

Valley Forge. Village in Chester County, Pennsylvania, so named because situated at the mouth of Valley Creek, where a forge was erected by Isaac Potts before the Revolution.

Vancouver (*văn-kōō'-vĕr*). A rising city which forms the western terminus of the Canadian Pacific Railway. It bears the name of Captain George Vancouver, R. N., who, as a midshipman in Cook's last voyage, visited the coast in 1776, surveyed it in 1792, and discovered Vancouver Island.

Vashti (*văsh'-tī*). Feminine name, so called from Vashti, wife of Ahasuerus, signifying "beauty, goodness."

Vasili or **Vasilii.** See Basil.

Vatican (*văt'-ĭ-kan*). A hill of Rome, on the right bank of the Tiber, opposite the Pincian. On it stands St. Peter's and the Vatican Palace.

Venezuela (*vĕn-ĕz-wē'-la.* Spanish, *vā-nĕth-wā'-lā*). Expresses the Spanish for "Little Venice," which designation was given to this country owing to the discovery of some Indian villages built upon piles somewhat after the manner of Venice.

Venice (*vĕn'-ĭs*). *It.*, Venezia, *Ger.*, Venedig. Is the French name for the city founded by fugitives from the Roman province of Venetia. The word means "blessed."

Verdun (*vĕr-dŭn'*). A celebrated town and fortress in the department of the Meuse, France. It is situated on the right bank of the Meuse, about 40 miles west of Metz. Verdun was the Roman *Verodunum*. From the ninth century until the Reformation it was a German town, rising to the position of a free city. By the Peace of Westphalia, 1648, it was ceded to France. In the European war of 1914 it constituted the right flank of the Allied armies in the great battle of the Marne. In 1916 the French armies under Joffre and Petain successfully resisted at Verdun the most tremendous series of attacks ever made by an enemy on an adversary's line, repelling the Germans with unprecedented losses from February until August.

Vermont. When the French were in possession of the St. Lawrence valley they called the mountains of the southern section *Vertmont, vert*, "green," *mont*, "mountain," and the inhabitants of that section in their Declaration of Independence, January 16, 1777, adopted the name for the State.

Veronica (*vĕr-ō-nĭ'-ka* or *vĕr-ŏn'-ĭk-a*). From the Greek word meaning "true picture."

Versailles (*vĕr-sālz'*; French, *vĕr-sä'-yŭ*), **Palace**

of. A famous royal palace in the French city of the same name, a great part of which is now occupied by the Museum of French History, consisting chiefly of paintings; but some of the apartments are still preserved with the fittings of a royal residence.

Vesuvius (*vē-sū'-vĭ-ŭs*), **Mt.** The only active volcano on the continent of Europe, and the most noted one in the world, situated on the Bay of Naples, Italy. The Italian form is *Vesuvio*, and the French form *Vesuve*, the word originally meant "emitter of smoke."

Vicksburg. City in Mississippi, named for Neivitt Vick, its founder.

Victoria (*vĭk-tō'-rĭ-ȧ*). From the Latin, meaning "victory." *Fr.*, Victoire; *It.*, Vittoria; *Lat.*, Victoria; *Sp.*, Vitoria.

Vienna (*vĭ-ĕn'-ȧ*). *Ger.*, Wien; *Fr.*, Vienne. Capital of Austro-Hungary. Originally, Vindobona, a name probably of Keltic origin, meaning either "white castle," or "town of the Wends."

Vincennes (*vĭn-sĕnz'*. French, *văn-sĕn'*). City in Indiana, named from the fort built by Sieur de Vincennes.

Vincent (*vĭn'-sĕnt*). From the Latin name, Vincentius, from *vincere*, "to conquer." *Dutch*, Vincentius; *Fr.*, Vincent; *It.*, Vincente; *Lat.*, Vincentius; *Port.*, Vicente; *Sp.*, Vicente or Vincente.

Viola (*vī'-ō-lȧ*. Italian, *vē-ō'-lä*). A feminine name derived from the Latin *viola*, "a violet."

Violante. A feminine name derived from the name Violet.

Violet. A feminine name derived from French *violette*, from the Latin, *viola*.

Violetta. A diminutive of the name Violet, or direct from Italian Violetta.

Virgil (*vĕr'-jĭl*). Derived, like the surname Vergil, from the bard of Mantua. Angelus Politianus writes the poet's name Vergilius; Pierius, Virgilius. The name has been variously derived from Vergiliæ, the stars called the Pleiades, and from *virga*, "a garland or laurel."

Virginia (*vĕr-jĭn'-ĭ-ȧ*). A Roman name, feminine of Virginius, from root of *virgo*, "a virgin." *Dutch*, Virginie; *Fr.*, Virginie; *Ger.*, Virginia; *It.*, Virginia; *Lat.*, Virginia.

Vittoria or **Vitoria.** See Victoria.

Vivian, Vyvian (*vĭv'-ĭ-an*). A Cornish name derived from locality, from *vy-vian*, "the small water." *Fr.*, Vivien; *Lat.*, Vivianus.

Volga (*vŏl'-gȧ*). The greatest European river, bears a name which is from the Old Slavonic *wolkoi* or *wolkoia*, "great."

Wabash (*wŏ'-bȧsh*). Counties in Indiana and Illinois, river flowing through both States, and city in Indiana. From the Indian word *Ouabache*, "cloud borne by an equinoctial wind," or, according to another authority, "white water."

Wales. Derived from *Wealas*, "foreigners," or "Welsh," a name given by the Anglo-Saxon invaders to the natives of Britain. Wales is a plural form denoting the people, which afterwards acquired a territorial significance.

Walla Walla (*wŏl'-lȧ wŏl'-lȧ*), **Washington.** The Indian *walawala* means "waving, throwing up waves, ripples."

Wall of Antoninus. A rampart erected in the southern part of Scotland, in the reign of Antoninus Pius, to check the barbarians in the north of Britain. It extended from the Firth of Forth to the Firth of Clyde.

Walloons (*wŏl-lōōnz'*). A people found chiefly in southern and southeastern Belgium, also in the neighboring parts of France, and in a few places in Rheinish Prussia near Malmedy. They are descended from the ancient Belgæ, mixed with Germanic and Roman elements.

Wall Street. A street in the lower part of New York City which extends from Broadway, opposite Trinity Church, to the East River, famous as a financial and speculative center. A figurative term for the money power of the country.

Walter. From the German, *walt-her*, "powerful lord"; literally, a "wood-master." *Dutch*, Wouter; *Fr.*, Gautier; *Ger.*, Walter; *It.*, Gualterio; *Lat.*, Gualterus; *Port.*, Gualter; *Sp.*, Gualterio; *Sw.*, Walter.

Warsaw. Formerly Varsovia (Polish, Warszawa), takes its Slavonic name from a "castle," or "fortified place," built in the Ninth Century by Conrad, Duke of the surrounding palatinate of Mazovia. Here originated the mazurek, a dance of the Polish peasantry, which we call the mazurka.

Washington. The name of two places in England, one in Durham the other in Sussex (Anglo-Saxon *Hwessingatun* and *Wassingatun*) which signifies the *tun*, or "town," of the Hwessings or Wassings. From the Durham village the ancestors of George Washington, the first President of the United States (1789–1797), are believed to have derived their territorial surname. In his honor the city of Georgetown, in Maryland, selected in 1790 for the Federal capital, was renamed Washington.

Watervliet (*wŏ-tĕr-vlēt'*). City on the Hudson, in Albany County, New York. From the Dutch, meaning "flowing stream."

Wednesday. Set apart for the worship of Odin, or Woden, sometimes called the god of magic and the inventor of the arts.

Weehawken (*wē-hŏ'-kĕn*), **N. J.** From the Delaware Indian name *weachin*, "maize lands."

Wellsburg, W. Va. In honor of Alexander Wells, an early settler.

Western Reserve, The. When, by the treaty of 1783, Great Britain relinquished the territory south of the Great Lakes and east of the Mississippi River, disputes arose among the States of Virginia, New York, Massachusetts, and Connecticut as to the right of occupancy in that locality. The difficulty was finally settled by the cession of the whole to the Federal Government, but Connecticut reserved a tract of nearly 4,000,000 acres on Lake Erie. That State finally disposed of this in small lots to colonists, and so accumulated a magnificent school-fund.

Westminster Hall. A structure adjoining the British Houses of Parliament on the west, forming part of the ancient palace of Westminster.

Westminster Palace, London. The Houses of Parliament. A palace is supposed to have existed at Westminster in the reign of Canute (1017–35). Its importance, however, begins with Edward the Confessor (1042–66), and the name has been conferred upon the great legislative edifice of the British Empire.

West Virginia. See "Virginia" for the word *Virginia*; the Western division of Virginia separated from the eastern, owing to civil war issues, as provided in Amnesty Proclamation of President Lincoln, December 8, 1863, affecting section of States in rebellion. Proposed at one time to call the State Kanawha, from its principal river.

Wetterhorn (*vĕt'-tĕr-hôrn*). A mountain of the Bernese Alps, canton of Bern, Switzerland, situated near Grindelwald, fourteen miles east-southeast of Interlaken. Means, literally, "storm peak."

Wettin (*vĕt-tēn'*). A town in the province of Saxony, Prussia, situated on the Saale, thirty-two miles northwest of Leipsic. It contains the ancestral castle of the Saxon line of Wettin from which King Edward VII. of England is descended.

Wheeling. City in West Virginia, so named because the Indians placed the head of a white victim on a pole and gave the place the name of *weal-ink*, "a place of a human head." The present name of the place is a corruption of the Indian name.

Whitechapel. A quarter in the eastern part of London, named from a certain chapel from which distances out of London used to be measured.

White House, The. The official residence of the President of the United States in Washington. It is a handsome mansion in the English Renaissance. Its classical details are sober and well designed.

White Mountains, N. H. Named from the color of the tops; being covered with snow(white), this has always been the groundword of various appellations. The first English explorers (1632) called them *The Crystal Hills.*

Whitney. Loftiest peak of the Sierra Nevadas, named for Josiah D. Whitney, noted geologist.

Wilfred, Wilfrid. This name has been translated "much peace," or "resolute peace," but the name is rather from *viel-frid,* "powerful protector."

Wilhelm. See William.

Wilkesbarre (*wĭlks'-băr-ĭ*). City in Pennsylvania, named for two members of the British Parliament, John Wilkes and Colonel Barre.

Willamette (*wĭl-ă'-mĕt*). River in Oregon. Indian word said to have originally been *Wallamet,* derived from the same root as Walla Walla and Wallula, meaning "running water." Another authority gives its definiton as "the long and beautiful river."

William. A name corrupted from the Old German name *Wilhelm,* derived from *weil-helm,* "protector of rest, defender of tranquility," or *vil-helm,* "strong protector."

Willimantic (*wĭl-ĭ-măn'-tĭk*). River and city in Connecticut. Indian word, meaning a "good lookout" or "good cedar swamps."

Windsor (*wĭn'-zôr*). A contraction of the Anglo-Saxon name *Windlesofra,* the place by the "winding shore."

Winifred (*wĭn'-ĭ-frĕd*). A feminine name, which some consider a Saxon compound signifying "winning peace"; it comes rather from the Old German *win-frid,* "beloved protector."

Winnepesaukee (*wĭn-ē-pē-sô'-kē*). Lake in New Hampshire. Indian word *winnepesaukee,* meaning "good water discharge," or "the beautiful lake of the highland."

Winnipeg (*wĭn'-ĭ-pĕg*) **City.** The capital of Manitoba, is built on a spit at the junction of the Red River and the Assiniboine, whose united waters after a course of forty-five miles reach Lake Winnipeg, which bears an Algonquin name meaning "the muddy water."

Winona (*wī-nō'-nȧ*), **Minn.** A Dakota name applied to the first born, if a daughter, hence, "first born." If a boy, he is spoken of as *Chaske.*

Winooski (*wī-nōōs'-kĭ*) **River, Vt.** Composed of two Algonquin words meaning "land of onions."

Wisconsin (*wĭs-kŏn'-sĭn*). From its principal river named by Marquette as *Masconsin,* "wild rushing channel," changed to *Ouisconsin,* then to Wisconsin.

Wissahickon (*wĭs-sȧ-hĭk'-on*) **Creek, Pa.** From the Indian word, *misamekhan,* "catfish stream."

Witenagemot (*wĭt'-ē-nȧ-gē-mōt*). In Anglo-Saxon history, the great Saxon council or parliament, consisting of the king with his dependents and friends and sometimes the members of his family, the earldormen, and the bishops and other ecclesiastics.

Worcester (*wo͝os'-tĕr*), **England.** From the ancient Huic-wara-ceaster, "the camp of the *Huieci,* or Hwiccas," a Celtic tribe.

Wyoming (*wī-ō'-mĭng*). Name carried to the West by emigrants from the Wyoming Valley of Eastern Pennsylvania, the word derived from the Delaware expression, *Maughwauwame,* meaning "the large plains."

Yang-tse-Kiang (*yăng-tsē-kĭ-ăng'*) **River.** "The son of the great water."

Yankee. This word is believed to have been derived from the manner in which the Indians endeavored to pronounce the word English, which they rendered "Yenghees," whence Yankee.

Yankton (*yăngk'-tŭn*), **South Dakota.** From the Dakotah Indian word, *eyank-ton-wah,* "people of the sacred or spirit lake."

Yazoo (*yăz'-o͞o*). County and river in Mississippi, named for a tribe of Indians, the name said to mean "to blow on an instrument."

Yellowstone. River in Montana and Wyoming. Name derived from its original French name, Roche jaune, "yellow rock or stone."

Yemassee (*yĕm-ȧ-sē'*) **River, Ga.** From a tribe of Indians, Yamassi, signifying "peaceable."

Yenisei (*yĕn-ē-sā'-ē*). The great river of Siberia, also written Jenissy, Geniseia, or Gelissy, has been explained as "the water which flows down," or the river which "brings down ice."

Yokohama (*yō-kō-hä'-mȧ*). Now the chief port in Japan, was before 1854 a small fishing village. The name is believed to mean the "cross shore."

Yosemite (*yō-sĕm'-ĭt-ē*). An Anglicized form of the Indian *A-hom-e-ta,* meaning "grizzly bear"; supposed to have been the title of a chief, and applied to a tribe that inhabited the region.

Youghiogheny (*yŏ-hŏ-gā'-nĭ*) **River, Penn.** From the Indian *yukwiakhanna,* "a stream taking a roundabout course."

Ypres (*ē'-pr'*). Flemish, *Yperen*; German, *Ypern.* A town in Belgium, situated on the Yperlée river, 35 miles south of Ostend. In the battles of 1914 and 1915 when the Germans unsuccessfully attempted to wrest its possession from the Allied forces, the town was reduced by shell fire to a heap of ruins. It contained a celebrated Cloth Hall, begun in 1201, and a Gothic cathedral erected in the thirteenth century when Ypres was the largest city in West Flanders.

Ypsilanti (*ĭp-sĭl-ăn'-tĭ*). City in Michigan, named for a Greek prince.

Zaccheus (*zăk-ē'-ŭs*). From the Hebrew Zakkay, "pure, innocent." Others render it "pure of the Lord," making the last letter stand for *Yah.*

Zachariah (*zăk-ȧ-rī'-ȧ*). From the Hebrew *Zakhar-Yah,* meaning "remembering the Lord."

Zambezi (*zăm-bā'-zē* or *zăm-bē'-zĭ*). The "great river" of Eastern Africa, whose upper waters and chief affluents are called Jambaji and Luambezi, dialectic forms of the same name.

Zanesville (*zānz'-vĭl*). City in Ohio, named for Ebenezer Zane, who, with John McIntire, founded the city.

Zanzibar (*zăn-zĭ-bär'*). An East African island, populated by negroes, Arabs, and Hindus. The name is a Portuguese form of the Persian *Zangibar,* "land of the blacks."

Zealand (*zē'-land*). In Netherlands, "land surrounded by the sea."

Zebulon (*zĕb'-ū-lŏn*). From the Hebrew, meaning "dwelling." *Fr.,* Zabulon; *Lat.,* Zabulon.

Zeebrugge (*zā'-bro͞og-ge*). The new seaport of Bruges, Belgium, with which it is connected by a ship canal accommodating sea-going vessels. After its capture by the Germans in 1914 Zeebrugge was used as a base for submarine operations against Allied shipping. Dutch *zee,* "sea," and *brugge,* "bridge."

Zeno (*zē'-nō*). From the Greek *Zeus. Fr.,* Zenon; *Gr.,* Zenon; *It.,* Zenone.

Zenobia (*zē-nō'-bĭ-ȧ*). Feminine form of Zeus.

Zion (*zī'-ŏn*), or **Sion** (*sī'-ŏn*), **Mount.** A hill on which was situated the old city of Jerusalem; the "city of David." Now used symbolically of the Christian church and of heaven.

Zoe (*zō'-ē* or *zō*). From the Greek name, signifying "life."

Zurich (*zo͞o'-rĭk*). From the ancient *Thiouricum,* "the town of the Thuricii," who built it after it had been destroyed by Attila.

Zuyder Zee (*zī'-dĕr zē*. Dutch, *zoi'-dĕr-zā*). Expresses the Dutch for the "South Sea," in relation to the North Sea or German Ocean.

Zwinger (*tsvĭng'-ĕr*). A famous museum in Dresden. Its picture-gallery contains about 2,500 paintings, also collections of drawings, casts, etc.

IMPORTANT NAVIES OF THE WORLD, 1921

Type of Vessel	Great Britain	United States	Germany	Japan	France	Russia	Italy
Battleships, No.	46	33	6	11	17	7	9
" Tons	962,750	707,990	78,136	244,800	327,950	139,800	158,060
Battle Cruisers, No.	10	....	....	4	....	....	....
" " Tons	307,500	....	....	110,100	....	....	....
Cruisers, No.	21	19	....	9	9	7	4
" Tons	248,900	161,750	....	81,783	107,352	56,525	38,462
Light Cruisers, No.	87	....	6	8	....	....	6
" " Tons	393,100	....	21,300	32,790	....	....	19,538
Coast Defence, No.	31	4	....	7	....	....	1
" " Tons	108,045	12,900	....	78,166	....	....	1,650
Flotilla Leader, No.	28	....	....	....	....	....	8
" " Tons	48,342	....	....	....	....	....	10,832
Destroyers, No.	386	215	12	65	62	67	35
" Tons	400,960	244,946	15,050	51,175	36,422	45,438	22,766
Torpedo Boats, No.	30	....	12	9	50	....	90
" " Tons	8,460	....	2,400	1,248	4,917	....	13,852
Submarines, No.	185	107	....	17	55	20	74
" Tons	139,270	....	....	6,200	26,292	12,385	21,511
Aircraft Carriers, No.	6	....	....	1	....	....	....
" " Tons	90,400	....	....	7,600	....	....	....
Expenditures, Millions $ (1)	421	(2) 433	....	(3) 150	174	....	73

(1) Expenditures for year 1920-1921.
(2) Appropriations.
(3) Expenditures 1919-1920 for Japan.

Parcel Post. By the provisions of the general parcel post act which took effect January 1, 1913, the United States and its territories and possessions, excepting the Philippine Islands, are divided into units of area which are the basis of eight postal zones. The zones represent an area having a mean radial distance of 50, 150, 300, 600, 1,000, 1,400, 1,800, all beyond 1,800, miles from the center of any given unit of area which is the mailing point.

Weight	1st Zone Local Rate	1st Zone Zone Rate	2nd Zone Rate	3rd Zone Rate	4th Zone Rate	5th Zone Rate	6th Zone Rate	7th Zone Rate	8th Zone Rate
1 lb.	$.05	$.05	$.05	$0 06	$0.07	$0.08	$0.09	$0.11	$0.12
2 lbs.	.06	.06	.06	.08	.11	.14	.17	.21	.24
3 lbs.	.06	.07	.07	.10	.15	.20	.25	.31	.36
4 lbs.	.07	.08	.08	.12	.19	.26	.33	.41	.48
5 lbs.	.07	.09	.09	.14	.23	.32	.41	.51	.60
6 lbs.	.08	.10	.10	.16	.27	.38	.49	.61	.72
7 lbs.	.08	.11	.11	.18	.31	.44	.57	.71	.84
8 lbs.	.09	.12	.12	.20	.35	.50	.65	.81	.96
9 lbs.	.09	.13	.13	.22	.39	.56	.73	.91	1.08
10 lbs.	.10	.14	.14	.24	.43	.62	.81	1.01	1.20
11 lbs.	.10	.15	.15	.26	.47	.68	.89	1.11	1.32
12 lbs.	.11	.16	.16	.28	.51	.74	.97	1.21	1.44
13 lbs.	.11	.17	.17	.30	.55	.80	1.05	1.31	1.56
14 lbs.	.12	.18	.18	.32	.59	.86	1.13	1.41	1.68
15 lbs.	.12	.19	.19	.34	.63	.92	1.21	1.51	1.80
16 lbs.	.13	.20	.20	.36	.67	.98	1.29	1.61	1.92
17 lbs.	.13	.21	.21	.38	.71	1.04	1.37	1.71	2.04
18 lbs.	.14	.22	.22	.40	.75	1.10	1.45	1.81	2.16
19 lbs.	.14	.23	.23	.42	.79	1.16	1.53	1.91	2.28
20 lbs.	.15	.24	.24	.44	.83	1.22	1.61	2.01	2.40
21 lbs.	.15	.25	.25	.46	.87	1.28	1.69	2.11	2.52
22 lbs.	.16	.26	.26	.48	.91	1.34	1.77	2.21	2.64
23 lbs.	.16	.27	.27	.50	.95	1.40	1.85	2.31	2.76
24 lbs.	.17	.28	.28	.52	.99	1.46	1.93	2.41	2.88
25 lbs.	.17	.29	.29	.54	1.03	1.52	2.01	2.51	3.00
26 lbs.	.18	.30	.30	.56	1.07	1.58	2.09	2.61	3.12
27 lbs.	.18	.31	.31	.58	1.11	1.64	2.17	2.71	3.24
28 lbs.	.19	.32	.32	.60	1.15	1.70	2.25	2.81	3.36
29 lbs.	.19	.33	.33	.62	1.19	1.76	2.33	2.91	3.48
30 lbs.	.20	.34	.34	.64	1.23	1.82	2.41	3.01	3.60
31 lbs.	$.20	$.35	$.35	$ .66	$1.27	$1.88	$2.49	$3.11	$3.72
32 lbs.	.21	.36	.36	.68	1.31	1.94	2.57	3.21	3.84
33 lbs.	.21	.37	.37	.70	1.35	2.00	2.65	3.31	3.96
34 lbs.	.22	.38	.38	.72	1.39	2.06	2.73	3.41	4.08
35 lbs.	.22	.39	.39	.74	1.43	2.12	2.81	3.51	4.20
36 lbs.	.23	.40	.40	.76	1.47	2.18	2.89	3.61	4.32
37 lbs.	.23	.41	.41	.78	1.51	2.24	2.97	3.71	4.44
38 lbs.	.24	.42	.42	.80	1.55	2.30	3.05	3.81	4.56
39 lbs.	.24	.43	.43	.82	1.59	2.36	3.13	3.91	4.68
40 lbs.	.25	.44	.44	.84	1.63	2.42	3.21	4.01	4.80
41 lbs.	.25	.45	.45	.86	1.67	2.48	3.29	4.11	4.92
42 lbs.	.26	.46	.46	.88	1.71	2.54	3.37	4.21	5.04
43 lbs.	.26	.47	.47	.90	1.75	2.60	3.45	4.31	5.16
44 lbs.	.27	.48	.48	.92	1.79	2.66	3.53	4.41	5.28
45 lbs.	.27	.49	.49	.94	1.83	2.72	3.61	4.51	5.40
46 lbs.	.28	.50	.50	.96	1.87	2.78	3.69	4.61	5.52
47 lbs.	.28	.51	.51	.98	1.91	2.84	3.77	4.71	5.64
48 lbs.	.29	.52	.52	1.00	1.95	2.90	3.85	4.81	5.76
49 lbs.	.29	.53	.53	1.02	1.99	2.96	3.93	4.91	5.88
50 lbs.	.30	.54	.54	1.04	2.03	3.02	4.01	5.01	6.00
51 lbs.	.30	.55	.55	1.06					
52 lbs.	.31	.56	.56	1.08					
53 lbs.	.31	.57	.57	1.10					
54 lbs.	.32	.58	.58	1.12					
55 lbs.	.32	.59	.59	1.14					
56 lbs.	.33	.60	.60	1.16					
57 lbs.	.33	.61	.61	1.18					
58 lbs.	.34	.62	.62	1.20					
59 lbs.	.34	.63	.63	1.22					
60 lbs.	.35	.64	.64	1.24					
61 lbs.	.35	.65	.65	1.26					
62 lbs.	.36	.66	.66	1.28					
63 lbs.	.36	.67	.67	1.30					
64 lbs.	.37	.68	.68	1.32					
65 lbs.	.37	.69	.69	1.34					
66 lbs.	.38	.70	.70	1.36					
67 lbs.	.38	.71	.71	1.38					
68 lbs.	.39	.72	.72	1.40					
69 lbs.	.39	.73	.73	1.42					
70 lbs.	.40	.74	.74	1.44					

Parcels are not to exceed 84 in. in combined length and girth; the weight limit for the first three zones is 70 lbs., that for all other zones 50 lbs. Parcels weighing 4 ounces or less are mailable at the rate of 1 cent for each ounce or fraction of an ounce, regardless of distance. Parcels weighing more than 4 ounces are mailable at the pound rates shown in the preceding table, a fraction of a pound being considered a full

pound. The rate of postage on parcels of books weighing 8 ounces or less is 1 cent for each two ounces or fraction thereof, and on those weighing more than 8 ounces the pound rates apply.

Parcels weighing over 4 ounces must be mailed at a post office, branch post office, named or lettered station, or such numbered stations as may be designated by the postmaster, or delivered to a rural or other carrier duly authorized to receive such matter. No special stamps are required. A mailable parcel on which the postage is fully prepaid may be insured against loss in an amount equivalent to its actual value, but not to exceed $5, on payment of a fee of three cents, not to exceed $25, a fee of five cents, not to exceed $50, a fee of ten cents, not to exceed $100, a fee of 25 cents, in stamps, such stamps to be affixed. Parcels may be sent special delivery or C. O. D. on payment of an additional fee of ten cents in stamps affixed. On C. O. D. parcels the person receiving the package pays for the return money order.

Pawnbroker's Sign. This sign, popularly known as "three balls," was taken from that of the Italian bankers, generally called Lombards, who, as early as the thirteenth century, opened pawn-shops in England. It has often been suggested that the three gold balls, for several hundred years the trade sign of the pawnbrokers, were taken from the coat of arms of the famous Florentine house of the Medici, in which three gilded pills were employed in allusion to the family name Medici, or "physicians." However, it now seems established that these balls were simply the symbol which early Lombard money-lending merchants hung up in front of their houses.

Postal Savings System. After a trial period in 1911, the postal savings system, authorized by Congress in 1910, was gradually extended until, in 1916, it embraced over a half million depositors and more than eighty millions in deposits. Certificates are issued to depositors and their accounts are kept at the post offices.

Interest bearing deposits by individuals are limited to $2500 in all; they can, however, be applied to purchase U. S. bonds which the trustees will repurchase at their face value on request. All deposits are required by law to be redeposited in federal reserve banks.

Prizes, Nobel. Alfred Bernhard Nobel, a Swedish inventor and philanthropist, who died in 1896, bequeathed a fund of about $9,200,000 from the interest of which five prizes are annually awarded to those who have contributed most largely to the common good in the domains of physics, chemistry, physiology or medicine, literature, and the preservation of peace. The prizes of about $40,000 each, with gold medals and diplomas, are awarded on December 10 of each year, the anniversary of the death of the founder. The Swedish Academy of Science awards the prizes in physics and chemistry, the Caroline Medical Institute in Stockholm that in physiology or medicine, the Swedish Academy that in literature, and a committee of five members, chosen by the Norwegian Storthing, the peace prize. The first awards were distributed December 10, 1901. Up to 1920 six men in the United States have received Nobel prizes. They are: Theodore Roosevelt, peace, 1906; Albert A. Michelson, physics, 1907; Alexis Carrel, medicine, 1912; Elihu Root, peace, 1912; Theo. Wm. Richards, chemistry, 1914; Woodrow Wilson, peace, 1920.

Red Cross Societies. International organizations devoted primarily to the purpose of mitigating the horrors of war by alleviating the sufferings of the sick and wounded. These associations, now comprising millions of members throughout the world, are the direct result of the efforts begun by Jean Henri Dunant, a noted philanthropist of Geneva, Switzerland. Chancing to be present at the great battle of Solferino, June 24, 1859, he became an eye witness to the vast amount of unnecessary suffering resulting from the inability of the regular surgical corps to care for the thousands of wounded. In 1862 Dunant published a widely read book entitled "Memories of Solferino," vividly describing the horrors of the battlefield and proposing an organization which in time of peace should train nurses and provide supplies to supplement the regular army surgical service in time of war.

The resulting agitation culminated in an international conference at Geneva in 1863. Delegates from 16 nations agreed upon a provisional plan, and in 1864 a diplomatic congress composed of representatives of the same number of nations was assembled. On Aug. 22, 1864, these representatives signed what is known as the Geneva Convention. The convention, contrary to the generally accepted opinion, did not formally provide for the organization of Red Cross societies. It did, however, make them possible. The provisional plan of 1863 had stipulated that each nation ratifying the convention should have a national organization, civil in its character and functions, which should possess the exclusive right to authorize the sending of a surgical corps to war. The Geneva Convention of 1864 was almost immediately ratified by 14 nations and this number has since been increased to 43. Consequently, its provisions have come to be recognized as a part of international law.

The American Red Cross Society was organized in 1881 under the leadership of Clara Barton, who was its first president. Through her efforts the scope of the American society was extended to include relief of suffering in great calamities.

Immediately upon the entrance of the United States into the world war in April, 1917, the American Red Cross greatly extended its organization and activities, increasing its membership by many millions and raising by popular subscription a fund exceeding $100,000,000.

Seven Wonders of the World. In ancient times this description was assigned the Pyramids of Egypt, the Hanging Gardens of Semiramis at Babylon, the Temple of Diana at Ephesus, the Statue of Jupiter at Athens by Phidias, the Mausoleum, the Colossus at Rhodes, and the Pharos of Alexandria. This cycle of seven wonders originated among the Greeks.

Signature of the Cross. The mark which persons who are unable to write are required to make, instead of their signature, is in the form of a cross (×). Anciently, the use of this mark was not confined to illiterate persons; it was required on all signatures as an attestation of good faith.

Places	When It Is 12 O'Clock Noon According To				At	
	Eastern	Central	Mountain	Pacific	London	Paris
	Standard Time in the United States					
IT IS AT						
Aden, Arabia	8.00 P. M.	9.00 P. M.	10.0[illegible] P. M.	11.00 P. M.	3.00 P. M.	2.51 P. M.
Amsterdam, Holland	5.20 P. M.	6.20 P. M.	7.20 P. M.	8.20 P. M.	12.20 P. M.	12.10 P. M.
Athens, Greece	6.35 P. M.	7.35 P. M.	8.35 P. M.	9.35 P. M.	1.35 P. M.	1.26 P. M.
Berlin, Germany	5.54 P. M.	6.54 P. M.	7.54 P. M.	8.54 P. M.	12.54 P. M.	12.45 P. M.
Bombay, India	9.51 P. M.	10.51 P. M.	11.51 P. M.	12.51 A. M.	4.51 P. M.	4.42 P. M.
Bremen, Germany	5.33 P. M.	6.33 P. M.	7.33 P. M.	8.33 P. M.	12.33 P. M.	12.23 P. M.
Cairo, United States	11.00 A. M.	. . . . .	1.00 P. M.	2.00 P. M.	6.00 A. M.	5.51 A. M.
Constantinople, Turkey	6.56 P. M.	7.56 P. M.	8.56 P. M.	9.56 P. M.	1.56 P. M.	1.47 P. M.
Copenhagen, Denmark	5.50 P. M.	6.50 P. M.	7.50 P. M.	8.50 P. M.	12.50 P. M.	12.41 P. M.
Dublin, Ireland	4.54 P. M.	5.55 P. M.	6.55 P. M.	7.55 P. M.	11.55 A. M.	11.26 A. M.
Fortress Monroe, United States	. . . . .	1.00 P. M.	2.00 P. M.	3.00 P. M.	7.00 A. M.	6.51 A. M.
Frankfort, Germany	5.10 P. M.	6.10 P. M.	7.10 P. M.	8.10 P. M.	12.10 P. M.	12.31 P. M.
Geneva, France	5.00 P. M.	6.00 P. M.	7.00 P. M.	8.00 P. M.	12 noon	11.51 A. M.
Hong Kong, China	12.37 A. M.*	1.37 A. M.*	2.37 A. M.*	3.37 A. M.*	7.37 P. M.	7.27 P. M.
Honolulu, Hawaii	6.29 A. M.	7.29 A. M.	8.29 A. M.	9.29 A. M.	1.29 A. M.	1.19 A. M.
Liverpool, England	4.48 P. M.	5.48 P. M.	6.48 P. M.	7.48 P. M.	11.48 A. M.	11.39 A. M.
London, England	5.00 P. M.	6.00 P. M.	7.00 P. M.	8.00 P. M.	. . . .	11.51 A. M.
Madrid, Spain	4.45 P. M.	5.45 P. M.	6.45 P. M.	7.45 P. M.	11.45 A. M.	11.36 A. M.
Manila, Philippine Islands	1.04 A. M.*	2.04 A. M.*	3.04 A. M.*	4.04 A. M.*	8.04 P. M.	7.54 P. M.
Melbourne, Australia	2.40 A. M.*	3.40 A. M.*	4.40 A. M.*	5.40 A. M.*	9.40 P. M.	9.31 P. M.
Mercury Time, United States	10.00 A. M.	11.00 A. M.	. . . . .	1.00 P. M.	5.00 A. M.	4.51 A. M.
Pacific Time, United States	9.00 A. M.	10.00 A. M.	11.00 A. M.	. . . . .	4.00 A. M.	3.51 A. M.
Paris, France	5.09 P. M.	6.09 P. M.	7.09 P. M.	8.09 P. M.	12.09 P. M.	. . . . .
Rome, Italy	5.50 P. M.	6.50 P. M.	7.50 P. M.	8.50 P. M.	12.50 P. M.	12.41 P. M.
Stockholm, Sweden	6.12 P. M.	7.12 P. M.	8.12 P. M.	9.12 P. M.	1.12 P. M.	1.03 P. M.
St. Petersburg, Russia	7.01 P. M.	8.01 P. M.	9.01 P. M.	10.01 P. M.	2.01 P. M.	1.52 P. M.
Vienna, Austria	6.06 P. M.	7.06 P. M.	8.06 P. M.	9.06 P. M.	1.06 P. M.	12.57 P. M.
Yokohama, Japan	2.19 A. M.*	3.19 A. M.*	4.19 A. M.*	5.19 A.M.*	9.19 P. M.	9.09 P. M.

*The time noted is in the morning of the following day.

STATES, MOTTOES, AND POPULAR NAMES

State	Motto	Translation	Popular Name of State	Popular Name of People
Alabama	Here we rest.	. . . . .	Cotton	Lizards.
Arizona	Ditat Deus	God enriches.		
Arkansas	Mercy, justice. Regnant populi	The people rule.	Bear . . .	Toothpicks.
California	Eureka . . .	I have found it.	Golden. . . .	Gold Hunters.
Colorado	Nil sine numine. .	Nothing without Providence. . . .	Centennial. . .	Rovers.
Connecticut	Qui transtulit sustinet	He who transplanted still sustains. . . .	Land of Steady Habits. Nutmeg.	Wooden Nutmegs.
Delaware	Liberty and Independence . . .	. . . . .	Blue Hen. Diamond. .	Blue Hen's Chickens. Muskrats.
Florida . .	In God is our trust. .	. . . . .	Peninsular.	Fly-up-the-Creeks.
Georgia . . .	Obverse: Wisdom, justice, moderation. Reverse: Agriculture and commerce. . . .	. . . . .	Empire State of the South. .	Crackers.
Idaho	Salve.	Hail.		
Illinois . .	National Union, State Sovereignty. . . .	. . . . .	Prairie. Sucker.	Suckers.
Indiana . . .	None.	. . . . .	Hoosier. . . .	Hoosiers.
Iowa .	Our liberties we prize and our rights we will maintain.	. . . . .	Hawkeye. . . .	Hawkeyes.
Kansas. . . .	Ad astra per aspera. . .	To the stars through all difficulties.	Garden of the West.	Jayhawkers.
Kentucky .	United we stand, divided we fall.	. . . . .	Blue Grass. Dark and Bloody Ground. . . .	Cornerackers.
Louisiana . . .	Union, justice, and confidence.	. . . . .	Creole. Pelican.	Creoles.
Maine.	Dirigo.	I direct.	Pine Tree. Lumber.	Foxes.

STATES, MOTTOES, AND POPULAR NAMES—Continued

State	Motto	Translation	Popular Name of State	Popular Name of People
Maryland	Fatti maschii parole femine. [At one time the seal was mislaid, and the new die carried the motto, "Crescite et Multiplicamini." Grow or increase and multiply.] Coronasti nos scuto bonæ voluntatis tuæ.	Manly deeds, womanly words. [Seal originally pendant, for wax, when screw introduced the reverse was abandoned.] You have crowned us with the shield of your good will.	Old Line	Crawthumpers.
Massachusetts	Ense petit placidam sub libertate quietem.	With the sword she seeks quiet peace under liberty.	Bay and Old Bay. Old Colony.	Beaneaters.
Michigan	Si quæris peninsulam amænam circumspice.	If thou seekest a beautiful peninsula, behold it here.	Wolverine.	Wolverines.
Minnesota	L'etoile du nord.	The Star of the North.	North Star. Gopher.	Gophers.
Mississippi	None.		Bayou.	Tadpoles.
Missouri	Salus populi suprema lex esto. United we stand, divided we fall.	The welfare of the people is the supreme law.	Iron.	
Montana	Oro y plata.	Gold and silver.	Mountain.	Bug-eaters.
Nebraska	Equality before the law.		Black-water.	
Nevada	All for our country.		Silver.	Sage Hens.
New Hampshire	None.		Granite.	Granite Boys.
New Jersey	None.		Garden.	Jersey Blues. Clam-catchers.
New Mexico	Crescit eundo.	It increases by going.		
New York	Excelsior.	Higher, more elevated.	Empire.	Knickerbockers.
North Carolina	Esse quam videri.	To be rather than to seem.	Old North. Turpentine.	Tar heels. Tuckoes.
North Dakota	Liberty and union, one and inseparable now and forever.		Sioux.	
Ohio	None.		Buckeye.	Buckeyes.
Oklahoma	Labor omnia vincit.	Labor conquers all things.		
Oregon	The Union.		Beaver. Web-foot.	Web Feet.
Pennsylvania	Obverse: None. Reverse: Both can't survive.	[The State "Coat of Arms" carries the motto, "Virtue, Liberty, and Independence."]	Keystone.	Pennanites. Leather-heads.
Rhode Island	Hope.		Little Rhody.	Gun-flints.
South Carolina	Animis opibusque parati.	Prepared in mind and resources; ready to give life and property.		
South Dakota	Dum spiro, spero. Spes. Under God the people rule.	While I breathe I hope. Hope.	Palmetto.	Weasels.
Tennessee	Agriculture, Commerce.		Volunteer.	Butternuts. Whelps.
Texas	None.		Lone Star.	Beef-heads.
Utah	None.			
Vermont	Freedom and unity.		Green Mountain.	Green Mountain Boys.
Virginia	Obverse: Sic semper tyrannis. Reverse: Perseverando.	Ever so to tyrants. By perseverance.	Old Dominion.	Beadles.
Washington	Al-Ki.	Bye-bye.	Evergreen.	
West Virginia	Obverse: Montani semper liberi. Reverse: Libertas et fidelitas.	Mountaineers are always free men. Liberty and fidelity.	Panhandle.	Panhandlers.
Wisconsin	Forward.		Badger.	Badgers.
Wyoming	Cedant arma togæ.	Let arms yield to the gown.		

State Flowers.

Alabama,	Goldenrod
Arizona,	Giant Cactus
Arkansas,	Apple Blossom
California,	California Poppy
Colorado,	White and Blue Columbine
Connecticut,	Mountain Laurel
Delaware,	Peach Blossom
Florida,	Orange Blossom
Georgia,	Cherokee Rose
Idaho,	Lewis' Syringa
Illinois,	Blue Violet
Indiana,	Carnation
Iowa,	Wild Rose
Kansas,	Sunflower
Kentucky,	Trumpet Vine
Louisiana,	Magnolia
Maine,	Pine Cone and Tassel
Maryland,	Black Eyed Susan
Massachusetts,	Mayflower
Michigan,	Apple Blossom
Minnesota,	Moccasin Flower
Mississippi,	Magnolia
Montana,	Bitter Root
Nebraska,	Goldenrod
Nevada,	Sagebrush
New Hampshire,	Purple Lilac
New Jersey,	Violet
New Mexico	Cactus
New York,	Rose
North Carolina,	Daisy
North Dakota,	Prairie Rose
Ohio,	Scarlet Carnation
Oklahoma,	Mistletoe
Oregon,	Oregon Grape
Rhode Island,	Violet
South Dakota,	Pasque Flower
Texas,	Bluebonnet
Utah,	Sego Lily
Vermont,	Red Clover
Virginia,	Dogwood
Washington,	Pink Rhododendron
West Virginia,	Great Rhododendron
Wisconsin,	Violet
Wyoming,	Indian Paintbrush

Statistics of the Earth.

Continental Divisions	Area in Square Miles	Inhabitants	
		Number	Per Sq. Mile
Africa,	11,513,579	132,880,988	11.54
America, N.,	8,037,714	142,446,290	17.72
America, S.,	6,851,306	58,510,832	8.54
Asia,	17,057,666	937,865,499	54.98
Europe,	3,754,282	468,423,021	124.77
Oceania,	4,232,661	65,228,564	15.41
Total,	51,447,208	1,805,355,194	35.08

St. Patrick's Day is celebrated on March 17, the reputed date of the death at Saul, Downpatrick, in the year 493, of the apostle and patron saint of Ireland. St. Patrick is said to have been born at Kilpatrick, near Dumbarton, Scotland, in 387, of Roman parentage. Captured and sold into slavery in Ireland at the age of sixteen, he escaped after six years' servitude to Gaul where he became a monk. Later he returned as a missionary to Ireland and converted the Druids to Christianity.

Thanksgiving Day. This holiday, in the United States, is named by the president, and usually by the governors of the various States, to be kept as a thanksgiving for the mercies of the year, and to be observed on the last Thursday of November. The festival is essentially a harvest thanksgiving, and its earliest observance can be traced to the Pilgrim Fathers. The summer of 1621, following the landing at Plymouth, yielded but a scanty harvest, and unless speedy supplies came from Europe the sturdy colonists foresaw that they would be reduced to the point of starvation. Yet, amid such surroundings as these, we learn from the old chronicles that Governor Bradford, "the harvest being gotten in, sent four men out on fowling, so that we might, after a more special manner, rejoice together after we had gathered the fruit of our labor." Thus the first governor of New England instituted the American Harvest Home.

During the Revolution, Thanksgiving Day was a national institution, being annually recommended by Congress; but after the general thanksgiving for peace, in 1784, there was no national appointment until 1789, when Washington, by request of Congress, recommended a day of thanksgiving for the adoption of the Constitution. Washington issued a second proclamation of thanksgiving, in 1795, on account of the suppression of insurrection. President Madison, by request of Congress, recommended a thanksgiving for peace, in 1815. During the Civil War President Lincoln established the present custom of annual thanksgivings.

Uncle Sam. This term is used in reference to America exactly in the same way as "John Bull" is applied to England. It arose at the time of the last war between England and America. At Troy, N. Y., on the Hudson, a commissariat contractor named Elbert Anderson, of New York, had a store yard. A government inspector named Samuel Wilson, who was always called "Uncle Sam," superintended the examination of the provisions, and when they were passed, each cask or package was marked "EA-US," the initials of the contractor and of the United States. The man whose duty it was to mark the casks, who was a facetious fellow, being asked what the letters meant, replied that they stood for Elbert Anderson and *Uncle Sam*. The joke soon became known, and was heartily entered into by Uncle Sam himself. It soon got into print, and long before the war was over was known throughout the United States. Mr. Wilson, the original "Uncle Sam," died at Troy, in 1854, aged eighty-four years.

Union Jack. The national flag of England was originally the banner of St. George — white with a red cross. It was called simply the "Jack." When James I. came to the throne of both kingdoms, the banner of St. Andrew, blue with a white diagonal cross, was added. The word "Jack" is supposed to be corrupted from the French *Jaque*, a jacket, and was applied to the early flags because the cross of St. George was embroidered on the jackets of the English infantry.

Valentine Day, or, more properly, St. Valentine's Day, is celebrated on the 14th of February, usually by the sending of valentines or other gifts. St. Valentine was a bishop of Rome during the Third Century. He possessed remarkable gifts of eloquence, and was so successful in converting the pagan Romans to Christianity that he incurred the displeasure of the emperor, and was martyred by his order, February 14, A.D. 270. When the saint came to be placed in the calendar, his name was given to the day of his death.

Arithmetical Principles, Measurements, Weights, and Distances

Among the many subjects covered in common school work, there is, perhaps, none that is more perplexing to the average pupil than that of Arithmetic. Moreover, it seems that these principles, rules, and formulas, even when once mastered, are very readily forgotten unless they are put to constant use.

The material covered on the following pages is in no sense intended to be complete, nor is it in any measure to take the place of the regular text book. Want of space has also precluded the idea of detailed analysis. On the contrary, the object has been to bring together and to simplify, if possible, the essentials and fundamentals. It is believed that a careful examination of this section will not only give one an excellent grasp of the leading principles at the outset, but that the material will also be found valuable both for review and for reference purposes.

Percentage

Percentage and **per cent** are terms derived from Latin **per** and **centum,** meaning by the hundred.

Percentage is one or more hundredths of the whole.

Hundredths are decimal expressions occupying the first two places on the right of the decimal point. Since percentage and per cent signify hundredths, it is clear that they can be expressed by decimals; as, 1% = 1/100 = .01.

Base is the number on which percentage is reckoned.

Rate is the number of hundredths to be taken.

Amount is the base + the percentage.

Difference is the base − the percentage.

1. Find percentage when base and rate are given.

A man had $480 in a bank and drew out 30% of it. How much did he draw out?

$480 × .30 = $144 Sum drawn out (Percentage).

Percentage = Base × Rate.

2. Find base when rate and percentage are given.

A man rented a house for $60 a month. The yearly rent of the house was 16⅔% of its value. What was the value of the house?

$60 × 12 = $720 rent for 1 yr. (Percentage)

$720 ÷ .16⅔ = $4320 Value of house (Base).

Base = Percentage ÷ Rate.

3. Find rate when base and percentage are given.

A farmer had 550 sheep and sold 319 sheep. What per cent of his flock did he sell?

319 ÷ 550 = .58 = 58% Rate.

Rate = Percentage ÷ Base

4. Find base when amount or difference and rate are given.

This year's income is $900, which is 12½% more than last year's. What was last year's income?

100% + 12½% = 112½% = 1.125

$900 ÷ 1.125 = $800 Income (Base).

Base = Amount ÷ (100% + Rate).

A clerk receives $170 a month which is 15% less than his friend's salary. How much salary does his friend receive?

100% − 15% = 85% = .85

$170 ÷ .85 = $200 Friend's salary (Base)

Base = Difference ÷ (100% − Rate).

The terms used in Interest, Discount, Profit and Loss, Commission, Insurance, Taxes, Duties, and Stocks and Bonds may be expressed in terms equivalent to the terms of Percentage, and the same principles apply.

Interest

Interest is the sum paid for the use of money.

Principal is the sum lent.

Amount is the sum of principal and interest.

Rate is the per cent paid per annum and is established by law.

Usury is a higher rate of interest than is allowed by law.

Simple interest is interest on the principal only.

Compound interest is interest on the principal and the unpaid interest combined at stated intervals.

Exact interest is interest computed on the basis of 365 days to a common year.

Simple Interest

1. Find the interest on $600 for 3 yr. 4 mo. 10 da. at 6%. What is the amount? Find the interest and the amount at 4%.

At 6% the interest on $1
For 1 yr. is $ .06
" 1 mo. " .005
" 1 da. " .000⅙
3 yr. @ 6% = $ .18
4 mo. (⅓ yr.) @ " = .02
10 da. (⅓ mo.) @ " = .001⅔
$ .201⅔ interest on $1 for 3 yr. 4 mo. 10 da. @ 6%

$ .201⅔ × 600 = $121 Interest.

$600 + $121 = $721 Amount.

Interest = Principal × Rate × Time.

Amount = Principal + Interest.

$.201⅔ = interest on $1 for 3 yr. 4 mo. 10 da. @ 6%

1% = ⅙ of $ .201⅔ = $ .033 11/18

4% = $ .033 11/18 × 4 = $ .134 8/9 interest on $1 for 3 yr. 4 mo. 10 da. @ 4%

$ .134 8/9 × 600 = $80.66⅔ Interest.

$600 + $80.66⅔ = $680.66⅔ Amount.

Any per cent may be determined by dividing the interest at 6% by 6 (to get 1%) and multiplying by the required per cent.

Bankers' Six Per Cent Method (60 day method)

A short method of computing interest at 6% is reckoned on the basis of 360 days to a year or 12 months of 30 days each.

The interest on any principal for 60 days or 2 months at 6% is 1% of the principal.

Find the interest on $350 for 5 mo. 13 da. at 6%.

$3.50 = interest for 60 da. or 2 mo.
.350 = interest for 6 da.
5 mo. = 2½ times 2 mo.
12 da. = ⅕ of 60 da.
1 da. = ⅙ of 6 da.

$3.50 × 2½ = $8.75 interest for 5 mo.
⅕ of $3.50 = .70 " " 12 da.
⅙ of .350 = .058⅓ " " 1 da.
$9.508⅓ interest for 5 mo. 13 da.

OR,

To find the interest on any number of dollars for six days, move the decimal point three places to the left; for sixty days, move the decimal point two places to the left; for six hundred days, move the decimal point one place to the left.

What is the interest on $350 for 5 mo. 13 da.?

5 mo. 13 da. = 163 da.
$3.50 × 2 = $7.00 interest for 120 da.
$3.50 ÷ 2 = 1.75 " " 30 da.
$.350 × 2 = .70 " " 12 da.
$.350 ÷ 6 = .058⅓ " " 1 da.
$9.508⅓ interest for 5 mo. 13 da.

2. What principal (sum of money) will produce $44.80 in 2 yr. 8 mo. at 6%?

2 yr. 8 mo. = 2⅔ yr.
6% × 2⅔ = 16% = .16
$44.80 ÷ .16 = $280 Principal.

Principal = Interest ÷ (Time × Rate).

3. What sum of money in 2 yr. 6 mo. at 7% will amount to $135.7125, and what will be the interest?

2 yr. 6 mo. = 2½ yr.
$ .07 × 2½ = $ .175
$1 + $ .175 = $1.175 amount of $1 for 2 yr. 6 mo. @ 7%
$135.7125 ÷ 1.175 = $115.50 Principal.
$135.7125 − $115.50 = $20.2125 Interest.

Principal = Amount ÷ Amount of $1 for given time and rate.

4. At what rate of interest will $280 produce $44.80 in 2 yr. 8 mo.?

$44.80 ÷ 2⅔ = $16.80 interest for 1 yr.
$16.80 ÷ $280 = .06 = 6% Rate of interest.

Rate = (Interest ÷ Time) ÷ Principal.

5. In what time will $280 produce $44.80 at 6%?

$280 × .06 = $16.80 interest for 1 yr.
$44.80 ÷ $16.80 = 2⅔ = 2 yr. 8 mo. Time.

Time = Interest ÷ (Principal × Rate).

Compound Interest

Find the compound interest on $1200 for 2 yr. 6 mo. at 4%.

$1200 × .04 = $48 first year's interest.
$1200 + $48 = $1248 second principal.
$1248 × .04 = $49.92 second year's interest.
$1248 + $49.92 = $1297.92 third principal.
$1297.92 × .02 = $25.958 interest for 6 mo.
$1297.92 + $25.958 = $1323.878 amount.
$1323.878 − $1200 = $123.878 Compound Interest.

Exact Interest

Find the exact interest on $360 for 90 da. at 5%

$360 × .05 = $18 interest for 1 yr.
$18 ÷ 365 = $ .0493 interest for 1 da.
$ .0493 × 90 = $4.437 Exact Interest.

Discount

Discount is a deduction made from a gross sum on any account whatever.

Cash discount is a reduction made for the cash payment of a bill of goods sold on time.

Time discount is the reduction made from the list or catalogue price within a specified limit.

Commercial discount is a reduction allowed on the list or fixed price of an article.

Net price is the list price less the discount or the discounts.

Bank discount is the sum charged by a bank for cashing a note or a time draft.

Proceeds is the difference between the face of the note and the bank discount.

Term of discount is the time from date of discount of a note to its maturity. Notes may contain a promise of interest, which will be reckoned from the date of the note unless some other time is specified.

Face of a note is the sum for which the note is drawn.

Protest is a formal declaration in writing, made by a notary public, at the request of the holder of a note, notifying the maker and the indorsers of its non-payment.

True discount is the interest which added to a principal (called Present Worth) will equal the face of the note.

Present Worth of a debt payable at some future time without interest is that sum which, being put at legal interest, will amount to the debt at the time it becomes due.

Commercial Discount

1. Find net price of a piano listed at $400, sold at 20% and 5% off.

$400 × .20 = $80 first discount
$400 − $80 = $320 first net price
$320 × .05 = $16 second discount
$320 − $16 = $304 Net Price.

2. Find the net price of a bill of goods amounting to $320, discount 10% and 12%. Find one discount which will be equal to these two discounts.

$320 × .10 = $32 first discount
$320 − $32 = $288 first net amount
$288 × .12 = $34.56 second discount
$288 − $34.56 = $253.44 Second net amount.
$320 − $253.44 = $66.56
$66.56 ÷ $320 = .208 = 20⅘% Rate of discount.

Bank Discount

1. Given face of note, time, and rate to find bank discount and proceeds.

A note for $500 payable in 2 mo. is discounted by a bank. What is the bank discount and what are the proceeds, money being worth 5%?

$500 × .05 = $25 interest for 1 yr.
2 mo. = ⅙ yr.
⅙ of $25 = $4.16⅔ Bank Discount.
$500 − $4.16⅔ = $495.83⅓ Proceeds.

Bank discount = Face of note × Rate × Time.

Proceeds = Face of note − Bank discount.

A note for $600, bearing interest at 6%, dated Sept. 20, 1909, and payable in 6 mo., was discounted at 7%, February 12, 1910. What were the proceeds and the bank discount?

Date of maturity is March 20, 1910
Term of discount = 36 da. (number of days from Feb. 12 to Mar. 20, 1910)
6 mo. (½ yr.) @ 6% = $ .03
1 da. @ 6% = .000⅙
$ .03 × 600 = $18 interest for 6 mo.
$600 + $18 = $618 amount.
$ .000⅙ × 36 = $ .006 interest on $1 for 36 da. @ 6%
1% = ⅙ of $ .006 = $ .001
7% = $ .001 × 7 = $ .007
$ .007 × 618 = $4.326 Bank Discount.
$618 − $4.326 = $613.674 Proceeds.

When an interest-bearing note is discounted, the discount must be computed on the amount due at maturity.

2. Given proceeds, time, and rate to find face of note.

For what sum must a note be drawn for 60 da. to obtain $2975 in cash if the rate of discount is 5%?

60 da. = 2 mo. = ⅙ yr.
⅙ of $ .05 = $ .00⅚ interest on $1 for 60 da. @ 5%
$1.00 − .00⅚ = $ .99⅙ proceeds of $1
$2975 ÷ .99⅙ = $3000 Face of note.

Face of note = Proceeds ÷ Proceeds of $1.

True Discount

A man owes $260 payable in 8 mo., money being worth 6%. What is the present worth of the debt? The true discount?

$1 @ 6% for 8 mo. will amount to $1.04
$260 ÷ $1.04 = $250 Present Worth.
$260 − $250 = $10 True Discount.

Profit and Loss

Profit and Loss in commerce signify the sum gained or lost in ordinary business transactions. They are reckoned at a certain per cent on the purchase price, or sum paid for articles under consideration.

Cost is the sum paid.

Selling Price is the sum received.

Profit or **Loss** is the difference between cost and selling price.

1. Find gain in dollars when cost and gain or loss per cent are given.

A man bought a lot for $2560 and sold it at a gain of 20%. How much did he gain? What was the selling price?

$2560 × .20 = $512 Gain.
$2560 + $512 = $3072 Selling Price.

Gain or Loss = Cost × Rate.

Selling Price = Cost + Gain or Cost − Loss.

2. Find per cent of profit or loss when cost and selling price are given.

A farm was bought for $5600 and sold for $6300. What per cent was gained?

$6300 − $5600 = $700 gain.
$700 ÷ $5600 = .12½ = 12½ Per cent gained.

Rate per cent = Gain or Loss ÷ Cost.

3. Find cost of an article when gain in dollars and gain per cent are given.

A man sold a watch at a profit of $24 and gained 16⅔%. Find cost of the watch?

$24 ÷ .16⅔ = $144 Cost.

Cost = Gain or Loss ÷ Rate.

4. Find cost of an article when selling price and per cent of gain or loss are given.

A bicycle dealer sold a wheel for $60 and gained 20% on the cost. Find the cost of the wheel.

100% + 20% = 120% = 1.20 (selling price of $1 is $1.20)
$60 ÷ 1.20 = $50 Cost.

Cost = Selling price ÷ (100% + Rate of gain).

A bicycle dealer sold a wheel for $60 and lost 20% on the cost. Find the cost of the wheel.

100% − 20% = 80% = .80 (selling price of $1 is $ .80)
$60 ÷ .80 = $75 Cost.

Cost = Selling price ÷ (100% − Rate of loss).

Commission

Commission is the percentage allowed an agent for his services.

Consignment is the merchandise forwarded to the agent.

Consignor is the person who sends the merchandise.

Consignee is the person to whom the merchandise is sent.

Gross Proceeds is the whole amount for which the merchandise is sold.

Net Proceeds is the sum remaining after all charges have been deducted.

1. A lawyer collected a debt of $720 and charged 16⅔% for his services. What was the lawyer's fee?

$720 × .16⅔ = $120 Commission.

2. A grain dealer bought 24,000 bushels of wheat at 60¢ a bushel. He charged 5% commission. How much money must be sent to cover cost of grain and commission?

$ .60 × 24,000 = $14,400 cost of wheat
$14,400 × .05 = $720 commission
$14,400 + $720 = $15,120 Sum sent.

3. A broker sold cotton at a commission of 2½%, and received $750 commission. What amount of cotton did he sell?

$750 ÷ .025 = $30,000 Cotton sold.

4. An agent charged 12½% for selling a consignment of bicycles. His commission was $250. What are the net proceeds due the consignor?

$250 ÷ .125 = $2000 selling price
$2000 − $250 = $1750 Net Proceeds.

5. A man bought 200 acres of land at $25 an acre. His commission was $100. What rate of commission did he charge?

$25 × 200 = $5000 cost of land
$100 ÷ $5000 = .02 = 2% Rate of commission.

6. A real estate agent demanded $38,291.40 for an investment in land, including 5% commission. What was his commission? How many acres did he purchase at $18 per acre?

100% + 5% = 105% = 1.05 (every dollar invested cost $1.05)
$38,291.40 ÷ 1.05 = $36,468 investment
$38,291.40 − $36,468 = $1823.40 Commission.
$36,468 ÷ $18 = 2026 (Acres).

Insurance

Insurance is a guaranteed security against loss or damage. There are two kinds of insurance, property and life.

Property insurance includes fire, marine, plate glass, tornado, boiler, and burglar insurance.

Life insurance includes four general kinds of policies: Straight Life, Limited Life, Endowment, and Term policies.

(There are also accident and health policies.)

Policy is the written contract between the party insured and the insurance company, or underwriters.

Face of the policy is the amount of insurance.

Premium is the sum paid for insurance.

Rate is the cost of $1 of insurance for the term of the policy.

Property Insurance

1. Given face of policy and rate to find premium.

A merchant insured his house for $1500 at ½% annual premium. Find the premium.

$1500 × .005 = $7.50 Premium.

Premium = Face of policy × Rate.

2. Given face of policy and premium to find rate.

A store is insured for $9000 and the annual premium is $300. Find the rate.

$300 ÷ $9000 = .03⅓ = 3⅓% Rate.

Rate = Premium ÷ Face of Policy.

3. Given premium and rate to find face of policy.

A man paid $9 for insuring an automobile at ¾%. Find face of policy or amount insured.

$9 ÷ .0075 = $1200 Face of policy.

Face of policy = Premium ÷ Rate.

4. Given value of property and rate to find face of policy.

For what sum must a store and contents valued at $29,400 be insured to cover entire loss by fire and premium at 2%.

$1.00 − .02 = $ .98 value of $1
$29,400 ÷ .98 = $30,000 Face of policy.

Face of policy = Value of property ÷ (100% − Rate).

Taxes

Tax is a sum of money levied on property for public purposes and is usually a certain per cent of the assessed valuation.

Poll Tax is a tax levied on male citizens.

Assessed Value is the value placed upon property by the assessor.

Rate of taxation is a certain per cent on each dollar or one hundred dollars of the assessed valuation of the property.

There are two kinds of property—real estate and personal property.

Real Estate is immovable property; as, houses, lands, etc.

Personal Property is movable property; as, money, notes, household goods, cattle, etc.

1. Given assessed valuation and rate to find tax.

The assessed valuation of a certain county is $4,246,600 and the rate of taxation for public schools is .0045. What is the school tax?

$4,246,600 × .0045 = $19,109.70 School Tax.

Tax = Assessed valuation × Rate.

2. Given tax and rate to find assessed valuation.

A man pays a tax of $125 on his property at the rate of 1¼%. What is the assessed valuation of his property?

$125 ÷ .0125 = $10,000 Assessed Valuation.

Assessed valuation = Tax ÷ Rate.

3. Given assessed valuation and tax to be raised to find rate.

The assessed valuation of property in a certain village is $2,340,000 and the tax to be raised is $11,700. What is the rate of taxation? Find A's tax whose property is valued at $3750 and who pays for 4 polls at 50¢ each.

$11,700 ÷ $2,340,000 = .005 = ½% Rate.

Rate = Tax ÷ Assessed valuation.

$3750 × .005 = $18.75 tax on property.
$ .50 × 4 = $2.00 poll tax
$18.75 + $2.00 = $20.75 A's Tax.

Duties or Customs

Duties, or Customs, are taxes levied on imported goods, to support the government and protect home industry.

Duties are of two kinds — Ad Valorem and Specific.

Ad Valorem duties are taxes computed on the net cost of the goods in the country from which they were imported.

Specific duties are taxes computed on goods without regard to their cost.

Invoice is a bill showing quantity and price of the goods.

Before computing the duties on certain classes of merchandise, allowances are made for tare, or the weight of the box, bag, etc., for leakage, breakage, etc.

1. A dealer imported 1200 bushels of grain at 85¢ a bushel. What was the duty at 30%?

$ .85 × 1200 = $1020 cost
$1020 × .30 = $306 Ad Valorem duty.

2. A merchant imported 3000 lb. of cheese. Allowing 5% tare, what was the duty at 5¢ a pound?

3000 × .05 = 150 pounds tare
3000 − 150 = 2850 pounds left for duty
$ .05 × 2850 = $142.50 Specific duty.

3. The specific duty on barley is 30¢ per bushel. If a grain dealer paid $2040 duty, how many bushels did he import?

$2040 ÷ $ .30 = 6800 (bushels)

4. The duty on an invoice of $3500 worth of merchandise amounted to $630. What was the rate of duty?

$630 ÷ $3500 = .18 = 18% Rate of duty.

Stocks and Bonds

Capital, or Stock, is the money contributed and employed to carry on the business of an individual corporation, company, or firm.

Share is one of the equal parts into which capital stock is divided. A share is valued at $100 unless otherwise specified.

Par Value of stock is the face value.

Market Value of stock is the sum for which it will sell.

Stock is at a **premium** when it sells for more than the par value; stock is at a **discount** when it sells for less than the par value.

Dividend is a sum paid to stockholders from the profits of the business.

Brokerage is the fee or compensation of a broker.

When a broker buys stock for a customer, the brokerage must be *added* to the quoted price; when a broker sells for a customer, the brokerage must be *subtracted* from the quoted price.

1. To find cost of shares at a given quotation.

Find the cost of 500 shares of railroad stock at 127¾, brokerage ¼%, par value of stock $50 a share.

$50 × 500 = $25,000 par value of stock
127¾% + ¼% = 128% ($1's worth of stock will cost $1.28)
$1.28 × 25,000 = $32,000 Cost of 500 shares.

2. To find how much stock can be purchased for a given sum.

How many shares of N. Y. C. stock at 61¼ can be bought for $6874, brokerage ⅛%?

61¼% + ⅛% = 61⅜% = .61375 ($1 invested costs $ .61375)
$6874 ÷ .61375 = $11,200 stock
$11,200 ÷ $100 = 112 (Shares).

3. To find what income any investment will produce.

What will be the annual income from investing $3427.50 in 5% stock, purchased at 57, allowing ⅛% brokerage?

57% + ⅛% = 57⅛% = .57125 ($1 invested costs $ .57125)
$3427.50 ÷ .57125 = $6000 stock purchased
$6000 × .05 = $300 Income.

4. To find what sum must be invested to obtain a given income.

How much must I invest in canal stock at 142, brokerage ⅛%, to secure an income of $1600 if the stock pays a dividend of 8%?

$1600 ÷ .08 = $20,000 stock required
142% + ⅛% = 142⅛% = 1.42⅛ ($1.42⅛ is market price of $1)
$20,000 × 1.42⅛ = $28,425 Sum to be invested.

5. To find what per cent the income is of the investment, when stock is purchased at a given price.

What per cent income on my investment will I receive if I buy 6% stock at 25% premium? If I buy 6% stock at 25% discount?

100% + 25% = 125% = 1.25 ($1 of stock will cost $1.25)
.06 ÷ 1.25 = .048 = 4⅘% Rate.
100% − 25% = 75% = .75 ($1 of stock will cost $ .75)
.06 ÷ .75 = .08 = 8% Rate.

6. To find the price at which stock must be purchased to obtain a given rate upon the investment.

What must I pay for 5% stock that my investment may yield 6%?

.05 ÷ .06 = .83⅓ ($1 of stock will cost $ .83⅓)
$ .83⅓ × 100 = $83⅓ Purchase price of one share.

7. To find the amount of dividend.

A stock company declares a dividend of 5%. What does A receive who owns 57 shares?

$100 × 57 = $5700 stock
$5700 × .05 = $285 Dividend.

8. To find the rate of dividend or installment to be paid.

The capital of a company is $500,000. The receipts for one year are $67,000 and the expenses are $103,000. If stockholders are assessed, what will be the rate of assessment?

$103,000 − $ 67,000 = $36,000
$ 36,000 ÷ $500,000 = .072 = 7⅕% Rate.

Measurements

Linear Measure

Linear Measure, or **Long Measure,** is used to measure length; as, buying goods by the yard, measuring distances, etc.

Table

12 inches (in.) = 1 foot (ft.)
3 feet = 1 yard (yd.)
5½ yd. or 16½ ft. = 1 rod (rd.)
320 rd. or 5280 ft. = 1 mile (mi.)

How many times will a wheel 9 ft. in circumference revolve in going a distance of 3 mi. 4 rd. 2 ft.?

320 rd. × 3 = 960 rd.
960 + 4 = 964 rd.
16½ ft. × 964 = 15,906 ft.
15,906 + 2 = 15,908 ft.
15,908 ft. ÷ 9 = 1767⅞ number of times wheel will revolve.

Square Measure

Square Measure is used to measure surface, or that which has length and breadth; as floors, walls, land, etc.

Table

144 square inches (sq. in.) = 1 square foot (sq. ft.)
9 square feet = 1 square yard (sq.yd.)
30¼ square yards = 1 square rod (sq. rd.)
160 square rods = 1 acre (A.)
640 acres = 1 square mile (sq.mi.)

A surface 1 ft. long and 1 ft. wide contains 1 sq. ft. or 144 sq. in.

Surface = Length × Breadth.

How many sq. in. are there in the surface of a table 26 in. long and 18 in. wide?

26 × 18 = 468 sq. in.

Plastering

What will be the cost of plastering a dining room 16 ft. long, 14¾ ft. wide, 10 ft. high above base board, at 45¢ a sq. yd.? The room has two windows, each 7 ft. by 3 ft., and two doors, each 8 ft. by 4½ ft.

16 + 16 + 14¾ + 14¾ = 61½ ft. (perimeter of room)
61½ ft. × 10 = 615 sq. ft. (all sides before deductions)
16 × 14¾ = 236 sq. ft. (ceiling)
7 × 3 × 2 = 42 sq. ft. (windows)
8 × 4½ × 2 = 72 sq. ft. (doors)
72 + 42 = 114 sq. ft. (deductions)
615 + 236 = 851 sq. ft.
851 − 114 = 737 sq. ft.
737 sq. ft. ÷ 9 = 81⅞ sq. yd. (surface to be plastered)
$ .45 × 81⅞ = $36.85 Cost.

Papering

Wall paper is sold in single rolls 8 yd. long, or in double rolls 16 yd. long. Each roll is ½ yd. or 18 in. wide.

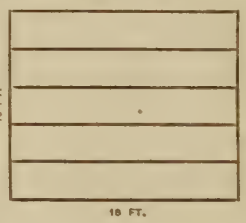
A single roll 8 yd. long and ½ yd. wide contains 4 sq. yd., and a double roll contains 8 sq. yd.

Find the cost of papering the above dining room, walls and ceiling, at 50¢ a single roll.

The surface to be papered is the same as the surface to be plastered = 81⅞ sq. yd.
81⅞ sq. yd. ÷ 4 = 20 7/8, or 21 rolls (Dealers do not sell part of a roll)
$ .50 × 21 = $10.50 Cost.

Carpeting

1. How many strips of carpeting 1 yd. wide will be required for a room 18 ft. long by 15 ft. wide if the strips are laid lengthwise? How many yards in each strip? How many yards will be required for the room? What will be the cost at $1.25 a yard?

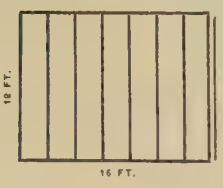


15 ft. ÷ 3 = 5 Strips
18 ft. ÷ 3 = 6 Yd. (length of each strip)
6 yd. × 5 = 30 Yd. (carpet required)
$1.25 × 30 = $37.50 Cost.

2. At $2.35 a yard, how much will it cost to carpet a room 16 ft. by 12 ft. with Brussels carpet (27 in. wide) if the strips run lengthwise, 9 in. being allowed on each strip except the first for matching the figures?

12 ft. = 4 yd.
4 yd. ÷ ¾ = 5⅓, or 6 strips
16 ft. ÷ 3 = 5⅓ yd. (length of each strip)
5⅓ yd. × 6 = 32 yd.
9 in. × 5 = 45 in. = 1¼ yd. (allowance for matching)
32 yd. + 1¼ yd. = 33¼ yd. (carpet required)
$2.35 × 33¼ = $78.13¾ Cost.

3. Find the cost of carpeting the room if the strips run crosswise.

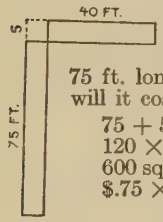


16 ft. ÷ 3 = 5⅓ yd.
5⅓ yd. ÷ ¾ = 7⅛, or 8 strips
12 ft. ÷ 3 = 4 yd. (length of each strip)
4 yd. × 8 = 32 yd.
9 in. × 7 = 63 in. = 1¾ yd. (allowance for matching)
32 yd. + 1¾ yd. = 33¾ yd. (carpet required)
$2.35 × 33¾ = $79.31¼ Cost.

Width of room ÷ width of carpet = number of strips when strips run lengthwise.

Length of room ÷ width of carpet = number of strips when strips run crosswise.

Paving



A man wishes to put a 5-foot concrete sidewalk on two sides of his corner lot. The lot is 75 ft. long and 40 ft. wide. How much will it cost at 75¢ per square yard?

75 + 5 + 40 = 120 ft. (length of walk)
120 × 5 = 600 sq. ft.
600 sq. ft. ÷ 9 = 66⅔ sq. yd.
$.75 × 66⅔ = $50 Cost.

Shingling

At $1 per bundle of 250 shingles, what will be the cost of the shingles for a double roof, each half measuring 50 ft. by 25 ft., assuming that a shingle covers 5 in. by 4 in., and adding ½ of the number for waste?

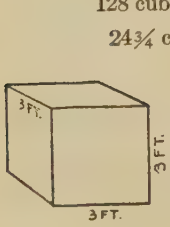
50 × 25 × 2 = 2500 sq. ft.
144 × 2500 = 360,000 sq. in.
5 × 4 = 20 sq. in.
360,000 ÷ 20 = 18,000 shingles
½ of 18,000 = 1500 shingles
18,000 + 1500 = 19,500 shingles
19,500 ÷ 250 = 78 bundles
$1 × 78 = $78 Cost.

Cubic Measure

Cubic Measure, or Solid Measure, is used to measure the volume or solid contents of regular bodies. The solid contents of irregular bodies is determined by weight.

Table

1728 cubic inches (cu. in.) = 1 cubic foot (cu. ft.)
27 cubic feet = 1 cubic yard (cu. yd.)
16 cubic feet = 1 cord foot (cd. ft.)
8 cord feet or 128 cubic feet = 1 cord of wood (Cd.)
24¾ cubic feet = 1 perch of stone or masonry (Pch.)



A cube 3 ft. long, 3 ft. wide, and 3 ft. thick contains 27 cu. ft.

Cubic contents = Length × breadth × thickness.

Digging cellar

Find the cost of digging the cellar of a house whose length is 41 ft. 3 in., width 33 ft., depth 8 ft., the cost of excavating being 50¢ a load.

41¼ × 33 × 8 = 10,890 cu. ft.
10,890 cu. ft. ÷ 27 = 403⅓ cu. yd. (1 cu. yd. of earth is called 1 load)
$ .50 × 403⅓ = $201.66⅔ Cost of digging cellar.

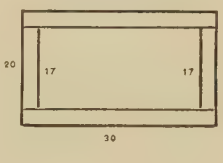
Masonry

In estimating *material* allowance is made for doors, windows, and corners.

In estimating the *work* masons measure each wall on the *outside*, and ordinarily no allowance is made for doors, windows, and corners; but sometimes an allowance of *one half* is made, this being, however, a matter of *contract*.

Material

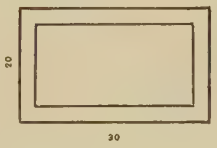
1. How many cubic feet of masonry in the walls of a cellar 30 ft. long, 20 ft. wide, outside measurement, the walls to be 9 ft. high and 18 in. thick, deducting 250 cu. ft. for openings?



30 + 30 + 17 + 17 = 94 ft. (perimeter, allowing for corners)
94 × 9 × 1½ = 1269 cu. ft. before deductions
1269 − 250 = 1019 cu. ft. of masonry.

Labor

2. Find the cost at $4 a perch of building the walls of the above cellar.



30 + 30 + 20 + 20 = 100 ft. (perimeter)
100 × 9 × 1½ = 1350 cu. ft. before deductions
1350 − 250 = 1100 cu. ft. in all walls
1100 cu. ft. ÷ 24¾ = 44⅘ perches
$4 × 44⅘ = $177.77⅞ Cost.

Bricks Required for a Building

8″ × 4″ × 2″ = 64 cu. in. in average brick.
1728 cu. in. = 1 cu. ft.
1728 cu. in. ÷ 64 = 27 bricks in 1 cu. ft.

In laying bricks ⅛ is allowed for mortar, or 4½ out of every 27, leaving 22½ actual bricks for each cubic foot.

How many bricks will be required for the walls of a flat-roofed building 90 ft. long, 50 ft. wide and 22 ft. high, if the walls are 1½ ft. thick, allowing 600 cu. ft. for doors and windows?

90 + 90 + 47 + 47 = 274 ft. (perimeter, allowing for corners)
274 × 22 × 1½ = 9042 cu. ft. before deductions
9042 − 600 = 8442 cu. ft. in all walls
22½ × 8442 = 189,945 Bricks required.

Capacity of Bins

How many bushels of grain will a bin hold that is 6 ft. long, 3½ ft. wide and 7 ft. high?

Stricken Measure

2150.42 cu. in. = 1 bushel (stricken measure)
6 × 3½ × 7 = 147 cu. ft.
1728 cu. in. × 147 = 254,016 cu. in. in bin
254,016 cu. in. ÷ 2150.42 = 118.123 + Bushels of grain.

Heap Measure

How many bushels of apples will the above bin hold?

2747.7167 cu. in. = 1 bushel (heap measure)
254,016 cu. in. ÷ 2747.7167 = 92.446 + Bushels of apples.

A vat that will hold 5000 gallons of water will hold how many bushels of corn in the ear?

231 cu. in. = 1 gal. (liquid measure)
231 cu. in. × 5000 = 1,155,000 cu. in.
1,155,000 cu. in. ÷ 2747.7167 = 420.549 + Bushels of corn in ear.

The standard 'bushel' contains 2150.42 cu. in. In measuring grain, seeds or similar items the measure must be even full or struck; in measuring large quantities of coarse vegetables, such as the ear corn, the measure must be heaped. Many articles are sold by weight, hence stricken and heap measure are little used except to ascertain capacities.

Tons of Coal in a Bin

1. How many tons of anthracite coal will a bin hold that is 14 ft. long, 12 ft. wide, 6 ft. high?

1 cu. ft. of anthracite coal = about 54 lb.
14 × 12 × 6 = 1008 cu. ft. in bin
54 lb. × 1008 = 54,432 lb.
54,432 lb. ÷ 2000 = 27.216 Tons.

2. How many tons of bituminous coal in the above bin?

1 cu. ft. of bituminous coal = about 50 lb.
50 lb. × 1008 = 50,400 lb.
50,400 lb. ÷ 2000 = 25.2 Tons.

Capacity of Cisterns

1. A cistern is 5 ft. square and 6 ft. deep. How many gallons of water will it hold?

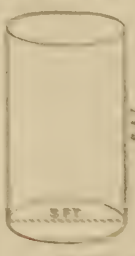
5 × 5 × 6 = 150 cu. ft.
1728 cu. in. × 150 = 259,200 cu. in. in cistern
231 cu. in. = 1 gal. (liquid measure)
259,200 cu. in. ÷ 231 = 1122.077 + Gal.

2. How many barrels will the above cistern hold? How many hogsheads?

31½ gal. = 1 bbl.
63 gal. = 1 hhd.
1122.077 gal. ÷ 31½ = 35.621 + Bbl.
1122.077 gal. ÷ 63 = 17.810 + Hhd.

Circular Cisterns

1. How many gallons of water will a cistern hold that is 3.14' in diameter and 8 ft. deep?



Circumference = Diameter × 3.1416.
Diameter = Circumference ÷ 3.1416.
Area of base = Circumference × ¼ of diameter.
Contents = Area of base × depth.
3 × 3.1416 = 15.708 circumference
15.708 × 1¼ = 19.635 area of base
19.635 × 8 = 157.08 cu. ft. contents
1728 cu. in. × 157.08 = 271,434.24 cu. in.
271,434.24 cu. in. ÷ 231 = 1175.04 Gal.

2. The diameter of a cistern is 8 ft. What must be its depth to contain 75 hhd. of water?

63 gal. × 75 = 4725 gal.
231 cu. in. × 4725 = 1,091,475 cu. in.
8 × 3.1416 = 25.1328 circumference of base
25.1328 × 2 = 50.2656 area of base
1728 cu. in. × 50.2656 = 86,858.9568 cu. in.
1,091,475 ÷ 86,858.9568 = 12.566 + Ft.

Cords in a pile of wood

How many cords in a pile of wood 28 ft. long, 6 ft. wide 7 ft. high?

128 cu. ft. = 1 cord of wood
28 × 6 × 7 = 1176 cu. ft.
1176 cu. ft. ÷ 128 = 9⅛ Cords.

Board or Lumber Measure

Board measure is used to measure lumber. A **board foot** is a square foot 1 inch or less thick.

1. How many board feet are there in 2 joists 15 ft. long, 8 in. wide and 3 in. thick?

Multiply length in feet by width in feet by thickness in inches.

15 × ⅔ × 3 × 2 = 60 Board feet.

2. How many board feet are there in a stick of timber 32 ft. long, 8 in. thick, 12 in. wide at one end and 9 in. wide at the other end?

12 + 9 = 21 ÷ 2 = 10½ in. average width

$$32 \times \frac{10\frac{1}{2}}{12} \times 8 = 224 \text{ Board feet.}$$

Lumber is usually sold by the thousand or hundred feet. By grading the timber, prices going up for certain grades, or along the boundaries of the states, the number of thousand feet or of one hundred feet is designated.

Round Logs

How many feet of lumber will a log 18 in. in diameter at the smaller end and 14 ft. long yield?

1. Express the diameter of the smaller end in inches.

2. Subtract 4 from this number.

3. The square of the remainder will express the number of board feet that a log 16 ft. in length will yield.

18 − 4 = 14 14 × 14 = 196
14 ft. = 14/16 = ⅞
⅞ of 196 = 171½ Board feet.

Weights and Measures.

AVOIRDUPOIS WEIGHT

Drachm,	*dr.*	= 27⅓ grains (27.34375).
Ounce,	*oz.*	= 16 drachms, 437.5 grains.
Pound,	*lb.*	= 16 oz., 256 dr., 7,000 grains.
Legal Stone,	*st.*	= 14 lbs.
Quarter (Eng.),	*qr.*	= 28 lbs.
Quarter (Can.),	*qr.*	= 25 lbs.
Cental or Quintal,	*cent.*	= 100 lbs.
Hundredwei't (Eng.),	*cwt.*	= 4 qrs., 112 lbs.
Hundredwei't (Can.),	*cwt.*	= 4 qrs., 100 lbs.
Ton (Eng.),	*T.*	= 20 cwt., 2,240 lbs.
Ton (Can.),	*T.*	= 20 cwt., 2,000 lbs.

TROY WEIGHT

Carat,		= 3.17 grains.
Pennyweight,	*dwt.*	= 24 grains.
Ounce,	*oz.*	= 20 dwts., 480 grains.
Pound,	*lb.*	= 12 oz., 240 dwts., 5,760 grs.
Hundredweight,	*cwt.*	= 100 lbs.

Troy is the weight used by goldsmiths and jewelers. The grains Troy, Apothecaries', and Avoirdupois are equal, and the same in England, France, the United States, Holland, and in most other countries.

The oz. Troy and Apothecaries' = 1.09714 oz. avoirdupois; but the lb. Troy and lb. Apothecaries' = only 0.82286 lb. avoirdupois; while 175 lb. Troy and Apothecaries' = 144 lb. avoirdupois.

APOTHECARIES' WEIGHT

Scruple	℈	= 20 Grains, =	20 grains.
Drachm	ʒ	= 3 Scruples, =	60 grains.
Ounce	℥	= 8 Drachms, =	480 grains.
Pound	℔	= 12 Ounces, =	5,760 grains.

BRITISH LIQUID MEASURE

The Gill contains 8.665 cubic inches.
The Pint contains 4 gills or 34.660 cubic inches.
Quart = 2 pints = 8 gills.
Gallon = 4 quarts = 32 gills.

APOTHECARIES' FLUID MEASURE

		MARKED
60 Minims ♏ (drops),	= 1 Fluid Drachm,	f ʒ
8 Drachms,	= 1 Ounce,	f ℥
16 Ounces,	= 1 Pint,	O
8 Pints,	= 1 Gallon,	C., or Cong.

1 Drachm = 1 Teaspoonful.
2 Drachms = 1 Dessertspoonful.
4 Drachms = 1 Tablespoonful.
2 Ounces = 1 Wineglassful.
3 Ounces = 1 Teacupful.

CUBIC OR SOLID MEASURE

Cubic Foot = 1,728 Cubic Inches.
Cubic Yard = 27 Cubic Feet, 21.033 bushels.
Cord of Wood = 128 Cubic Feet.
Shipping Ton = 40 Cubic Feet merchandise.
Shipping Ton = 42 Cubic Feet of timber.
Ton of displacement of a Ship = 35 Cubic Feet.

LINEAR MEASURE

3 barleycorns, or, 12 lines, or, 72 points, or, 1,000 mils (mi.),	1 inch (in.).
3 inches,	1 palm.
4 inches,	1 hand.
9 inches,	1 span.
12 inches,	1 foot (ft.).
18 inches,	1 cubic.
3 feet,	1 yard (yd.).
2½ feet,	1 military pace.
5 feet,	1 geometrical pace.
2 yards,	1 fathom.
5½ yards,	1 rod, pole, or perch.
66 feet, or, 4 rods,	1 Gunter's chain.
40 poles, or, 220 yards,	1 furlong (fur.).
8 furlongs, or, 1,760 yards, or, 5,280 feet,	1 mile.
3 miles,	1 league.

The hand is used to measure horses' height. The military pace is the length of the ordinary step of a man. One thousand geometrical paces were reckoned to a mile.

LAND MEASURE (LINEAR)

7.92 inches,	1 link.
100 links, or, 66 feet, or, 22 yards, or, 4 poles,	1 chain (ch.).
10 chains,	1 furlong (fur.)
80 chains, or, 8 furlongs,	1 mile.

LAND MEASURE (SQUARE)

144 sq inches,	1 square foot (sq. ft.).
9 square feet,	1 square yard (sq. yd.).
30¼ square yards,	1 sq. pole, rod, or perch.
16 square poles,	1 square chain (sq. ch.).
40 square poles, or, 1,210 square yards, or, 4 roods, or, 10 square chains, or,	1 square rood.
160 square poles, or, 4,840 square yards, or, 43,560 square feet,	1 acre.
640 acres, or, 3,097,600 square yards,	1 square mile.
30 acres,	1 yard of land.
100 acres,	1 hide of land.
40 hides,	1 barony.

GEOGRAPHICAL AND NAUTICAL MEASURE

6086.44 feet, or, 1000 fathoms, or, 10 cables, or, 1.1528 statute miles,	= 1 nautical mile.
1 nautical mile,	= 1 knot.
60 nautical miles, or, 67.168 statute miles,	= 1 degree.
360 degrees,	= 1 circumference of the earth at the equator.
3 nautical miles,	= 1 league.
120 fathoms,	= 1 cable's length.

DRY MEASURE, UNITED STATES

		Cu. In.
2 pints,	1 quart (qt.) =	67.20
4 quarts,	1 gallon (gal.) =	268.80
2 gallons, or, 8 quarts,	1 peck =	537.60
4 pecks,	1 struck bushel =	2150.42

LIQUID MEASURE, UNITED STATES

		Cu. In.
4 gills,	1 pint (O). =	28.875
2 pints,	1 quart (qt.) =	57.75
4 quarts,	1 gallon (gal.) =	231.
63 gallons,	1 hogshead (hhd.).	
2 hogsheads,	1 pipe or butt.	
2 pipes,	1 tun.	

METRIC SYSTEM

The meter, unit of length, is approximately one ten-millionth of the distance from the equator to the pole. The tables used in the metric system are decimal. The following prefixes are used: Latin, *milli-*($\frac{1}{1000}$), *centi-*($\frac{1}{100}$), *deci-*($\frac{1}{10}$); Greek, *deca-*(10), *hekto-*(100), *kilo-*(1000), *myria-*(10,000). Thus a centimeter is $\frac{1}{100}$ of a meter; a kilometer is 1000 meters.

Table of linear measure	10 millimeters (mm.)	= 1 centimeter (cm.)
	10 centimeters	= 1 decimeter
	10 decimeters	= 1 meter
	10 meters (m.)	= 1 decameter
	10 decameters	= 1 hektometer
	10 hektometers	= 1 kilometer (km.)
	10 kilometers	= 1 myriameter

For the table of square measure the scale is 100; thus, 100 square millimeters = 1 square centimeter, etc. For the table of cubic measure the scale is 1000; thus, 1000 cubic millimeters = 1 cubic centimeter (cc.), etc.

The unit of weight is the *gram* (the weight of a cubic centimeter of water). Table of weight: 10 milligrams = 1 centigram, etc. The unit of liquid and dry measure is the *liter* (one cubic decimeter). Table: 10 deciliters = 1 liter, etc. For measuring land the *are* (10 sq. meters) and the *hektare* (10,000 sq. meters) are used.

Equivalents: A meter = 39.37 inches. A kilometer = 0.62 mile. A hektoliter = 26.41 gallons. A kilogram (kg.) is 2⅕ lbs. A metric ton (1000 kg.) = 2204.6 lbs. About 5cc. = 1 teaspoonful. About 30 grams = 1 oz.

LEGAL WEIGHTS (IN POUNDS) PER BUSHEL

(FROM BUREAU OF STANDARDS, DEPARTMENT OF COMMERCE AND LABOR)

States	Apples										Corn									Peaches										
	Apples	Dried Apples	Barley	Beans	Beets	Bran	Buckwheat	Carrots	Clover seed	Coal	Corn in ear	Shelled Corn	Corn meal	Cotton seed	Flaxseed (Linseed)	Hemp seed	Hungarian grass seed	Millet	Oats	Onions	Orchard grass seed	Parsnips	Peaches	Dried, peeled	Dried, unpeeled	Pears	Peas	Potatoes	Sweet potatoes	Rye	Timothy seed	Tomatoes	Turnips	Wheat
Federal Statutes*	50	..	48	60	..	..	48	..	..	..	..	56	..	..	56	..	..	..	32	..	..	..	50	..	..	50	60	60	..	56	..	..	..	60
Alabama,	..	24	47	60	..	..	..	..	..	..	70	56	..	32	..	..	..	..	32	..	..	..	..	38	33	..	60	60	55	56	..	..	55	60
Arkansas,	50	24	48	..	..	20	52	..	60	..	..	56	48	33⅓	56	..	..	50	32	57	14	..	..	..	..	..	60	60	50	56	60	..	57	60
California,	..	..	50	..	..	..	40	..	..	..	..	52	..	..	..	..	..	..	32	..	..	..	..	..	..	..	..	..	..	54	..	..	..	60
Colorado,	..	..	48	60	..	..	52	..	60	..	70	56	50	..	..	44	..	..	32	57	..	..	..	..	..	..	..	60	..	56	45	..	..	60
Connecticut,	48	25	48	60	..	20	48	50	60	..	..	56	50	..	55	..	..	..	32	52	..	45	..	..	..	..	60	60	54	56	45	..	..	60
Delaware,	..	..	..	..	..	..	..	..	..	..	..	56	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	60
District of Columbia,	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	60	..	..	..	..	..	60
Florida,	48	24	48	60	..	20	..	..	..	..	..	56	48	32	..	..	..	50	32	56	..	..	54	..	..	55	..	60	56	56	..	..	54	60
Georgia,	..	24	47	..	..	20	52	..	60	..	70	56	..	30	56	44	..	..	32	57	..	..	..	38	33	..	60	60	55	56	..	..	55	60
Idaho,	48	24	48	60	56	20	50	50	60	..	70	56	48	..	56	44	50	50	32	57	..	50	48	..	..	..	60	60	55	56	45	..	55	60
Illinois,	50	24	48	..	60	20	52	50	60	80	70	56	48	32	56	44	50	50	32	57	14	50	48	..	..	..	60	60	50	56	45	56	55	60
Indiana,	48	25	48	60	60	20	50	50	60	..	a70	56	50	..	56	44	..	50	32	57	14	55	48	..	..	50	..	60	50	56	45	60	55	60
Iowa,	48	24	48	60	56	20	48	50	60	80	70	56	48	..	56	44	50	50	32	52	14	45	48	..	..	45	60	60	50	56	45	50	55	60
Kansas,	50	24	48	60	60	..	48	50	60	..	..	56	..	..	56	44	..	50	32	57	..	48	48	..	..	45	60	60	50	56	45	50	55	60
Kentucky,	..	24	47	..	..	20	56	..	60	76	b70	56	50	..	56	44	50	50	32	57	14	..	..	..	..	..	60	60	55	56	45	..	60	60
Louisiana,	..	..	32	..	..	..	..	..	..	..	..	56	..	..	..	..	..	..	32	..	..	..	..	..	..	..	..	..	..	32	..	..	..	60
Maine,	44	25	48	60	60	20	48	50	60	..	..	56	50	..	56	44	48	50	32	52	14	45	48	..	..	58	60	60	54	56	45	56	..	60
Maryland,	50	28	48	60	..	20	48	50	60	80	70	56	48	..	56	44	50	50	32	54	14	..	40	..	..	..	60	60	60	56	45	60	60	60
Massachusetts,	48	25	48	60	60	20	48	50	60	..	..	56	50	..	55	..	..	..	32	52	..	45	48	..	..	58	60	60	54	56	45	56	55	60
Michigan,	48	22	48	60	..	..	48	..	60	..	70	56	50	..	56	44	50	50	32	54	14	..	..	..	..	..	60	60	56	56	45	..	58	60
Minnesota,	50	28	48	60	50	..	50	45	60	..	70	56	..	..	56	50	48	48	32	52	14	42	48	..	..	45	60	60	55	56	45	50	55	60
Mississippi,	..	26	48	..	..	20	48	..	60	..	72	56	48	32	56	44	50	50	32	57	..	..	..	..	..	..	60	60	54	56	45	..	55	60
Missouri,	48	24	48	60	..	20	52	50	60	..	70	56	50	33	56	44	48	50	32	57	14	44	48	..	..	..	60	60	56	56	45	45	55	60
Montana,	45	..	48	60	50	20	52	50	60	..	70	56	50	..	56	44	50	..	32	57	..	50	..	..	..	45	60	60	..	56	45	..	50	60
Nebraska,	48	24	48	60	56	20	50	50	60	80	70	56	..	..	56	44	..	50	32	57	14	50	48	..	..	45	60	60	50	56	45	56	55	60
Nevada,	48	24	48	60	56	20	50	50	60	..	70	56	48	..	56	48	50	50	32	57	..	50	48	..	..	..	60	60	50	56	45	56	56	60
New Hampshire,	48	25	48	..	60	20	48	50	60	..	..	56	50	..	56	..	..	..	32	52	..	45	48	..	..	58	60	60	54	56	45	56	55	60
New Jersey,	50	25	48	60	60	..	48	50	60	..	..	56	..	..	55	..	..	..	32	57	..	..	50	33	33	..	60	60	54	56	45	56	55	60
New Mexico,	45	24	48	60	56	20	52	50	60	..	70	56	50	32	56	44	50	50	32	57	14	42	48	..	..	48	60	60	50	56	45	50	56	60
New York,	48	25	48	60	..	20	48	50	60	..	..	56	50	..	55	..	..	..	32	57	..	..	..	..	..	..	60	60	54	56	45	..	..	60
North Carolina,	48	24	48	60	50	20	50	50	60	..	..	56	..	30	56	44	48	50	32	57	14	50	50	..	..	56	60	56	56	56	45	56	50	60
North Dakota,	50	..	48	60	60	20	42	..	60	..	70	56	..	..	56	..	..	50	32	52	..	..	..	..	..	..	60	60	46	56	45	..	60	60
Ohio,	48	24	48	60	56	..	50	50	60	70	68	56	48	..	56	44	50	50	32	56	..	50	48	..	..	..	60	60	50	56	45	56	60	60
Oklahoma,	48	24	48	60	..	20	52	50	60	..	70	56	50	32	56	44	48	50	32	57	14	44	48	..	..	48	60	60	55	56	45	45	42	60
Oregon,	45	28	46	..	..	..	42	..	60	..	..	56	..	..	..	..	..	..	32	..	..	..	..	..	..	45	..	60	..	56	..	..	..	60
Pennsylvania,	45	25	47	60	56	20	48	50	60	..	..	56	50	..	56	44	50	50	32	50	14	50	48	38	33	50	60	60	54	56	45	60	60	60
Rhode Island,	48	25	48	60	50	20	48	50	60	80	70	56	50	..	56	44	50	50	32	50	..	50	48	..	..	..	60	60	54	56	45	56	60	60
South Carolina,	50	24	48	60	50	20	50	50	60	..	..	56	..	30	56	44	48	50	32	56	14	50	50	..	..	36	60	60	50	56	45	56	50	60
South Dakota,	48	24	48	60	56	20	52	50	60	..	70	56	50	..	56	44	50	50	32	57	14	42	48	..	..	..	60	60	46	56	45	50	55	60
Tennessee,	50	24	48	60	50	20	50	50	60	..	..	56	..	28	56	44	48	50	32	56	14	50	50	..	..	56	60	60	50	56	45	56	50	60
Texas,	45	28	48	..	..	20	42	..	60	..	..	56	..	32	56	44	48	50	32	57	..	..	50	..	..	..	..	60	55	56	45	55	55	60
Vermont,	48	..	48	60	60	..	48	50	60	..	..	56	50	..	55	..	50	50	32	52	..	45	48	..	..	58	60	60	54	56	45	56	60	60
Virginia,	..	28	48	60	..	20	48	50	60	..	70	56	48	30	56	44	48	50	32	57	14	50	..	40	32	..	..	60	56	56	45	60	55	60
Washington,	45	28	48	..	..	..	42	..	60	..	..	56	..	..	56	..	..	..	32	..	..	..	..	..	..	45	..	60	..	56	..	..	..	60
West Virginia,	50	24	48	60	..	20	52	50	60	80	c68	56	48	..	56	44	50	50	32	55	14	42	48	..	..	..	60	60	50	56	45	56	..	60
Wisconsin,	44	25	48	60	50	20	50	50	60	..	..	56	50	..	56	44	48	50	32	50	..	44	48	..	..	48	60	60	54	56	45	56	42	60

* Weights used in transactions that are governed by Interstate Commerce.

a Until Dec. 1 next after grown; 68 pounds thereafter.

b From Nov. 1 to May 1 following; 68 pounds from May 1 to Nov. 1 following.

c In ear, dry; 72 pounds in ear, green.

TRAVEL DISTANCES BETWEEN IMPORTANT CENTERS IN THE UNITED STATES.

	Atlanta.	Baltimore.	Boston.	Buffalo.	Chicago.	Cincinnati.	Cleveland.	Denver.	Detroit.	Galveston.	*Havana. Via Tampa.	*Honolulu. Via San Francisco.	Indianapolis.	Jacksonville.	Kansas City.	Little Rock.	Los Angeles.	*Manila, Ph. Is. Via S. Fran. and Honolulu.	Milwaukee.	Minneapolis.	Nashville.	New Orleans.	New York.	Omaha.	Philadelphia.	Pittsburg.	Portland, Me.	Portland, Ore.	Saint Louis.	*Salt Lake City.	San Francisco.	*San Juan, P. R. Via New York or Tampa.	*Seattle, Wash.	*Sitka, Alaska. Via Seattle.	Washington.
Atlanta,		686	1104	888	731	461	705	1523	722	907	940	5165	548	351	884	553	2267	10800	816	1151	289	496	874	1020	783	774	1212	2839	607	2086	2750	1944	2992	4010	646
Baltimore,	686		418	402	802	593	474	1827	653	1561	1393	5571	704	885	1211	1279	3014	11206	887	1222	810	1150	188	1292	97	334	526	3111	934	2358	3158	1747	3039	4057	40
Boston,	1104	418		478	999	905	661	2024	724	1979	1811	5768	944	1303	1432	1529	3235	11403	1084	1419	1200	1568	217	1489	321	674	108	3326	1184	2555	3353	1778	3236	4254	458
Buffalo,	888	402	478		527	427	183	1552	251	1575	1795	5296	466	1239	954	1051	2757	10931	612	947	722	1253	411	1017	413	235	561	2836	706	2083	2881	1970	2764	3782	442
Chicago,	731	802	999	527		294	344	1025	272	1152	1671	4769	183	1096	457	628	2260	10404	85	420	442	915	912	490	821	468	1082	2309	283	1556	2354	2471	2237	3255	813
Cincinnati,	461	593	905	427	294		244	1257	261	1210	1413	4996	111	812	618	686	2421	10631	379	714	295	826	757	717	666	313	988	2536	341	1783	2581	2316	2531	3549	553
Cleveland,	705	474	661	183	344	244		1369	169	1392	1657	5113	283	1056	771	868	2574	10748	429	764	539	1070	584	834	493	140	744	2853	523	1900	2698	2143	2581	3599	514
Denver,	1523	1827	2024	1552	1025	1257	1369		1297	1151	2462	3869	1120	1824	639	1082	1361	9504	1048	902	1234	1348	1937	539	1846	1493	2107	1409	916	657	1454	3496	1595	2613	1810
Detroit,	722	653	724	251	272	261	169	1297		1351	1674	5041	272	1073	708	827	2511	10676	357	692	556	1087	662	762	664	321	807	2581	482	1828	2626	2221	2509	3527	668
Galveston,	907	1561	1979	1575	1152	1210	1392	1151	1351		1613	4579	1109	1027	840	524	1681	10214	1237	1346	891	411	1749	1040	1658	1490	2087	2560	869	1713	2164	2617	2746	3764	1521
*Havana, Via Tampa.	940	1393	1811	1795	1671	1413	1657	2462	1674	1613		6104	1497	586	1823	1474	3144	11739	1756	2091	1229	1202	1581	1960	1490	1655	1919	3779	1547	2954	3689	1120	3951	4969	1353
*Honolulu, Via San Francisco.	5165	5571	5768	5296	4769	4996	5113	3869	5041	4579	6104		4885	5360	4479	4714	2897	5635	4789	4643	5010	4859	5681	4279	5590	5237	5851	3161	4692	3285	2415	7240	3373	4391	5582
Indianapolis,	548	704	944	466	183	111	283	1120	272	1109	1497	4885		899	492	585	2295	10520	268	603	295	852	825	606	734	381	1027	2425	240	1672	2470	2384	2420	3438	664
Jacksonville,	351	885	1303	1239	1096	812	1056	1824	1073	1027	586	5360	899		1185	833	2462	10995	1181	1516	654	616	1073	1385	982	1125	1411	3204	972	2387	2945	1590	3333	4351	845
Kansas City,	884	1211	1432	954	457	618	771	639	708	840	1823	4479	492	1185		470	1803	10114	542	558	595	881	1342	200	1251	898	1515	2019	277	1250	2064	2901	2234	3252	1171
Little Rock,	553	1279	1529	1051	628	686	868	1082	827	524	1474	4714	585	833	470		1816	10349	713	919	367	451	1410	670	1319	966	1612	2489	345	1577	2299	2478	2677	3695	1239
Los Angeles,	2267	3014	3235	2757	2260	2421	2574	1361	2511	1681	3144	2897	2295	2462	1803	1816		8532	2345	2263	2183	1961	3145	1899	3054	2701	3318	1127	2080	1225	482	4107	1313	2331	2974
*Manila, Ph. Is., Via S. Fran. and Honolulu	10800	11206	11403	10931	10404	10631	10748	9504	10676	10214	11739	5635	10520	10995	10114	10349	8532		10424	10278	10645	10494	11319	9914	11225	10872	11486	8796	10327	8920	8050	12878	9008	10026	11197
Milwaukee,	816	887	1084	612	85	379	429	1048	357	1237	1756	4789	268	1181	542	713	2345	10424		335	527	1000	997	510	906	553	1167	2237	368	1576	2374	2556	2152	3170	898
Minneapolis,	1151	1222	1419	947	420	714	764	902	692	1346	2091	4643	603	1516	556	919	2263	10278	335		862	1261	1332	364	1241	888	1502	1901	574	1430	2228	2891	1817	2835	1233
Nashville,	289	810	1200	722	442	295	539	1234	556	891	1229	5010	295	654	595	367	2183	10645	527	862		557	998	731	907	608	1283	2550	318	1797	2595	2233	2679	3697	770
New Orleans,	496	1150	1568	1253	915	826	1070	1348	1087	411	1202	4859	852	616	881	451	1961	10494	1000	1261	557		1338	1081	1247	1139	1676	2757	700	1838	2444	2206	2943	3961	1110
New York,	874	188	217	411	912	757	584	1937	652	1749	1581	5681	825	1073	1342	1410	3145	11319	997	1332	998	1338		1402	91	444	325	3221	1065	2469	3266	1559	3149	4167	228
Omaha,	1020	1292	1489	1017	490	717	834	538	762	1040	1960	4279	606	1385	200	670	1899	9914	510	364	731	1081	1402		1311	956	1572	1819	413	1066	1864	2961	2005	3023	1303
Philadelphia,	783	97	321	413	821	666	493	1846	664	1658	1490	5590	734	982	1251	1319	3054	11225	906	1241	907	1247	91	1311		353	429	3130	974	2377	3175	1650	3058	4076	137
Pittsburg,	774	334	674	235	468	313	140	1493	321	1490	1655	5237	381	1125	898	966	2701	10872	553	888	608	1139	444	958	353		782	2777	621	2024	2822	2003	2705	3723	302
Portland, Me.	1212	526	108	581	1082	988	744	2107	807	2087	1919	5851	1027	1411	1515	1612	3318	11486	1167	1502	1283	1676	325	1572	429	782		3391	1267	2338	3436	1884	3319	4337	586
Portland, Ore.,	2839	3111	3326	2836	2309	2536	2653	1409	2581	2560	3779	3161	2425	3204	2019	2489	1127	8796	2237	1901	2550	2757	3221	1819	3130	2777	3391		2232	922	746	4780	188	1204	3122
Saint Louis,	607	934	1184	706	283	341	523	916	482	869	1547	4692	240	972	277	345	2080	10327	368	574	318	700	1065	413	974	621	1267	2232		1479	2277	2624	2391	3409	894
*Salt Lake City,	2086	2358	2555	2083	1556	1783	1900	657	1828	1713	2954	3285	1672	2387	1250	1577	1225	8920	1576	1430	1797	1838	2469	1066	2377	2024	2638	922	1479		870	4028	1068	2086	2369
San Francisco,	2750	3156	3353	2881	2354	2581	2698	1454	2626	2164	3689	2415	2470	2945	2064	2299	482	8050	2374	2228	2595	2444	3266	1864	3175	2822	3436	746	2277	870		4825	958	1976	3167
*San Juan, P. R., Via New York or Tampa.	1944	1747	1776	1970	2471	2316	2143	3496	2221	2617	1120	7240	2384	1590	2901	2478	4107	12878	2556	2891	2233	2206	1559	2961	1650	2003	1884	4780	2624	4028	4825		4708	5726	1787
*Seattle, Wash.,	2992	3039	3236	2764	2237	2531	2581	1595	2509	2746	3951	3373	2420	3333	2234	2677	1313	9008	2152	1817	2679	2943	3149	2005	3058	2705	3319	186	2391	1068	958	4708		1018	3027
*Sitka, Alaska, Via Seattle.	4010	4057	4254	3782	3255	3549	3599	2613	3527	3764	4969	4391	3438	4351	3252	3695	2331	10028	3170	2835	3697	3961	4167	3023	4076	3723	4337	1204	3409	2086	1976	5726	1018		4045
Washington,	646	40	458	442	813	553	514	1810	668	1521	1353	5582	664	845	1171	1239	2974	11197	898	1233	770	1110	228	1303	137	302	568	3122	894	2369	3167	1787	3027	4045	

The figures in this table are taken from the "Official Table of Distances" used by the War Department of the U. S. Government, except the distance to cities marked with an asterisk (*) which are computed along the best routes of travel. All distances are in STATUTE MILES.

WORLD TRAVEL DISTANCES

The chief ports of the world are named in alphabetical order across the top and down the sides of the tables. The distance between any two ports will be found at the intersection of the two columns which contain the names of the selected ports. Thus the distance from Baltimore to Bombay is given as 8,431, and the small "S" shows that the route is via Suez Canal. Distances are for full-powered steam vessels reckoned in nautical miles.

	Amsterdam	Antwerp	Barbados	Belfast	Bombay	Boston	Bremen	Buenos Aires	Cape Town	Cherbourg	Genoa	Glasgow	Hamburg	Havana	Havre	Hongkong	Liverpool	London	Melbourne	New Orleans	New York	Plymouth	Rio de Janeiro	San Francisco	Shanghai	Singapore	Southampton	Valparaiso	Yokohama
Amsterdam	——	135	3,877	733	6,336 S	3,164	272	6,370	6,193	303	2,237	818	290	4,335	267	9,764	711	201	11,131	4,837	3,346	385	5,280	8,145 P	10,507	8,324 S	277	7,483 P	11,226
Antwerp	135	——	3,841	697	6,300 S	3,128	357	6,334	6,157	267	2,201	782	385	4,299	231	9,728 S	675	180	11,095 C	4,801	3,310	349	5,244	8,093 P	10,471 S	8,288 S	238	7,464 P	11,190 S
Baltimore	3,638	3,602	1,823	3,204	8,431 S	674	3,851	5,898	6,913	3,357	4,332	3,250	3,869	1,112	3,423	11,859 S	3,328	3,562	12,703 C	1,614	410	3,265	4,808	5,189 P	12,602 S	10,419 S	3,383	4,560 P	13,327 S
Barbados	3,877	3,841	——	3,637	8,199 S	1,880	4,090	4,169	5,284	3,596	4,100	3,719	4,108	1,472	3,662	11,627 S	3,624	3,801	11,047 C	2,115	1,825	3,549	3,079	4,552 P	12,370 S	10,187 S	3,622	3,890 P	13,089 S
Belfast	733	697	3,637	——	6,245	2,730	880	6,271	6,089	459	2,146	113	891	3,899	528	9,673 S	137	663	11,040 C	4,401	2,912	360	5,168	7,870 P	10,535 S	8,233 S	488	7,208 P	11,135 S
Bermuda	3,248 S	3,112 S	1,222 S	2,958	7,876	707 S	3,459	5,175 C	6,181	2,967	3,771	2,885	3,477	1,141 S	3,033	11,627	2,945	3,172	11,972	1,643	699	2,875	4,085	4,624 P	12,376	9,864 S	2,956	3,962 P	13,094
Bombay	6,336	6,300	8,199	6,245	——	7,962 S	6,549	8,349	4,604	6,040	4,473	6,327	6,567	9,000	6,115	4,090	6,223	6,260	6,535 S	9,502	8,153	5,997	7,824 C	9,780	4,633 S	2,450 S	6,090	9,875 M	5,352
Boston	3,164	3,128	1,880	2,730	7,962 S	——	3,377	5,804	6,776	2,883	3,863	2,777	3,395	1,422	2,949	11,390	2,854	3,088	12,534 S	1,924	379	2,791	4,714	5,560 P	12,133 S	9,950 S	2,909	4,891 P	12,852 S
Bremen	272	357	4,090	880	6,549 C	3,377	——	6,583	6,406	513	2,456	922	171	4,548	480	9,977 C	924	409	11,344 S	5,050	3,559	598	5,501	8,358 P	10,720 S	8,537 S	479	7,696 M	11,439 C
Buenos Aires	6,370	6,334	4,169	6,271	8,349 C	5,804	6,583	——	3,778	6,074	6,130	6,350	6,601	5,669	6,151	10,643 C	6,258	6,294	9,099	6,255	5,838	6,029	1,135	7,536 P	11,386	9,376 S	6,124	7,536 M	12,105
Cape Town	6,193	6,157	5,284	6,089	4,604 S	6,776	6,406	3,778	——	5,897	5,972	6,168	6,424	6,716	5,966	6,898 S	6,076	6,117	5,814 C	7,347	6,795	5,852	3,267	9,898 P	7,641 S	5,631 S	5,947	10,217 P	8,360 S
Charleston	3,846	3,810	1,630	3,561	8,388 S	845	4,059	5,790	6,828	3,565	4,459	3,498	4,077	605	3,631	11,986 S	3,548	3,770	12,620 C	1,107	614	3,473	4,700	4,852 P	12,729 S	10,546 S	3,591	4,223 P	13,448 S
Cherbourg	303	267	3,596	459	6,040 S	2,883	513	6,074	5,897	——	1,941	544	531	4,029	71	9,468 S	437	227	10,835 C	4,531	3,065	108	4,984	7,864 P	10,211 S	8,028 S	83	7,202 P	10,930 S
Colon	4,818	4,782	1,225	4,543	9,283 S	2,173	5,031	5,318	6,410 S	4,537	5,184	4,625	5,049	1,380	4,603	12,711 S	4,530	4,742	12,203 C	1,380	1,972	4,445	4,228	3,327 P	13,454 S	11,271 S	4,563	2,665 P	14,173 S
Constantinople	2,898	3,158	5,057	3,103	3,837 S	4,820	3,407	7,381	6,137 S	2,898	1,312	3,185	3,425	5,852	2,975	7,266 S	3,081	3,118	8,633 C	6,354	5,011	2,855	5,997	9,130 P	8,009 S	5,826 S	2,948	8,201 P	8,728 S
Galveston	5,031	4,995	2,240	4,595	9,696 S	2,118	5,244	6,378	7,470	4,725	5,591	4,641	5,262	765	4,816	13,124 S	4,719	4,955	13,263 C	380	1,893	4,658	5,288	4,787 P	13,861 S	11,678 S	4,776	4,158 P	14,586 S
Genoa	2,237	2,201	4,100	2,146	4,473 S	3,863	2,450	6,130	5,972	1,941	——	2,228	2,468	4,895	2,018	7,901 S	2,124	2,161	9,268 C	5,397	4,054	1,898	5,040	8,511 P	8,644 S	6,461 S	1,991	7,849 P	9,363 S
Gibraltar	1,389	1,353	3,252	1,298	4,953 S	3,015	1,602	5,282	5,124	1,093	854	1,380	1,620	4,047	1,162	8,381 S	1,276	1,313	9,748 C	4,549	3,206	1,050	4,192	7,621 P	9,124 S	6,941 S	1,143	6,992 P	9,843 S
Glasgow	818	782	3,719	113	6,327 S	2,777	922	6,350	6,168	544	2,228	——	1,049	3,945	610	9,755 S	210	745	11,122 C	4,447	2,959	442	5,158	7,952 P	10,498 S	8,315 S	570	7,290 P	11,217 S
Hamburg	290	385	4,108	891	6,567 S	3,395	171	6,601	6,424	531	2,468	1,049	——	4,566	498	9,995 S	942	427	11,362 C	5,068	3,577	616	5,519	8,355 P	10,738 S	8,555 S	497	7,726 P	11,457 S
Havana	4,335	4,299	1,472	3,899	9,000 S	1,422	4,548	5,669	6,716	4,029	4,895	3,945	4,566	——	4,120	12,428 S	4,023	4,259	12,512 C	597	1,197	3,962	4,579	4,707 P	13,165 S	10,982 S	4,080	4,045 P	13,890 S
Havre	267	231	3,662 S	528	6,115 C	2,949	480	6,151 C	5,966	71 S	2,018	610	498	4,120 S	——	9,537 S	503	194	10,904 S	4,622 S	3,131 S	175	5,061 C	7,930 P	10,280 S	8,097 S	105 S	7,268 P	11,999 S
Hongkong	9,764 P	9,728 P	11,627 P	9,673 P	4,090 S	11,390 P	9,977 P	10,643 M	6,898 M	9,468 P	7,901 P	9,755 P	9,995 P	12,428 P	9,537 P	——	9,651 P	9,688 P	5,031 P	12,924 P	11,580 P	9,425 P	10,118 M	6,041	853	1,440	9,518 P	10,536	1,580
Honolulu	9,588	9,533	5,995	9,313	8,375 S	6,870	9,801	7,709	10,390	9,307	9,954	9,395	9,795	6,150	9,373	4,858 S	9,276	9,512	4,916 C	6,123	6,702	9,215	8,587	2,089 P	4,333 S	5,925 S	9,333	5,916 P	3,445 S
Jamaica	4,314	4,278	1,040	4,039	8,844 S	1,658	4,527	5,166	6,260	4,033	4,739	4,121	4,545	716	4,099	12,266 S	4,026	4,238	12,051 S	1,115	1,457	3,941	4,076	3,991 P	13,009 S	10,826 S	4,059	3,329 P	13,728 S
Lisbon	1,111	1,087	3,085	1,020	5,249 S	2,797	1,324	5,304	5,148	815	1,150	1,102	1,342	4,174	884	8,677	998	1,035	10,044 S	4,676	3,025	770	4,214	11,803 P	9,420 S	7,237 S	865	7,578 P	10,139

K, via Kiel Canal. S, via Suez Canal. C, via Cape of Good Hope. M, via Strait of Magellan. P, via Panama Canal. T, via Torres Strait.

WORLD TRAVEL DISTANCES—(Continued)

The chief ports of the world are named in alphabetical order across the top and down the sides of the tables. The distance between any two ports is found at intersection of the two columns which contain the names of the selected ports. Thus the distance from New York to Melbourne is given as 11,586, and the small "C" shows that the route is via Cape of Good Hope. Distances are for full-powered steam vessels reckoned in nautical miles.

	Amsterdam	Antwerp	Barbados	Belfast	Bombay	Boston	Bremen	Buenos Aires	Cape Town	Cherbourg	Genoa	Glasgow	Hamburg	Havana	Havre	Hongkong	Liverpool	London	Melbourne	New Orleans	New York	Plymouth	Rio de Janeiro	San Francisco	Shanghai	Singapore	Southampton	Valparaiso	Yokohama
Liverpool	711	675	3,624	137	6,223	2,854	924	6,258	6,076	437	2,124	210	942	4,023	503	9,651	—	638	11,018 S	4,525	3,036	345	5,158	7,836 P	10,394 S	8,211	463	7,207 P	11,113 S
London	201	180	3,801	663	6,260	3,088 S	409	6,294 C	6,117	227	2,161	745	427	4,259 S	194	9,688 S	638	—	11,055 T	4,761 S	3,270	309	5,204 C	8,069 P	10,437 S	8,248	201	7,407 P	11,150 S
Manila	9,667	9,631	11,530 C	9,576 S	3,793	11,293	9,880 S	10,546	6,801	9,371 S	7,804	9,658	9,898	12,325 C	9,440	640	9,554 S	9,591	4,511	12,827 C	11,584 C	9,328 S	10,021	6,238	1,130	1,435	9,421 S	10,406	1,768
Melbourne	11,131	11,095	11,047	11,040	6,535	12,534	11,344 S	9,099	5,814	10,835 S	9,268	11,122	11,362	12,512	10,904	5,031 S	11,018	11,055	—	13,140	12,586	10,792	8,827	6,966 P	5,234 S	3,823 S	10,885	6,280 P	4,875 S
Montreal	3,317	3,281	2,715	2,645	8,141	1,222	3,530	6,421	7,108	3,036	4,042	2,693	3,548	2,475	3,102	11,569 S	2,760	3,241 C	12,936	2,977	1,451	2,944	5,331	6,713 P	12,312 S	10,129 S	3,062	6,094 P	13,031 S
New Orleans	4,837	4,801	2,115	4,401	9,502	1,924	5,050	6,255	7,347	4,531	5,397	4,447	5,068	597	4,622	12,924	4,525	4,761	13,140 C	—	1,699	4,464	5,160	4,683 P	13,667 S	11,484 S	4,582	4,054 P	14,386 S
Newport News	3,514	3,478	1,699	3,080	8,307	550	3,727	5,774	6,789	3,233	4,208	3,126	3,745	988	3,299	11,735	3,204	3,438	12,579 C	1,490	286	3,141	4,590	4,976 P	12,478 S	10,295 S	3,259	4,347 P	13,203 S
New York	3,346 P	3,310 P	1,825 P	2,912 P	8,153 P	379 P	3,559 P	5,838 P	6,995 P	3,065 P	4,054 P	2,959 P	3,577 P	1,227 P	3,131 P	11,580 P	3,053 P	3,270 P	11,586 P	1,699 P	— P	2,973 P	4,748 P	5,262 P	13,324 P	10,141 P	3,091 P	4,633 P	13,042 P
Panama	4,868 P	4,832 P	1,275 P	4,593 P	9,333 S	2,185 P	5,081 P	5,280 P	6,460 P	4,587 P	5,234 P	4,675 P	5,110 P	1,430 P	4,653 P	9,324 C	4,591 P	4,792 P	7,949 C	1,438 P	2,017 P	4,495 P	4,278 P	3,277 P	8,672 C	11,321 S	4,613 P	2,615 P	7,702 C
Para	4,319	4,193	1,142	4,056	8,262	2,943	4,442	3,235	4,330	3,933	4,163	4,138	4,460	2,577	4,010	11,204 S	4,043	4,153	10,120 C	3,136	2,915	3,883	2,145	5,642 P	11,947 S	10,250 S	3,983	4,970 P	12,666 P
Philadelphia	3,482	3,446	1,828	3,048	8,284	517	3,694	5,870	6,861	3,201	4,185	3,094	3,712	1,158	3,267	11,712 S	3,172	3,406	12,652 C	1,660	234	3,109	4,782	5,234 P	12,455 P	10,272 S	3,227	4,605 P	13,174 P
Plymouth	385	349	3,594	360	5,997	2,791	598	6,029	5,852	108	1,898	442	616	3,962	175	9,425 S	345	309	10,792 S	4,464	2,973	—	4,939	7,772 P	10,168 P	7,985 S	129	7,110 P	10,887 S
Portland (Me.)	3,086	3,050	1,927	2,652	7,912	98	3,299	5,849	6,787	2,805	3,807	2,698	3,317	1,470	2,871	11,334 C	2,776	3,010	12,579	1,972	427	2,713	4,759	5,474 P	12,077 C	9,894 C	2,831	4,845 P	12,796 C
Rio de Janeiro	5,280	5,244 K	3,079	5,168	7,824	4,714	5,501	1,135 K	3,265	4,984	5,040	5,250	5,519	4,579	5,061 K	11,118 K S	5,158	5,204 K	8,827	5,160	4,748	4,939	—	7,678 P	10,861 P	8,851 C	5,034	4,016 P	11,580 P
St. Petersburg	1,070	1,165	4,888	1,606	7,353	4,052	951	7,381	7,204	1,311	3,248	1,648	860	5,346	1,275	10,755 S	1,716	1,207	12,142 C	5,848	4,234	1,396	6,299	9,236 P	11,518 P	9,335	1,277	8,574 P	12,237 P
St. Thomas	3,846 P	3,810 P	440 P	3,586 P	8,265 P	1,516 P	4,059 P	4,629 M	5,708 P	3,570 P	4,160 P	3,668 P	4,077 P	1,040 P	3,639 P	11,687 P	3,573 P	3,770 P	11,499 P	1,590 P	1,435 P	3,473 P	3,539 P	4,213 P	12,430 S	10,247 P	3,591 P	3,637 P	13,149 P
San Francisco	8,145	8,093	4,552	7,870	9,780	5,500 P	8,358 P	7,536 M	9,898 P	7,864 P	8,511 P	7,952 P	8,355 P	4,707 P	7,930 P	6,041 S	7,836 P	8,069 P	6,966 C	4,683 P	5,262 P	7,772 P	7,678	—	5,491 S	7,330 P	7,890 P	5,140 P	4,521 S
San Juan	3,867	3,831	502	3,600	8,307	1,480	4,080	4,694	5,773	3,583	4,202	3,681	4,098	975	3,652	11,730 S	3,588	3,791	11,564	1,525	1,428	3,494	3,604	4,278 P	12,473 S	10,289	3,612	3,616 P	13,192 P
Savannah	3,916 P	3,880 P	1,648 P	3,443 P	8,640 P	928 P	4,129 P	5,820 M	6,860 P	3,684 P	4,535 P	3,489 P	4,147 P	634 P	3,701 P	12,062 P	3,618 P	3,840 P	12,650 P	1,136 P	695 P	3,543 P	4,730 P	4,851 P	12,805 P	10,622 P	3,661 P	4,222 P	13,524 P
Seattle	8,944	8,903	5,351	8,669	9,515	6,240 S	9,157	8,315 C	10,536	8,663 S	9,310	8,751	9,173 S	5,506 S	8,729	5,779	8,654 S	8,868	7,326	5,501 S	6,080 S	8,571	8,354 C	799	5,209	7,068	8,689	6,678	4,259
Shanghai	10,507	10,471	12,370	10,535	4,633	12,133 S	10,720	11,380	7,641	10,211	8,644	10,498	10,738	13,165	10,280	853	10,394	10,437	5,234	13,667 S	12,324 S	10,168	10,861 C	5,491	— —	2,183	10,267 M	10,266	1,030
Singapore	8,324	8,288	10,187	8,233	2,450	9,950 S	8,537	9,376	5,631	8,028	6,461	8,315	8,555	10,982	8,097	1,440 S	8,211	8,248	3,823 S	11,484	10,141 S	7,985	8,851 C	7,330 P	2,183 S	—	8,078 P	10,899 P	2,902
Southampton	277	238	3,622	488	6,090	2,909	479	6,124	5,947	83	1,991	570	497	4,080	105	9,518	463	201	10,885	4,582	3,091	129	5,034	7,890 P	10,261 P	8,078	—	7,228 P	10,980 P
Suez	3,376 P	3,340 P	5,239 P	3,285 P	2,960 M	5,002 P	3,589 P	8,154 M	5,259 P	3,080 P	1,513 P	3,367 P	3,607 P	6,034 P	3,157 P	6,388 P	3,263 P	3,300 P	7,755 P	6,536 P	5,193 P	3,037 P	6,179 P	9,629 P	7,131 M	4,948 P	3,130 P	9,000 P	7,850 P
Valparaiso	7,483	7,464	3,890 S	7,208	9,875	4,801 S	7,696	7,536 C	10,217	7,202	7,849	7,290	7,726	4,045 S	7,268	10,536	7,207	7,407	6,280	4,054 S	4,633 S	7,110	4,016 C	5,140	10,266	10,899	7,228	—	9,339
Yokohama	11,226	11,190	13,089	11,135	5,352	12,852	11,439	12,105	8,360	10,930	9,363	11,217	11,457	13,890 S	10,999	1,580	11,113	11,150	4,875	14,386	13,043 S	10,887	11,580	4,521	1,030	2,902	10,980	9,339	—

K, via Kiel Canal. S, via Suez Canal. C, via Cape of Good Hope. M, via Strait of Magellan. P, via Panama Canal. T, via Torres Strait.

CANADIAN TRAVEL DISTANCES IN ENGLISH STATUTE MILES

Between Points in the Provinces of Ontario and Quebec.	Brantford, Ont.	Hamilton, Ont.	Hull, Que.	Kingston, Ont.	London, Ont.	Montreal, Que.	Muskoka, Ont.	Niagara Falls, Ont.	North Bay, Ont.	Ottawa, Ont.	Owen Sound, Ont.	Peterborough, Ont.	Port Arthur, Ont.	Quebec, Que.	St. Hyacinthe, Que.	St. Johns, Que.	St. Thomas, Ont.	Sault Ste. Marie, Ont.	Sherbrooke, Que.	Sorel, Que.	Three Rivers, Que.	Toronto, Ont.	Valleyfield, Que.	Windsor, Ont.
Brantford, Ont.		25	327	227	51	397	148	69	262	325	147	141	891	571	433	427	58	520	498	449	492	64	432	145
Hamilton, Ont.	1128		302	202	76	372	123	44	237	300	159	116	866	546	408	402	83	495	473	424	467	39	407	187
Hull, Que.	756	372		120	378	119	268	344	240	2	385	185	875	291	148	142	384	504	213	171	207	263	86	488
Kingston, Ont.	876	300	112		278	163	206	244	278	118	161	113	907	335	199	193	284	536	264	215	258	163	143	387
London, Ont.	1749	866	993	873		448	199	119	313	376	141	192	942	620	484	478	15	571	549	500	543	115	483	111
Montreal, Que.	698	546	172	284	1157		445	414	364	112	455	262	993	172	36	30	454	622	101	52	95	333	35	558
Muskoka, Ont.	1378	495	622	502	250	786		167	115	266	180	93	744	619	481	475	206	373	546	497	540	112	480	310
Niagara Falls, Ont.	1089	39	333	261	856	507	485		281	342	203	160	955	586	450	444	115	539	515	466	509	81	449	226
North Bay, Ont.	3662	2808	2906	2786	1913	3078	2284	2769		244	294	207	629	528	400	394	320	258	465	416	459	227	399	424
Ottawa, Ont.	2180	1326	1424	1304	431	1596	802	1287	1482		383	183	873	284	148	142	382	502	213	164	207	261	84	486
Owen Sound, Ont.	1829	909	1260	1214	1359	1429	1456	997	3142	1594		199	490	627	491	485	156	240	556	507	550	122	490	252
Peterborough, Ont.	725	626	341	450	1334	390	963	587	3246	1754	1104		836	434	298	292	198	465	363	314	357	77	297	301
Port Arthur, Ont.	1195	73	402	370	965	575	568	109	2872	1390	888	478		1157	1029	1023	1255	250	1094	1045	1088	856	1028	570
Quebec, Que.	1597	473	837	764	736	1009	486	508	2345	863	731	999	527		129	159	628	786	143	165	77	507	207	730
St. Hyacinthe, Que.	2612	1484	1866	1789	1776	2034	1382	1523	1745	1345	1523	2024	1552	1025		30	490	658	65	36	131	369	71	594
St. Johns, Que.	1315	187	569	492	637	736	387	226	2617	1135	722	724	251	272	1297		484	652	78	66	125	363	47	588
St. Thomas, Ont.	1983	1274	1651	1579	1724	1824	1374	1677	3186	1704	496	1568	1253	915	1348	1087		578	555	506	549	121	489	111
Sault Ste. Marie, Ont.	944	484	386	427	1371	555	1000	515	3292	1810	874	217	411	912	1937	662	1338		723	674	717	485	657	320
Sherbrooke, Que.	619	669	297	450	1290	318	919	630	3203	1721	1212	108	561	1082	2107	807	1676	325		101	93	434	125	659
Sorel, Que.	1802	669	1046	1166	1448	1219	769	713	2516	1034	607	1184	706	283	916	482	700	1065	1267		48	385	87	610
Three Rivers, Que.	1868	869	1112	992	884	1418	490	908	1973	453	1141	1409	937	410	892	682	1251	1322	1492	564		428	130	653
Toronto, Ont.	3695	2696	2939	2878	2005	3170	2255	2861	150	1574	2992	3236	2764	2237	1595	2509	2943	3149	3319	2391	1823	958	206	224
Valleyfield, Que.	1097	515	614	655	1407	786	1010	557	3320	1838	646	458	442	813	1810	668	1110	228	566	894	1223	3167	3027	593
Windsor, Ont.																								

Between Points in the Dominion of Canada and the United States.	Halifax, N. S.	Hamilton, Ont.	Montreal, Que.	Ottawa, Ont.	Port Arthur, Ont.	Quebec, Que.	Sault Ste. Marie, Ont.	Toronto, Ont.	Vancouver, B. C.	Winnipeg, Man.	Atlanta, Ga.	Boston, Mass.	Buffalo, N. Y.	Chicago, Ill.	Denver, Col.	Detroit, Mich.	New Orleans, La.	New York, N. Y.	Portland, Me.	St. Louis, Mo.	St. Paul, Minn.	San Francisco, Cal.	Seattle, Wash.	Washington, D. C.
Halifax, N. S.		1097	515	614	655	1407	786	1010	557	3320	1838	646	458	442	813	1810	668	1110	228	566	894	1223	3167	3027
Hamilton, Ont.	1097		614	515	655	1407	786	1010	557	3320	1838	646	458	442	813	1810	668	1110	228	566	894	1223	3167	3027
Montreal, Que.	515	614		614	655	1407	786	1010	557	3320	1838	646	458	442	813	1810	668	1110	228	566	894	1223	3167	3027
Ottawa, Ont.	614	515	614		655	1407	786	1010	557	3320	1838	646	458	442	813	1810	668	1110	228	566	894	1223	3167	3027
Port Arthur, Ont.	655	655	655	655		1407	786	1010	557	3320	1838	646	458	442	813	1810	668	1110	228	566	894	1223	3167	3027
Quebec, Que.	1407	1407	1407	1407	1407		786	1010	557	3320	1838	646	458	442	813	1810	668	1110	228	566	894	1223	3167	3027
Sault Ste. Marie, Ont.	786	786	786	786	786	786		1010	557	3320	1838	646	458	442	813	1810	668	1110	228	566	894	1223	3167	3027
Toronto, Ont.	1010	1010	1010	1010	1010	1010	1010		557	3320	1838	646	458	442	813	1810	668	1110	228	566	894	1223	3167	3027
Vancouver, B. C.	557	557	557	557	557	557	557	557		3320	1838	646	458	442	813	1810	668	1110	228	566	894	1223	3167	3027
Winnipeg, Man.	3320	3320	3320	3320	3320	3320	3320	3320	3320		1838	646	458	442	813	1810	668	1110	228	566	894	1223	3167	3027
Atlanta, Ga.	1838	1838	1838	1838	1838	1838	1838	1838	1838	1838		646	458	442	813	1810	668	1110	228	566	894	1223	3167	3027
Boston, Mass.	646	646	646	646	646	646	646	646	646	646	646		458	442	813	1810	668	1110	228	566	894	1223	3167	3027
Buffalo, N. Y.	458	458	458	458	458	458	458	458	458	458	458	458		442	813	1810	668	1110	228	566	894	1223	3167	3027
Chicago, Ill.	442	442	442	442	442	442	442	442	442	442	442	442	442		813	1810	668	1110	228	566	894	1223	3167	3027
Denver, Col.	813	813	813	813	813	813	813	813	813	813	813	813	813	813		1810	668	1110	228	566	894	1223	3167	3027
Detroit, Mich.	1810	1810	1810	1810	1810	1810	1810	1810	1810	1810	1810	1810	1810	1810	1810		668	1110	228	566	894	1223	3167	3027
New Orleans, La.	668	668	668	668	668	668	668	668	668	668	668	668	668	668	668	668		1110	228	566	894	1223	3167	3027
New York, N. Y.	1110	1110	1110	1110	1110	1110	1110	1110	1110	1110	1110	1110	1110	1110	1110	1110	1110		228	566	894	1223	3167	3027
Portland, Me.	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228	228		566	894	1223	3167	3027
St. Louis, Mo.	566	566	566	566	566	566	566	566	566	566	566	566	566	566	566	566	566	566	566		894	1223	3167	3027
St. Paul, Minn.	894	894	894	894	894	894	894	894	894	894	894	894	894	894	894	894	894	894	894	894		1223	3167	3027
San Francisco, Cal.	1223	1223	1223	1223	1223	1223	1223	1223	1223	1223	1223	1223	1223	1223	1223	1223	1223	1223	1223	1223	1223		3167	3027
Seattle, Wash.	3167	3167	3167	3167	3167	3167	3167	3167	3167	3167	3167	3167	3167	3167	3167	3167	3167	3167	3167	3167	3167	3167		3027
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NOTE.—In addition to the general index on the following pages—which in itself will usually be found sufficient—a large number of alphabetical lists are to be found in the body of the book, and they should be carefully consulted in connection with the general index, if necessary. For example, American Battles, page 11; Treaties, Coalitions, Conventions, and Leagues, page 163; Right Use of Some Common Words, page 191; Abbreviations, Contractions, and Degrees, page 202; Words and Phrases from the Classic and Modern Languages, page 255; Modern Languages, page 263; Words Often Mispronounced, page 267; Pen Names of Noted Writers, page 321; Mythology, page 323; Names in Fiction, Literary Plots, and Allusions, page 343; Famous Poems, Author and First Line, page 387; Biography, page 393; Cities, Population of, page 582; Canals, page 653; College Fraternities, page 697; Colleges and Universities, page 698; Notable Bridges, page 779; Cities, Popular Names of, page 782; Names and Name Origins, page 797. For information concerning the causes, events, and results of the war of the nations, 1914-1919, *see* WORLD WAR, pages 181-182*n*.

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